ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regular-sized Project Concept

Country/Region: **Malawi/Africa**
Project Title: **Adapting to climate change through integrated risk management strategies and enhanced market opportunities for resilient food security and livelihoods**
Thematic Focal Area: **Food Security**
Implementing Entity: **WFP**
AF Project ID: **MWI/MIE/Food/2018/1**
IE Project ID:
Requested Financing from Adaptation Fund (US Dollars): **9,989,334.60**
Reviewer and contact person: **Imen Meliane**
Co-reviewer(s): **Dustin Schinn**
IE Contact Person:

Review Criteria	Questions	Comments	WFP responses, 3 September 2018
Country Eligibility	1. Is the country party to the Kyoto Protocol?	Yes.	
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	Yes.	
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	Yes. The endorsement letter was signed on August 1, 2018.	

	2. Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to the adverse effects of climate change and build in climate resilience?	Yes. Overall, the project concept is sound and the proposed components and activities are justified based on sound climate and vulnerability data. The project main goal is to enhance climate adaptation and food security of households through access to integrated climate risk management strategies and structured market opportunities. The project seeks to achieve this goal through the following three (3) main outcomes working in complementarity: 1. Improved access to insurance as a risk transfer mechanism for targeted farmers affected by climate change and food insecurity; 2. Adopted climate-resilient agriculture practices among targeted farmers contributing to the integrated climate risk management approach; and 3. Strengthened market access strategies and approaches for smallholder farmers.	
		CR1: Please clarify and provide more details on how components 1 and 2 would help transition farmers from subsistence to surplus producing to justify component 3.	**CR1:** The project will pursue an integrated resilience approach that is adaptive and able to support graduation processes. This programming approach adopts a theory of change that represents an emerging evidence on how investments leading to improvements in access to productive assets, skills and knowledge gradually combined with an integrated risk management package (financial savings, credit, insurance scheme, climate services), technical assistance, and access to structured markets contribute to breaking the cycle of food insecurity and improve resilience to climate change.

			As noted in the proposal, under component 1, the protection of the insurance and compensation, when triggered, can help households maintain their level of wellbeing even when shocks occur. In shock-free years, insurance can act as an enabler for investments and diversification in livelihoods, as it provides a guarantee for credit and the security of compensation, in the event of a poor season. Insurance, therefore, has a dual role of protecting and promoting diversified livelihoods, which is key to facilitate adaptation to climate change. However, global evidence has shown that insurance is most effective as part of an integrated climate risk management package, rather than a standalone intervention. This was also verified in the context of Malawi where insurance has been trialled successfully as part of an integrated package since 2015. Whilst the first component works to transfer risk away from households, the second component works to increase and sustain food production. Under component 2, to achieve food security and reduce vulnerability to climate change and weather shocks, the project will contribute to changing the downward spiral of degrading landscapes to a cycle of increasing productivity and income opportunities as they are a critical resource base upon which lives and livelihoods depend. Asset creation is the entry activity for the integrated resilience approach as it aims at creating productive assets through a watershed management approach. Asset creation comprises mostly of soil and water conservation activities, thus playing a fundamental role of rehabilitating many degraded landscapes and improving soil quality. Asset creation activities also focus on supporting crop production mainly through irrigation in addition to facilitating access to drought tolerant and nutritious crops and new high value crops. Supporting alternative crop production is used as one way to restore livelihoods and improve food and nutrition security and contribute to improving farmers income. In addition, this component also includes the provision of climate services, for risk-informed agricultural decision making based on tailored climate and weather information communicated through radio, text messages (i.e. SMS) and intermediary/extension workers. Furthermore, savings, promoted through village savings and loans group will act as a buffer for smaller, individual shocks, and to fund investments in diversified and more resilient livelihoods. Credits, promoted through micro-finance, will support larger investments into farmers' livelihoods, for prudent risk taking. Therefore, providing households with a package of asset creation, integrated risk management and climate services targeting the same beneficiaries is critical to making them more resilient and food secure. When graduating to this stage, it is then possible to support farmers transition from subsistence to surplus producing, under component 3. Under component 3, the project will continue to support graduation with access to improved storage, post-harvest loss management technologies and aggregating infrastructure to increase market access. The project will support transitioned farmers develop business and post-harvest skills to meet market standards and open market platforms for the farmers through their organizations into associations and/or cooperatives.

	3. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	Somewhat clear. Further clarification is required. The project concept outlines clear and tangible social and economic benefits as well as some minor environmental benefits. The project aims to target 32,000 households in Balaka, Zomba, and Machinga districts that have been selected as a result of an integrated context analysis, overlaying patterns of vulnerability and historical trend analyses of food security, natural shocks, and land degradation. The project also has specific commitments to contribute to gender equality, empower women and girls, and ensure equal rights, access and opportunities for participation and leadership in the project and in community decision-making. **CR2:** Please provide reference on how the project benefits will be equitably distributed to vulnerable communities, households, and individuals.	**CR2:** Transparency, inclusion and accountability are fundamental aspects of targeting that help lay the foundations for ownership of the criteria for inclusion or exclusion of areas and participants to ensure that project benefits are distributed equitably to vulnerable communities, households and individuals. Consultations with local government authorities and the development plans at district councils as well as knowledge of local structures, traditions and cultural values will be done through a participatory planning process, consulting communities when identifying participants and introducing activities to ensure effective participation and benefits. Considering that many communities in the targeted districts include high proportions of marginalized groups, (i.e. chronically ill, widows, elderly, child-headed households, etc.) attention shall be paid to ensure participation of these people and their households into all project activities. To ensure that the project meets the needs of vulnerable groups or individuals in the targeted community and that project benefits are equitably distributed to these groups, the following steps will be considered: i) Community-based participatory planning sessions at community level that will include a representation from a cross-section of all socio-economic groups - youths, men, women, elderly, to identify activities and beneficiaries based on vulnerability profiles; ii) Involvement of local representatives of women's organizations in the planning and implementation of project activities; iii) Involvement of men and women in the decision-making processes of project planning, beneficiary identification and activity implementation in all project components and in equal terms; iv) Promotion of gender-sensitive activities. At the household level, the targeting process shall take into account of the key role that women play in the production activities.
		CR3: The environmental benefits described are not detailed and their realisation somewhat unclear. Pease further justify how you expect to realise the environmental benefits, in particular the disaster risk reduction potential.	**CR3:** Implementation of an integrated watershed management approach will be central to promote enhanced climate adaptation and food security of the targeted communities and households and achieve long-term environmental benefits in the project areas. Such approach entails the rational utilization of land and water resources for optimum production but with minimum impact on natural and human resources. Through asset creation activities such as soil and water conservation measures, soil erosion will be reduced, water retention will increase helping to the replenishment of the water table, vegetative cover will increase and soil fertility will be enhanced. Targeted degraded landscapes are expected to be rehabilitated with a multiple of environmental benefits in addition to livelihood restoration, food security and nutrition improvements and resilience building.

			The realisation of this approach is based on evidence from ongoing watershed management programmes in Malawi and other countries which highlights impact of such initiatives for communities and households that depend on natural resources. Practically, the watershed management activities will support: i) Harnessing, conserving and developing degraded natural resources – soil, vegetative cover and ground water; ii) Prevention of soil run-off/erosion; iii) Rain water harvesting and recharging of ground water increasing potential for promotion of irrigation and fishery activities in the context of river basin benefits; iv) Increasing the productivity of crops, with a focus on drought-tolerant ones. Regarding the risk reduction potential, by decreasing soil erosion (through plantation of vetiver grass and trees, introduction of minimum tillage practices and organic matter retention, among others), and improving water retention (swales, trenches, gully reclamation, etc.) risk for flooding is reduced. Also, all the asset creation activities aim at improving soil fertility and water harvesting, therefore rendering communities more resilient to droughts.
	4. Is the project / programme cost effective?	Unclear. Overall, the project seems to be cost-effective in its approach which seeks to leverage previous experiences. The concept provides some numbers on comparing with the status quo and some consideration of sustainability and leveraging funding. However, the project concept does not provide details on the choice and effectiveness of some proposed adaptation measures. It also does not provide comparison with alternative adaptation options. **CR4:** please provide a logical explanation of the selected scope and approach in comparison to other options.	**CR4**: The project aims to enhance climate adaptation and food security of 32,000 households through access to integrated climate risk management strategies and structured market opportunities, with a focus on the most vulnerable, in the 3 districts of Balaka, Zomba and Machinga (highly impacted by climate change and environmental degradation) over a 5-year period. The project, thus, purposely targets those who are most affected by climate change, poverty, food insecurity, and who rely on agricultural livelihoods that are limited by and vulnerable to climatic shocks, especially women and other marginalized groups. In terms of scope and in order to increase cost-efficiency, the project aims to concentrate on this group in order to optimize the resources for maximum benefits. Based on this approach, partners involved aim to draw further experience and learning upon which upscaling action to other affected areas can be implemented. Moreover, the proximity and similarities across the districts offer the project an opportunity to test and validate the proposed integrated climate risk management strategies and structured market opportunities, prior to scaling these further to other more diverse contexts. Besides, the approach is designed in a way to 'break the silos', targeting different communities and community groups with an integrated package of holistic interventions and not delivered as stand-alone initiatives. The project's integrated climate risk management approach will support beneficiaries to be transitioned out of the cycle of food insecurity and poverty. The innovative selected approaches have been trialled and have shown some promising results in Malawi and in other countries.

		CR5: Please provide more information on the effectiveness of the proposed adaptation measures, particular the ones proposed in component 2 and 3, and their expected performance in face of future climate change scenarios.	**CR5**: Evidence from ongoing interventions shows that communities and individuals who participate in resilient agriculture interventions including through asset creation activities (Component 2) are able to increase their own food production and maximize food utilization through soil and water conservation and fertility improvement practices, irrigation, communal/kitchen gardens, crop diversification and food processing. For example, a review looked at the evolution of impact indicators for the R4 Rural Resilience initiative between 2015 and 2017 in Balaka. The review is based on the information retrieved through panel data obtained from regular quantitative surveys conducted in May 2015 and 2017 and specific qualitative surveys, to analyse the evolution of the impact and outcome indicators as well as understand the perception of participants on the process and achievements so far. This report focuses on a sub-sample of participant households that have been followed over time to understand the changes linked to the intervention. The evolution of participants has been compared to a randomly selected control group of households (with similar resilience and food security levels at baseline) not supported by the programme in the same areas. The comparison of both groups is indicative of effects that can be directly attributable to the intervention. The review found that the food security situation – measured using WFP corporate indicators – food consumption score, reduced coping strategy index, livelihood coping strategy index and food expenditure share – improved among R4 participants for all indicators more that for non-R4 participants. R4 participants showed an improvement on their resilience capacity index (RCI)[1] compared to the control group over the period, indicating that the R4 programme had a positive effect on household resilience to food insecurity. Moreover, the review highlighted other promising results among R4 participants such as increased crop production, stabilisation of income sources and monthly expenditure, improvement on savings, and increased access to credit. Results from component 2 are usually shown from within one year to three years of project implementation. Integrating market support strategies (Component 3) in ongoing resilient agriculture intervention projects have also shown to have considerable benefits for communities and contribute to increasing income and accelerating the process of setting up sustainable livelihoods by allowing farmers to find market outlets for their production. The market support activities are beneficial to consolidate the benefits of the establishments achieved through component 2. In this regard, components 2 and 3 re-enforce each other to enhance adaptation and build resilience of the targeted communities and households against climatic shocks.
		CR6: Please see comments below related to risk insurance and whether the insurance policies will take into account farmer-specific levels of risk.	**CR6**: The weather index insurance product will be designed to address covariate risks (drought) which affect a wider community while other risk mitigating strategies are employed to address household specific shocks. The integration of the interventions will provide participants with more than the benefit of each component alone. While participation in the risk reduction activities (assets creation) aims at improving the natural resource base of the farmers involved, with beneficial effects on their agricultural production, insurance offers protection for crop losses in case of drought, thereby

[1] The RCI is the output of the RIMA II analysis, which takes into account key features on resilience, which are grouped into 4 categories, namely: access to basic services, assets, adaptive capacity, and social safety nets.

			safeguarding their livelihoods, and also guaranteeing that their investment in crops will not go wasted due to extreme drought event. It also helps unlock formal credit provision, as microfinance institutions become more willing to offer credit as they will be guaranteed that the credit will not be used for consumption but rather to be invested in productive ways because borrower's food gaps will be met through their participation in risk reduction activities. The formal credit along with promotion of savings for individual households through village savings and loans (VSL) groups will be intended to create another layer of protection against household specific shocks, and also provide additional capital for investments. This will provide vulnerable households with a collection of tools, options, assets and skills to avoid negative coping strategies in the face of droughts and other shocks, protect development gains and provide a chance to move to sustained food and nutrition security. Furthermore, the project will seek to facilitate access to other affordable complementary insurance products such as funeral and health insurance provided by the project partners to address household specific shocks, targeting capable households as they move on their transition trajectory. These products are already being informally offered to some communities through VSL-managed social funds where members contribute small amounts aimed to help them in times of illness or loss of a family member. Through this project, arrangements will be facilitated to formalise these processes by linking them with insurance service providers who would offer meaningful compensations to affected families.
		CR7: Please further describe if other cost-effective measures such as seed banks would be supported by the project, for example.	**CR7**: Yes, based on further community consultations, the project would support any other cost-effective measures that promote community and household adaptation to climate shocks including the promotion of the seed banks, which is proven to be an innovative and effective approach to seed saving and enhancing access to and availability of diverse local crops; and ensuring seed and food sovereignty by the communities. This approach will be fostered combined with seed multiplication focusing on drought tolerant and nutritious varieties.
	5. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?	Yes. The project highlights a number of national and sectoral strategies to which the project responds, but there is no mention of any sub-national strategy. **CR8:** Please clarify if there are relevant subnational strategies, district development strategy in the project target areas.	**CR8**: There are several subnational strategies and district development strategies in the project areas that will inform the design and implementation of the proposed project interventions; these include; i) District Development Plan (DDP) which is the overarching development strategy framework at district level, linked to both short, medium and long-term development aspirations of the Central Government. It provides a development roadmap to increase consistency and coordination in promoting socio-economic development in the district. The DDP is able to translate the strategies into policy outputs (projects and programmes). ii) Socio-Economic Profiles (SEP) which is a snapshot of the overall physical, social and economic situation of the district. A SEP paves way for a better appreciation of the socio-economic situation of an area or locality within a district. iii) Other sub-national development strategies that feeds into DDP including: i) Decentralized Environment Management Guidelines, ii) District State of the Environment Reporting (DSOER), iii) District Contingency Plans iv) District Environmental Action Plans. v) District Development Investment Plan.

			All these plans are aligned to sectorial strategies and National Development Frameworks (Malawi Growth and Development Strategy – MGDS III). The targeted districts have developed and updated their own plans and strategies as mentioned above.
	6. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund??	Yes.	
	7. Is there duplication of project / programme with other funding sources?	Not clear. There has been a robust interest and investment in climate insurance in Malawi in particular over the past years. The justification for investing further resources in this specific area of adaptation needs to be strengthened. **CR9:** Please elaborate on complementarity and learning from other relevant insurance-focused initiatives, aside from R4 (such as PPCR, ARC, and others), and also other potentially relevant projects in related sectors such as early warning systems.	**CR9**: Malawi subscribed to the ARC only for the 2015/16 season, just before the El Niño-induced weather shock. Though Malawi is a signatory to the ARC Agency Treaty, the policy was not renewed during subsequent years. ARC was using the satellite weather surveillance software Africa RiskView, to estimate the impact of drought on vulnerable populations. Building on this experience, this software is currently supporting the seasonal monitoring process for the R4 weather-insurance model. This may be customized to support the micro-insurance scale up process. The R4 model has taken into account learnings from ARC experience in Malawi. For instance, under ARC, any payouts triggered was directly made to the Government of Malawi (as it is a macro-insurance scheme) to be utilised towards activities for school feeding, water and sanitation, and health and nutrition, as agreed under the contingency plan. This methodology has been evaluated and findings revealed that the approach was unable to address the immediate concerns of insured farmers. Unlike the above-mentioned model, any payouts triggered under the R4 micro-insurance component of the proposed project is directly made to the insured households (as it is a micro-insurance scheme) in Balaka, Zomba and Machinga. This ensures a more effective and time-efficient response. In this sense, payouts from the two schemes, if Malawi were to subscribe to ARC again, either in the form of interventions (ARC) or cash (micro-insurance), would be complementary and phased-in at different times and geographical areas to offer a more coordinated approach to drought management. Lastly, learnings from the ARC experience also highlight that insurance is not a silver bullet and therefore expectations need to be managed for each insurance mechanism. Additionally, the implementation of a risk financing mechanism requires a long-term commitment and considerable investment in systems and capacity building including development of analytical tools, education and awareness raising, commitment of risk capital etc. National ownership is essential for sustainability and to drive awareness, demand and government political support for engagement a multidisciplinary network of actors for a shared analysis and inclusive dialogue around risk management and insurance. Besides, intervention efforts under this project will complement those under the Pilot Program for Climate Resilience-PPCR (Strategic Program for Climate Resilience-SPCR)

			for Malawi in the agriculture, water resources and climate information sectors principally by bringing to scale some common interventions focusing on geographical areas that have not been covered by these interventions. Moreover, this project will introduce some interventions that are not covered by the PPCR such as the weather insurance schemes. In addition, the climate services component will aim at jointly building the government capacity and systems for the effective delivery of climate services in the country. For the rest of the projects such as The Malawi Drought Recovery and Resilience Project, Africa Agriculture Development Company, Scaling up of Modernised Climate Information and Early Warning Systems in Malawi, the aim will be to increase coverage and bring implementation to scale.
		CR10: Please also elaborate on how, in practice, this project will bring together the other existing initiatives under a common approach.	**CR10**: This project builds on existing efforts to strengthen climate adaptation and resilience with investment initiatives that shall be potentially linked with the ongoing interventions such as the Malawi Drought Recovery and Resilience Project, Africa Agriculture Development Company, Scaling up of Modernised Climate Information and Early Warning Systems in Malawi. The project will seek to facilitate cross-learning to ensure implementation of common approaches and for learning. Both at national and district level, there are coordination structures that will be the entry points and platforms for facilitating project planning, implementation coordination, monitoring and reporting that will ensure drawing of best practices and lessons learnt for common approaches in the delivery of interventions under the project. Through these coordination mechanisms (mainly the Disaster Risk Reduction and Climate Change Management Technical Committees at national and local level) the project will ensure harmonisation of implementation approaches by supporting development of: i) National guidelines for designing and implementing insurance projects, climate resilient approaches, water harvesting technologies, capacity strengthening for farmer organisations/cooperatives; ii) Standard operating procedures (SOPs) to ensure application of common approaches to delivering climate adaptation and resilience projects. iii) Documentation of best practices and dissemination of the same through several channels including learning events and/or review sessions. It is worth highlighting that the layering of integrated resilience building activities is articulated in many national strategies and programmes (e.g. National Social Support Programme II, National Resilience Strategy) and this project will serve to contribute to the government realising these ambitions, but also serve as a best practice.
	8. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?	Yes. The project concept has included knowledge management activities.	

	9. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	Yes.	
	10. Is the requested financing justified on the basis of full cost of adaptation reasoning?	Unclear. **CR11**: Please provide information on whether the level of risk will be assessed based on modelling of weather-related impacts on crop yields. Please also describe whether farmers would be educated about the level of risk they are facing for specific crops and taking into account their specific localities and describe if that information will be made publicly available. Please further describe how the project will work to avoid maladaptation in the long term.	**CR11**: The level of risk to be insured will be assessed based on climatology analysis complemented with agronomy practices in the project locations and further validated with community-based participatory exercises. The insurance product offered is "crop-agnostic", meaning that farmers do not ensure against a specific crop loss but rather against a rainfall deficit. The index (that triggers insurance payouts) is developed according to the agricultural specificities of three reference crops: maize, groundnuts and pigeon peas. It is calibrated to reflect the adoption of resilient agricultural practices and crops. This means that farmers are free to decide which crop and what practices to apply, however, if a payout is triggered, it will reflect more closely the loss occurred to resilient crops grown through resilient climate practices rather than the loss occurred to maize under traditional agricultural practices. Farmers are informed and educated on this and are therefore incentivized to apply adaptation measures, grow more resilient crops, and turn to conservation agriculture. Under R4, WFP and its partners have experience with other types of insurance products and are looking to share these insights with national stakeholders in order to explore them as alternatives to the weather index insurance product during the course of programme implementation. This includes insights into livestock products, area yield index insurance, and hybrid models that combine different approaches, like precipitation-based, vegetation-based and area yield-based indices. Educating farmers about the level of risk they are facing for specific crops in their specific localities will be an integral activity in this project through both the climate services and insurance components. The climate services will support farmers decision-making process (including timing agricultural activities, establishing the types of crops and quantities of agri-inputs needed, the right type of agricultural practices, the suitable markets to target, and thus, the investments needed to successfully harvest for both consumption and profit) by providing them with information on climate risks and the upcoming season accompanied by advisories for their livelihood decision-making. Climate services, therefore, combine downscaled/location specific weather and agricultural information to help inform farmers' actions using SMS, radio platforms, and agricultural extension services. Through radio platforms and extension services, such information is made publicly available. Under the insurance component, the various community-based participatory exercises conducted during index design, validation and seasonal assessment stages as well as community sensitization processes include education on the economic cost of risk (e.g.

			higher implicit deductibles for high risk crops such as maize) and try to incentivise practices that will increase their adaptive capacity. Lastly, farmers are continuously educated on the index design and its parameters and also provided with climate-smart agricultural practices to manage the impacts of climate variability. For example, farmers get advice on modern and sustainable farming practice, such as planting drought and disease tolerant crops to minimize their vulnerabilities to climatic shocks. The index only triggers in extreme events and farmer losses experienced every year may not always be warranted for compensation and therefore highlight the need for adoption of new climate smart agricultural technologies. In this way, farmers are incentivized to adapt these other adaptive technologies and move away from cultivating only maize. Furthermore, maladaptation will be avoided by using an index-based approach that is crop-agnostic and limits moral hazard, unlike traditional agricultural insurance; higher implicit deductibles for farmers who do not follow recommended practices; and strong consumer education for management of expectations.
	11. Is the project / program aligned with AF's results framework?	Yes, the project concept is aligned with the AF results framework. It would contribute to achieving outcomes 2, 3, 4 and 6.	
	12. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	Partly unclear. **CR12:** In Component 1 on insurance, the assumption seems to be that non-cash paying groups will develop, over time, the ability to pay their own insurance premiums. However, there currently does not seem to be a description of potential risk that farmers may not be able to develop this financial capacity in the medium to long-term, and that the project at some point will be closed, meaning that there is a chance that some parts of the beneficiaries of the projects may not continue to benefit from project results beyond the lifetime of the project. Please provide an assessment of this specific implementation and sustainability risk along with	**CR12**: The ability of the targeted households to transition from the non-paying groups to pay their own insurance in the medium to long term rests on their potential capacity to uptake the support towards their diversified and strengthened livelihoods to become self-reliant. However, these households will still be affected by climatic shocks also likely to push them back if shocks affect their livelihood base. It is in this context that the project introduces an integrated risk management approach where different risk management strategies are planned to be provided to households in a layered manner to offer a comprehensive package of support that would tackle different risks levels while building systems and capacities that will act as the enabler for households' continued access to market and financial services. The transition from non-paying to paying households has been measured in Senegal and Malawi. For example, in Senegal, it started with 5% in 2016, 10% in 2017 and 15% this year (refer to page 12 of R4 Annual Report 2017) while in Malawi farmers contributed over 7% in 2017/18 season in a few villages in Balaka (refer to page 13 of R4 Annual Report 2017). Part of the insurance component, is also focusing on creating the framework, the capacities and the market for the micro-insurance to become sustainable and affordable to smallholders. The project also recognises several risks that can affect project implementation and impact negatively including wide-scale severe drought affecting even irrigation activities and therefore incomes. In this regard, the project will intensify other risk management strategies that provide income smoothing to households such as participation in VSLs and access to microcredit. The project will also need buy-in and support from all relevant stakeholders-government (relevant government sectors and departments), private sector and NGOs from the start to ensure technical support and guidance to the targeted

		avenues on how to mitigate this project-related risk.	households is provided throughout the project period. The project will seek government ownership to ensure continued engagement of the targeted communities through the established systems and provision of other basic services on a sustainable manner/beyond the project lifespan.
		CR13: The transition of farmers from subsistence to surplus production – on which the main sustainability reasoning is based – is more of an assumption and not proven. Please provide more information on this and an assessment of this potential.	**CR13**: This project builds on emerging evidence from two districts (Balaka and Zomba) where improved access to productive assets through asset creation activities, combined with integrated risk management packages are steadily improving participants livelihoods and moving them towards being more shock responsive. On the other hand, WFP's smallholder agriculture market support activities (SAMS) have enabled 60,000 participating farmers to improve their food and nutrition security through food loss reduction and improved incomes through access to quality-oriented market. SAMS empowers smallholder farmers with skills in post-harvest loss reduction, group formation and facilitates linkages to output and input markets. In the project districts, institutional buyers such as schools have been identified as potential market opportunities. In addition, other market support initiatives such Malawi Oilseeds Sector Transformation programme has demonstrated that through a comprehensive package of assistance to smallholder farmers, increased both production and access to markets to cotton farmers.
	13. Does the project / programme provide an overview of environmental and social impacts / risks identified, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	Yes. The project has identified potential environmental and social impacts and risks in accordance with the Environmental and Social Policy and Gender Policy of the Fund and proposed mitigation activities where relevant.	
Resource Availability	1. Is the requested project / programme funding within the cap of the country?	Yes.	
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	Yes, at 8.5%	
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	Yes, at 8.68%	

Eligibility of IE	4. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	Yes.	
Implementation Arrangements	1. Is there adequate arrangement for project / programme management, in compliance with the Gender Policy of the Fund?	n/a at concept stage	
	2. Are there measures for financial and project/programme risk management?	n/a at concept stage	
	3. Are there measures in place for the management of for environmental and social risks, in line with the Environmental and Social Policy and Gender Policy of the Fund?	n/a at concept stage	
	4. Is a budget on the Implementing Entity Management Fee use included?	n/a at concept stage	
	5. Is an explanation and a breakdown of the execution costs included?	n/a at concept stage	
	6. Is a detailed budget including budget notes included?	n/a at concept stage	
	7. Are arrangements for monitoring and evaluation clearly defined, including budgeted M&E plans and sex-disaggregated data, targets and indicators, in compliance with the	n/a at concept stage	

	Gender Policy of the Fund?		
	8. Does the M&E Framework include a break-down of how implementing entity IE fees will be utilized in the supervision of the M&E function?	n/a at concept stage	
	9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?	n/a at concept stage	
	10. Is a disbursement schedule with time-bound milestones included?	n/a at concept stage	

Technical Summary	The project "Adapting to climate change through integrated risk management strategies and enhanced market opportunities for resilient food security and livelihoods" aims to enhance climate adaptation and food security of households through access to integrated climate risk management strategies and structured market opportunities. The project seeks to achieve this goal through the following three (3) main outcomes-working in complementarity: 1. Improved access to insurance as a risk transfer mechanism for targeted farmers affected by climate change and food insecurity; 2. Adopted climate-resilient agriculture practices among targeted farmers contributing to the integrated climate risk management approach; and 3. Strengthened market access strategies and approaches for smallholder farmers. The project aims to target 32,000 households in Balaka, Zomba, and Machinga districts that have been selected on the basis of as a result of an integrated context analysis, overlaying patterns of vulnerability and historical trend analyses of food security, natural shocks, and land degradation. The initial technical review found that the project was sound overall, seeking to leverage previous work by WFP and other in Malawi. The proposed components and activities are justified based on sound climate and vulnerability data. However a few clarifications were requested, related among others to further justification of the assumption of farmers transition from subsistence to surplus and the need of component 3, to providing more details on the insurance scheme, and to the effectiveness of the proposed measures in component 2 in the face of future climate change.
Date:	August 26, 2018

ADAPTATION FUND

PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

PART I: PROJECT/PROGRAMME INFORMATION

Project/Programme Category:	PROJECT
Country/ies:	MALAWI
Title of Project/Programme:	Adapting to climate change through integrated risk management strategies and enhanced market opportunities for resilient food security and livelihoods
Type of Implementing Entity:	MULTILATERAL IMPLEMENTING ENTITY
Implementing Entity:	WORLD FOOD PROGRAMME
Executing Entity/ies:	Ministry of Agriculture, Irrigation and Water Development
Amount of Financing Requested:	USD $9,989,334.60 (5 years)

Project / Programme Background and Context:

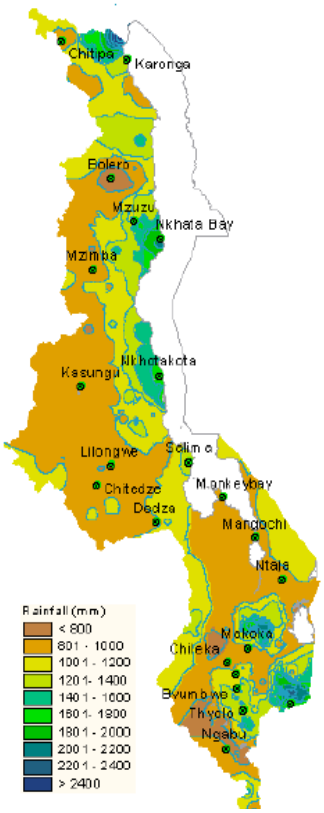
General context

1. Geography and Climate:

Malawi is a landlocked country in the southern African region bordered by Zambia to the West, Mozambique to the South East, and Tanzania to the North East. The country has a total area of 118,484 square kilometers of which 94,080 square kilometers are land and 24,404 are water[1]. Lake Malawi runs North to South across the country with a considerable network of tributaries, which altogether account for the significant portion of water area in the country. The terrain is also characterized by an elongated plateau, resulting in rolling plains, hills, and some mountains. This terrain creates micro-climates, principally due to the variation in rainfall across locations, while the overarching climate is sub-tropical and influenced by the Inter Tropical Convergence Zone (ITCZ) and El Niño Southern Oscillation (ENSO)[2]. The lakeshore in the northern and central regions experiences the highest rainfall, and this occurs during the months of December to February (which are the wettest) and March to May (which are relatively drier)[3]. Central and southern Malawi have a

[1] "The World Factbook Malawi." *Central Intelligence Agency*, Central Intelligence Agency, www.cia.gov/library/publications/the-world-factbook/geos/print_mi.html.
[2] "Climate Change Country Profiles." C. McSweeney, M. New, and G. Lizcano, UNDP, http://www.un-gsp.org/sites/default/files/documents/malawi.oxford.report.pdf.
[3] "A Detailed Rainfall Climatology for Malawi, Southern Africa." Nicholson, S. E., et al. Quarterly Journal of the Royal Meteorological Society, Wiley-Blackwell, 27 Feb. 2013, rmets.onlinelibrary.wiley.com/doi/full/10.1002/joc.3687.

single rainy season from December to February. As such, there are two characteristic climate patterns, specifically one for the North of the country and another for the central and southern regions. Accordingly, higher temperatures are experienced in the South, versus the North. Areas along the lake also experience cooler temperatures. Climate projections have shown that rainfall variability and temperatures are due to increase across the country, causing a disproportionate impact across geographies. The South will be most affected, which is a highly vulnerable context where food and income insecurity is highest[4].



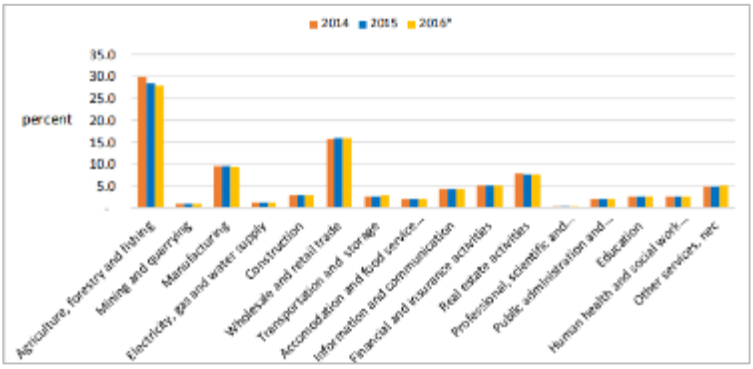
DCCMS, 3rd National Communication

2. Economy and Poverty:

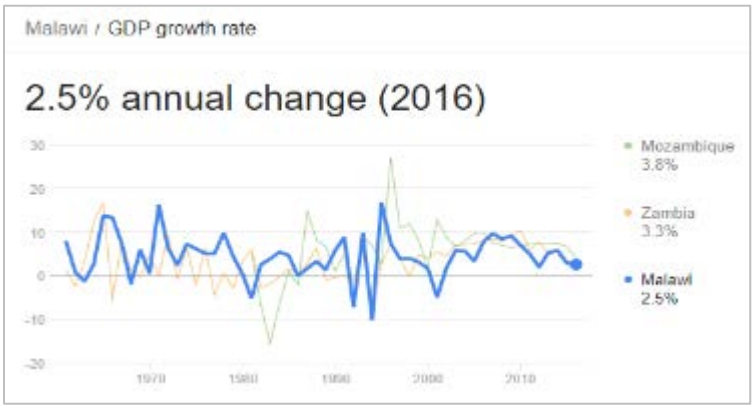
Malawi is categorized as a least developed country (LDC), commonly ranked in the lower levels of the Human Development Index (HDI), placing 170 out of 180 countries in 2015[5]. In this context, one in four people live in extreme poverty[6]. Malawi's economy largely depends on agriculture as a major foreign exchange earner and it contributes 28 % of the total Gross Domestic Product (GDP) as of 2016[7] (shown in graph below). Therefore, being an agro-based economy, it is vulnerable to weather-related shocks, such as drought and floods, which significantly constrain economic performance. This has been the case in recent years due to recurring shock events. For example, GDP growth rate remained at 2.5 % and

[4] "Country Climate Brief Malawi", Future Climate For Africa, www.futureclimateafrica.org/resource/future-climate-projections-for-malawi/.
[5] "Briefing note for countries on the 2016 Human Development Report" UNDP, UNDP, http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/MWI.pdf
[6] "Malawi Country Profile", WFP Malawi, http://www1.wfp.org/countries/malawi
[7] "Financial and Economic Review, Volume 50-Number 1-2016", Reserve Bank, https://www.rbm.mw/Home/GetContentFile/?ContentID=17535

2.8 % in 2016 and 2015, respectively[8], due to shocks, but previously the growth rate was much higher as shown by the double-digit growth rate in the early 2000s.



Reserve Bank, Economic Review 2016



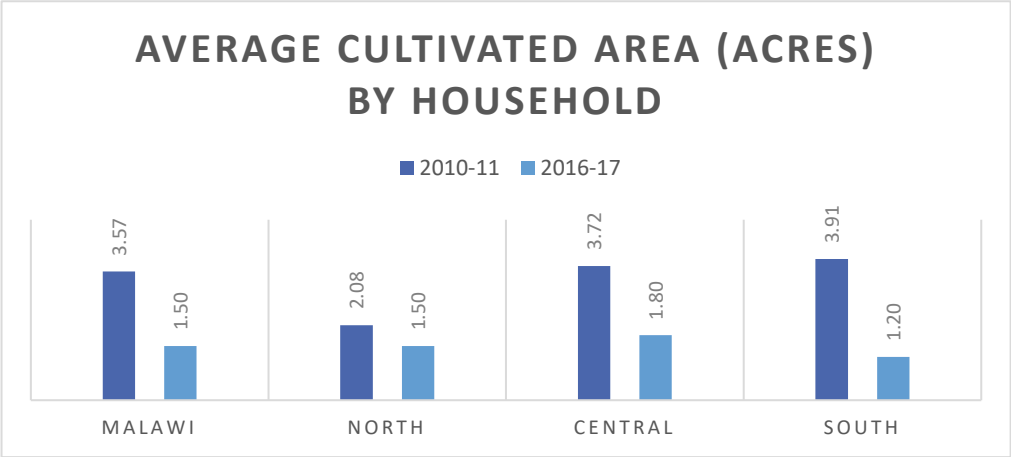
World Bank, GDP Growth 2016

Against this backdrop of shocks and slowed GDP growth, Malawi's national poverty has marginally increased from 50.7% in 2010/11 to 51.5% in 2016/17[9]. Rural poverty has increased from 56.6% in 2010/11 to 59.5% in 2016/17[10]. The significant increase in rural poverty has been largely attributed to the floods and drought events which Malawi experienced within the period 2010/11 to 2016/17. On the other hand, national ultra-poverty has declined from 24.5% in 2010/11 to 20.1% in 2016/17[11]. The significant decrease in ultra-poverty is largely attributed to the delivery of humanitarian assistance and different social protection programmes, such as the social cash transfer and public works programme, which Malawi rolled out between 2010/11 to 2016/17. These were found to be instrumental in helping vulnerable households cope with the recurring shocks.

[8] "GDP Growth (Annual %)." World Bank, data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG.
[9] "Malawi Poverty Statistics, 2016/17", The National Statistics Office and the World Bank Group, http://microdata.worldbank.org/index.php/catalog/2939
[10] *IBID*
[11] *IBID*

3. **Agriculture and Food Security:**

The estimated total land under cultivation in Malawi is 2.5 million hectares. Of this, only 112,000 hectares have been developed for irrigation. This is 28% of the irrigable area[12]. Therefore, most agriculture is rain-fed and dependent on weather patterns, making the sector highly vulnerable to the impacts of a changing climate. Irrigated, more productive systems, focused on marketable commodities, are found in the North. In contrast, smallholder, low input-output systems are concentrated in the South. Smallholders cultivate principally for subsistence purposes, focusing mainly on crops such as maize, the main staple grain, cassava and sweet. The estate sector, in the central and northern regions, focus on high value cash crops for export such as tobacco, tea, sugar, coffee and macadamia nuts[13]. Notably, the smallholder systems make up the bulk of agriculture, thereby, the food system is by enlarge characterized by restricted productivity, which has had negative ramifications on national food insecurity and malnutrition. The latest figures from 2016/17 show that the national prevalence of 'very low food security' increased from 32.5% to 61.4% since 2010/11.[14] Malnutrition is also highly prevalent. 37 % of children under the age of 5 are malnourished[15]. In addition, wasting and micro-nutrient deficiencies (especially anemia) are also prevalent across the country. The situation is being further challenged, as the average land hold size under cultivation is progressively decreasing. The average size has reduced by two acres across the country in the 2010/11 and 2016/17 period, with the biggest drop in the southern region, followed by the central region, and lastly the northern region[16]. In the same period, the number of households cultivating less than one acre has increased by more than 15 percent across the country[17]. The main cause is the high population growth rate, as households divide their resources as they grow. This trend reflects a reduction in crop production, but also in livestock production, which has decreased by 8 % across the country during the same period[18].Overall, agriculture, while key for the macro and micro economy, is characterized by many challenges undermining the future of the sector and the country, with climate change and variability being a critical influencing factor.



NSO & FAO, HIS 4, 2018

[12] "National Agriculture Policy", Government of Malawi, http://extwprlegs1.fao.org/docs/pdf/mlw141073.pdf
[13] *IBID*
[14] "Malawi Poverty Statistics, 2016/17", The National Statistics Office and the World Bank Group, http://microdata.worldbank.org/index.php/catalog/2939
[15] "Integrated Context Analysis 2014", WF & Government of Malawi, http://www1.wfp.org/countries/malawi
[16] *IBID*
[17] *IBID*
[18] *IBID*

4. Gender and HIV/AIDS:

Gender inequality is a marked challenge that the country faces. This stands to be exacerbated by climate change. Evidence shows that food gaps in female-headed households are more frequent and prolonged when shocks occur, given that women have limited access to and control over the assets needed to cope and adapt. This is sharply contrasted by the fact that women constitute roughly 51% of the total population, but make up 70% of the agricultural workforce, and produce 80% of food for home consumption. This is the outcome of widespread gender-based inequality[19], which is evident in many areas: female-headed households in Malawi have a lower land holding size (0.803 ha) than their male counterparts (1.031 ha) and account for only 14% of the recipients of extension services[20]. "The Cost of the Gender Gap in Agriculture" states that if these negative trends were to be reversed, Malawi could gain a 7.3 % increase in in crop production, USD 100 million increase in GDP, and lift 238,000 people out of poverty[21]. Looking ahead, the current demographics are making it harder to achieve these goals. With 47.96 percent of the population within the ages of 15 and 54, and only 5.7 percent above the age of 55, it is expected that population growth will only continue to increase in the upcoming years[22]. This trend has, and continues, to place a considerable burden on women, who have on average 4.5 children[23]. Lastly, it is worth noting that in Malawi there is a close link between gender and HIV/AIDS. While the transmission rate of HIV/AIDS has decreased considerably, prevalence remains at 10.2 % of the population, with women considerably overrepresented in this statistic[24]. This is because transmission is driven by cohabiting HIV-discordant partners, with women most affected. Studies have found that the rate of transmission increases across the population by 11 % in case of shocks, like drought. So, both gender inequality and the HIV/AIDS situation could be made worse by the changing climate.

Climate change vulnerabilities, impacts and risks

1. Experienced Climate Change Impacts

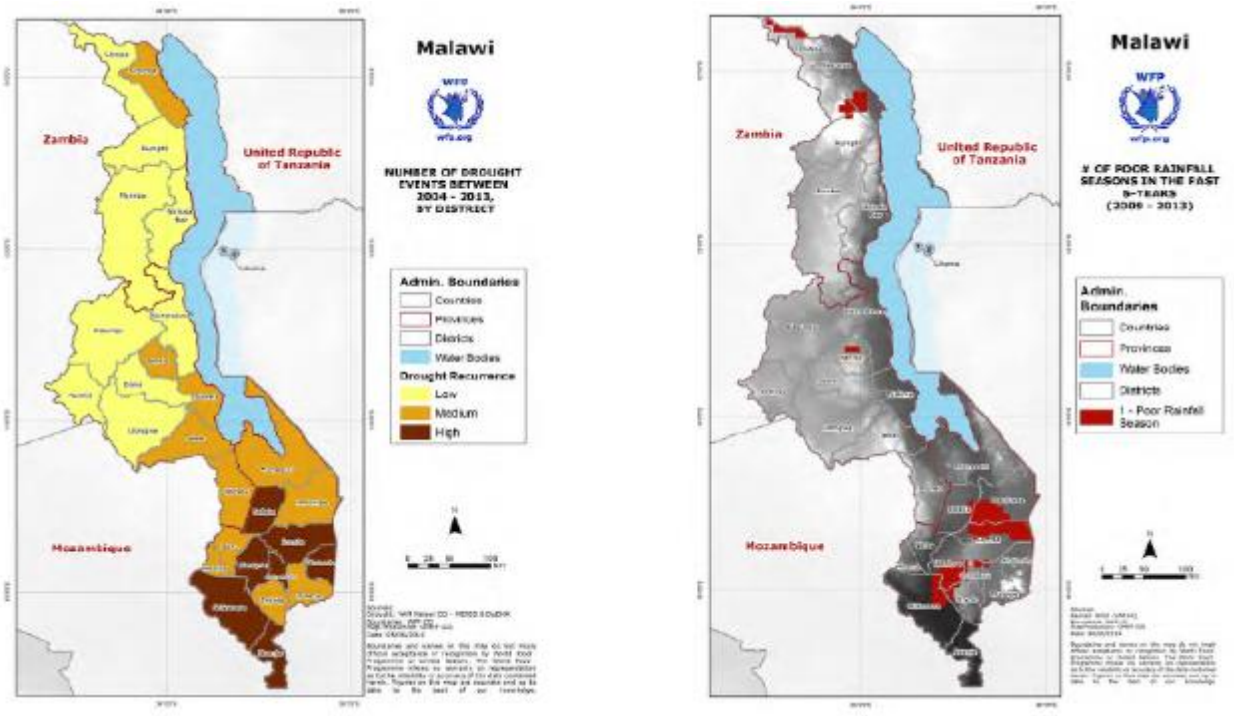
Malawi has experienced an increase in weather-related shocks in recent years. This has meant an increase in the frequency, but also intensity and variability, of events such as floods, drought, and dry spells. At the same, time there has been an increase in temperatures. As such, the impacts of climate change are felt in Malawi and are having negative impacts on wellbeing. This is driven by the dependence on climate-sensitive sectors, particularly rain-fed agriculture, making many people across the country vulnerable to the impacts of climate change.

The incident of weather-related shocks, either drought or floods, increased from 25.8% to 35.1% between 2010/11 and 2016/17[25]. During this period, there was a spike in humanitarian response. From 8 % of the country requiring lifesaving assistance during the 2014/15 lean season, to 18 % in 2015/16, and 40 % in the 2016/17 lean season[26]. In 2014/15, the country was affected by a lack of rainfall. Then, in 2015/16, the country had both drought and floods. In 2016/17, the country experienced the most severe El Niño event on record. Accordingly, this is when the country recorded its largest humanitarian caseload to date. The

[19] Government of Malawi, 2015. Agriculture Sector Gender, HIV, and AIDS Strategy 2012-2017. Available here: http://reliefweb.int/sites/reliefweb.int/files/resources/Gender%20HIV%20and%20AIDS%20Strategy%20Final.pdf
[20] *IBID*
[21] World Bank, 2015, The cost of the gender gap in agricultural productivity in Malawi, Tanzania, and Uganda. Available here: http://documents.worldbank.org/curated/en/847131467987832287/The-cost-of-the-gender-gap-in-agricultural-productivity-in-Malawi-Tanzania-and-Uganda
[22] "The World Factbook Malawi." *Central Intelligence Agency*, Central Intelligence Agency, www.cia.gov/library/publications/the-world-factbook/geos/print_mi.html.
[23] *IBID*
[24] Government of Malawi, 2015. Agriculture Sector Gender, HIV, and AIDS Strategy 2012-2017. Available here: http://reliefweb.int/sites/reliefweb.int/files/resources/Gender%20HIV%20and%20AIDS%20Strategy%20Final.pdf
[25] "Malawi Poverty Statistics, 2016/17", The National Statistics Office and the World Bank Group, http://microdata.worldbank.org/index.php/catalog/2939
[26] "2016/17 Food Insecurity Response Plan", Office of the Vice President Department of Disaster Management Affairs, Office of the Vice President Department of Disaster Management Affairs

combination of sever events and the erosion of capacities to cope with recurring events proved to be a very negative influence in the country.

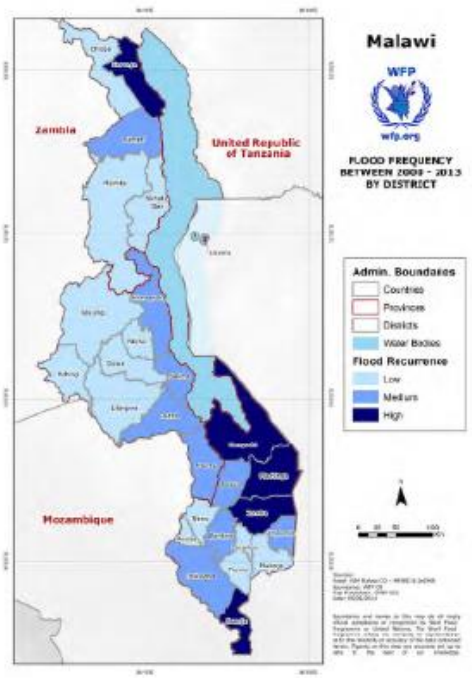
Additional studies have shown that this trend is not limited to the 2010-2017 period. Evidence shows that the incidence of weather-related shocks between 2004 and 2013 had already markedly increased. With reference to the below maps, it is evident that the high number of drought events across the country, especially in the southern region, is of concern. Districts like Balaka, Zomba, Phalombe, Blantyre, Chiradzulu, Chikwawa, and Nsanje had all experienced a high recurrence of drought events with 7 or more years during the 2004 and 2013 period recorded as having below average rainfall as per the 15-year average[27]. For the areas in the moderate range, many still in the southern region, this meant 4 to 6 events during this period. The districts with poor rainfall seasons between 2009 and 2013 closely aligned to those that had experienced a high frequency of drought events in the longer time scale[28]. This shows the persistence of the issue since 2004, but also its heightened frequency in recent years.



WFP, ICA, 2014

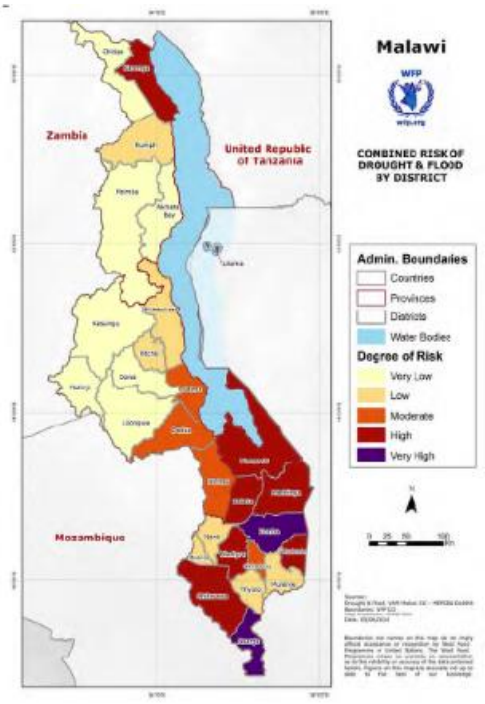
As regards flood incidence, this has also been of concern in the period 2000 to 2013. Districts like Mangochi, Machinga, Zomba, Nsanje, and Karonga have all experienced 8 or more flood events in that specific period. Districts like Chikwawa, Blantyre, Phalombe, and Balaka, among others under the medium category have experienced flood events 4 to 7 times in 2000-2013. In the 13-year period, it seems plausible to assume that every other year flood events are to be expected across these highly susceptible locations. Notably, it is alarming that many of the locations with a high incidence of flood events are also locations with a high incidence of drought events. As experienced in 2015, it is common for both flood and drought events to manifest within a single year, further aggravating the situation[29].

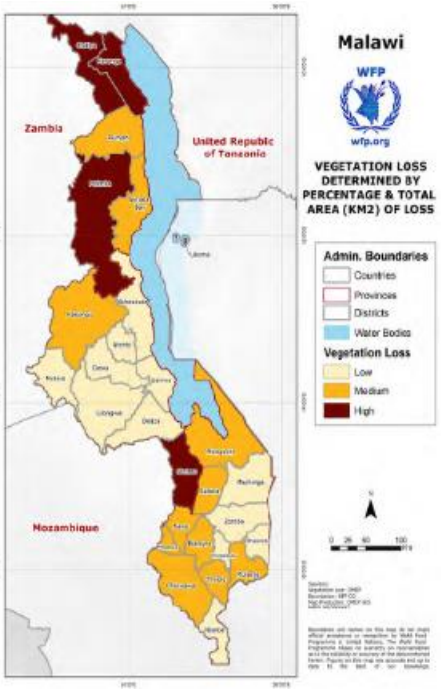
[27] "Integrated Context Analysis 2014", WF & Government of Malawi, http://www1.wfp.org/countries/malawi
[28] *IBID*
[29] *IBID*



WFP, ICA, 2014

As noted above, there are clear hotspots for weather-related shocks. These are the places where both flood and drought shock events take place with most frequency based on historical records. Zomba and Nsanje are the highest on this list. These are followed by Mangochi, Balaka, Machinga, Blantyre, Phalombe, and Chikwawa. All of these districts are once again concentrated in the southern region of the country. An evident aggravating factor is human-induced vegetation loss, driven by the need for firewood and land for agricultural production. The loss of vegetation makes it so that there is poor soil structure making floods more likely to happen and to have a greater impact since the phenomenon destabilizes the ground. Also, this means that the water retention capacity of the ground is minimized, making it so that droughts have a larger impact, too.





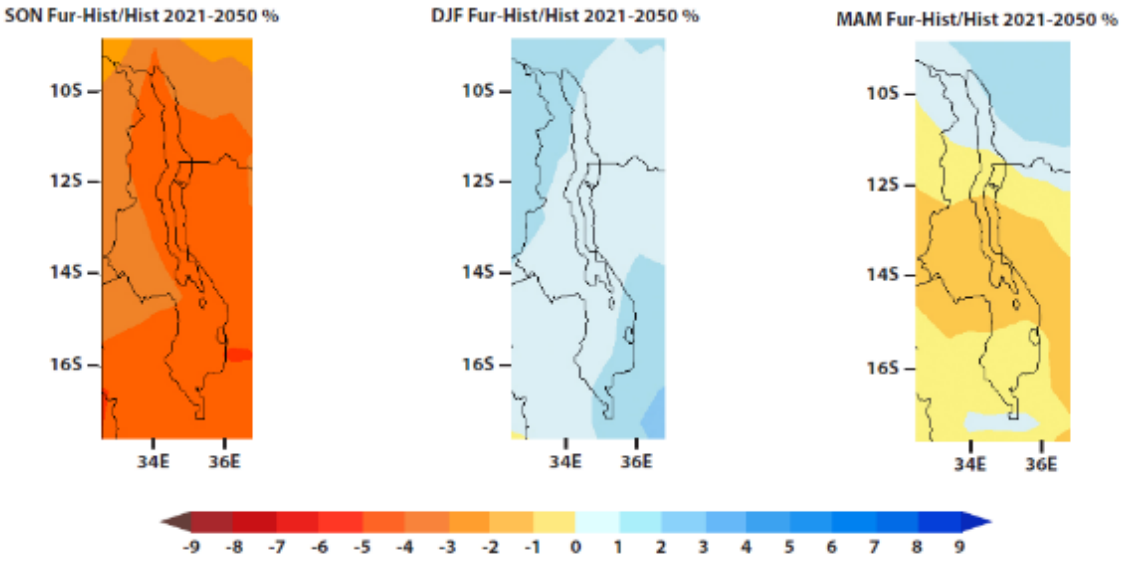
WFP, ICA, 2014

2. Future climate trends

While Malawi has been affected by considerable weather-related shocks, the trend seems unlikely to change. Climate projections show that temperatures are due to climb, while rainfall will continue to be variable and seemingly due to decrease. This section explores these possibilities, supported by different climate models. The aim is to indicate the possible changes in weather, with a focus on weather-related shocks, building on the prior section, which supports the statement that weather-related shocks are increasing in frequency, intensity, and variability.

Regarding warming, this is due to take place throughout the country. Future warming is to be evenly distributed across the country with projections indicating an increase of +0.5 to +1.5 degrees Celsius by 2040[30]. A further look ahead to 2090 shows that the increase will be even more considerable reaching +4 and +4.5 degrees Celsius[31]. The higher temperatures are due to stress ground conditions. Evapotranspiration rates will go up, minimizing the water retention in the ground. Without water available in the ground, livelihoods that depend on ground water sources, like crop or livestock farming, will be severely affected. In addition, these livelihoods will be stressed by the sheer impacts of the direct heat exposure that can negatively impact both crops and livestock.

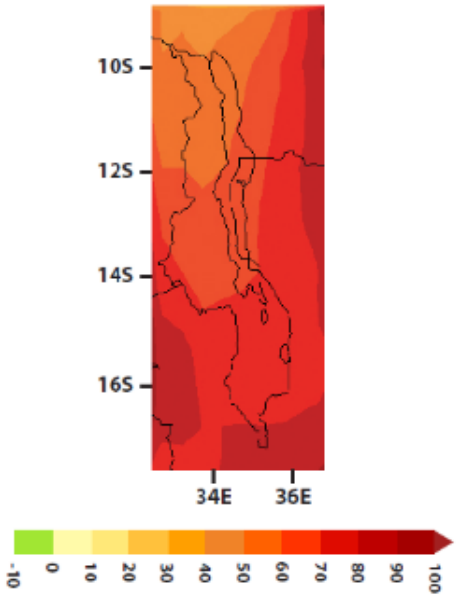
Rainfall is due to become more variable, which means unpredictable starts and cessation of rainfall. It is expected that rainfall patterns will greatly vary, not only in terms of timing and seasonality but also in terms of precipitation levels with current trends seeing rainfall concentrated over less number of days often prompting flooding especially if following a dry spell. The maps below show the in-year variability in rainfall. By the 2090s the changes have similar spatial patterns, but are larger, with annual rainfall decreasing throughout Malawi by -14%[32]. The prevailing higher temperatures noted above compounded with the time-specific rainfall decreases are producing a high probability of drier conditions at critical times of the year when crop production typically takes place. This jeopardizes food and income security by destabilizing agricultural-based livelihoods.



Future Climate For Africa, Malawi, 2017

[30] "Country Climate Brief Malawi", Future Climate For Africa, www.futureclimateafrica.org/resource/future-climate-projections-for-malawi/.
[31] *IBID*
[32] *IBID*

Climate related extremes, referring to the high incidence of atypical weather events, are due to also increase according to future projections. For example, the number of days with temperatures higher than 30 degrees Celsius is due to increase from 10 to 100 by 2040[33]. The threshold of 30 degrees Celsius is used since it is also an established indicator of maize stress, which is the staple food crop. In the map below, the areas shaded with a darker red show where temperatures above 30 degrees are more likely. In addition, the mean number of rainfall days is projected to decrease. Within this reduced period, the amount of rainfall per day is projected to increase. This could result in flooding, after extremely hot and dry conditions, acting as a highly destabilizing force for climate-sensitive activities, like rain-fed agriculture.

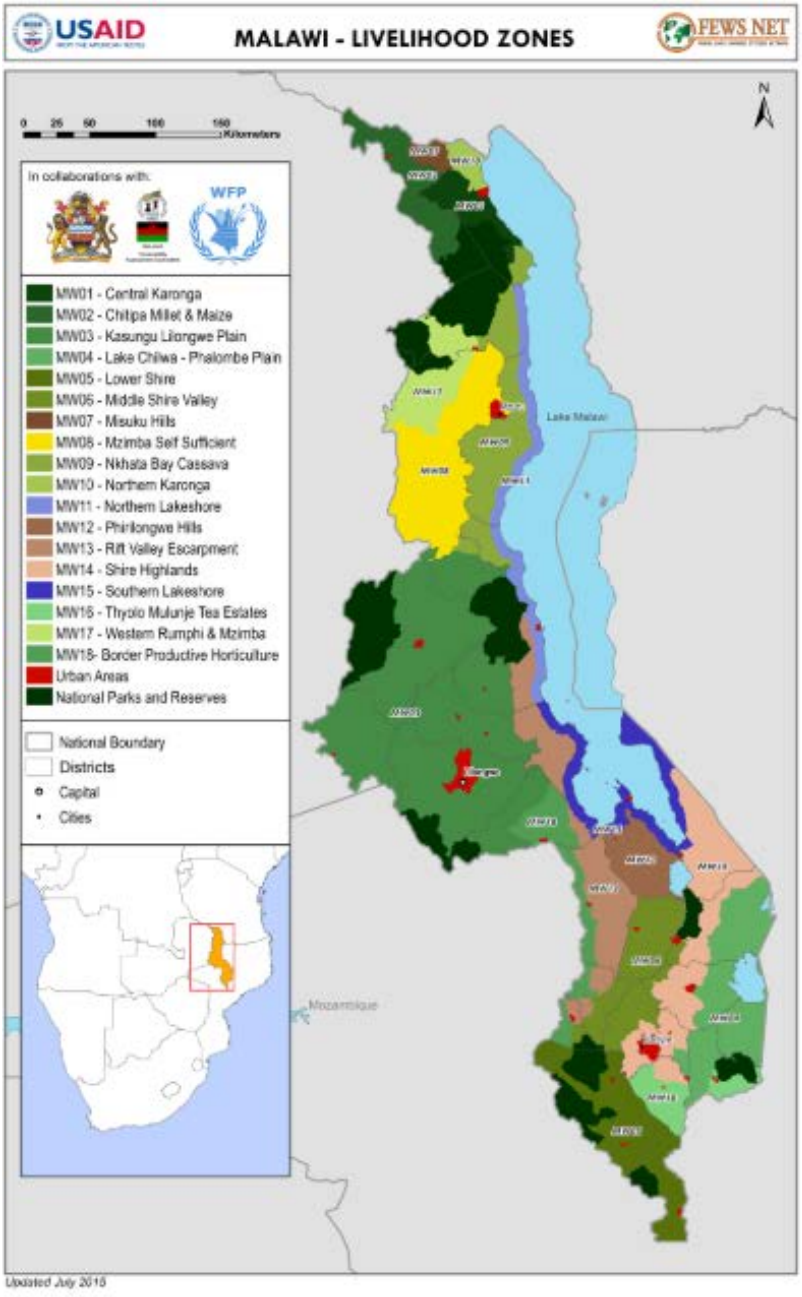


Future Climate For Africa, Malawi, 2017

3. Key factors of vulnerability & barriers to adaptation

As weather related events become more frequent, intense, and variable in nature, the coping capacities of households, communities, and national systems become eroded. In most cases, the pre-existing coping strategies are already limited due to the seasonality of livelihoods as well as prevailing levels of poverty, food insecurity, malnutrition, and environmental degradation. This section will explore these factors, which if not addressed, along with the drivers of climate change, will result in a deterioration of wellbeing across the country.

[33] *IBID*

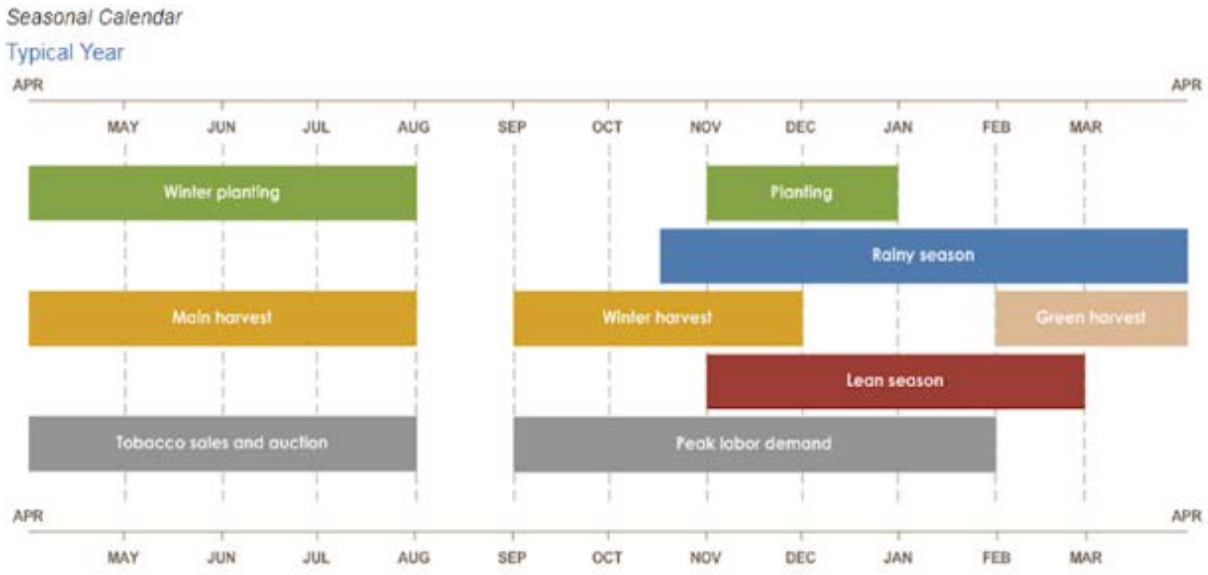


Government of Malawi & WFP, Livelihood Zones, 2014

Seasonal Livelihoods: Fourteen main livelihood zones have been identified across the country[34]. See the map above for their geographical distribution. Across most livelihoods in the country, the major contributing factors include rainfall and vegetation. These two factors are determinant of the success of livelihoods, because most of these are agriculture- or pasture- based livelihoods. Livelihoods based on agricultural and pasture lands require certain levels of rainfall and vegetation at specific times of the year based on the context, principally the local geography. With a single rainy season throughout most of the country, this means that livelihoods are reliant on the timely and sufficient arrival of rainfall, and in the healthy condition of the environment, supporting the productivity of the land. This is further emphasized given the minimal

[34] "Integrated Context Analysis 2014", WF & Government of Malawi, http://www1.wfp.org/countries/malawi

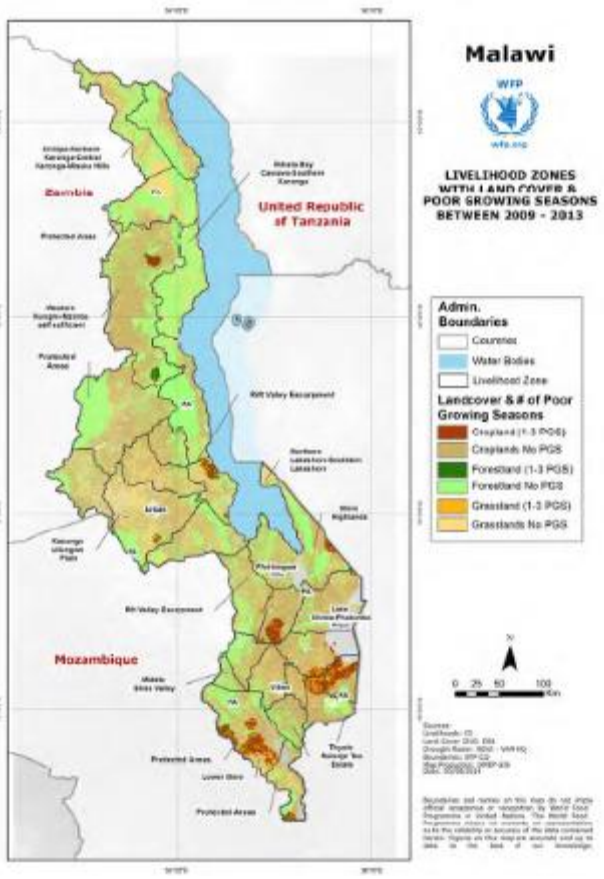
reach of irrigated land across the country and limited access (and use) of agricultural inputs. The seasonal calendar below shows how this dependence on a single rainy season results in a single, main harvest, which is then followed by a lean season, when households have limited resources, as they await the next harvest. This type of seasonal calendar is very limiting for those bound by it, making it very important for the main harvest to be successful. As such, any deviations from this cycle have proven to severely impact food and income security at the micro- and macro- levels, necessitating relief assistance, given the large proportion of the population who rely on agriculture for their subsistence. Deviations may include the late arrival of rains, early cessation of rains, or inadequate levels of rainfall realized during the season. These shocks, as noted in the sections above, are due to increase in frequency and variability, adding further uncertainty to climate-sensitive livelihoods.



FEWSNET, Seasonal Calendar Malawi, 2017

In light of these current and future trends, an analysis was conducted to identify which livelihoods are most affected by poor growing seasons, using drought as a proxy, in a 5-year period. The map below shows in darker shades the locations that have experienced poor growing seasons ranging from 1 to 3 poor events of this nature in the 5-year period of study. Primarily livelihoods in the croplands of the central and southern regions were affected[35]. The majority of districts where this pattern emerged are in the South and include Mangochi, Balaka, Machinga, Zomba, Blantyre, Phalombe, Mulanje, Chiradszulu, Chikwawa, and Nsanje. Making reference to the maps in the previous sections, it is clear that these are locations that are frequently affected by both drought and flood events. The sensitivity of livelihoods and their exposure to such risks make for a very precarious situation going forward. Women will likely be more affected, as well as other vulnerable groups, as they often have less diversified income streams and asset base.

[35] *IBID*

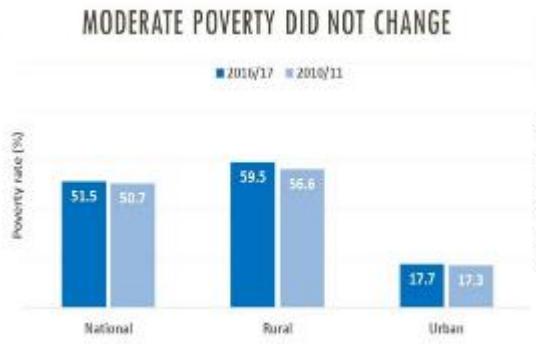


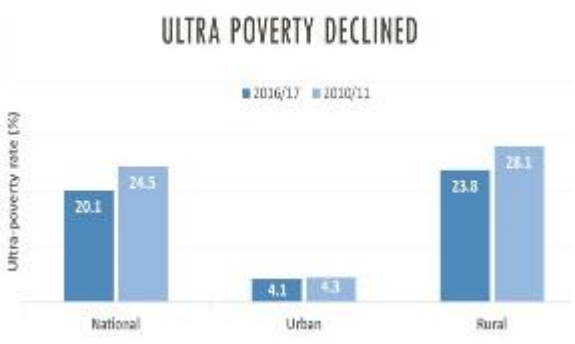
WFP, ICA, 2014

Environmental Degradation: As previously noted, the prevailing livelihoods in the country are dependent on the local vegetation, such as the presence of trees, shrubs, and grasses which support soil and water conservation in the landscape. The root systems of these help retain the top soil and water that filtrates into the ground supports production. These functions are key where the prevailing climate and topography are not conducive to productivity, and where access to external inputs is low, including irrigation. For example, in the northern region, where wetter conditions are experienced and even two rainy seasons can be realized, the conditions are more conducive to more productive systems. The situation is reversed in the southern region, where there is a single rainy season that is commonly affected by drought and flood events. In this context, a healthy environment is critical. Despite this, trends of vegetation loss have increased during the 1990-2010 period[36]. As a result, livelihoods are becoming increasingly stressed, with the poorest and most vulnerable, like women headed households, facing greater challenges, as they have an even more limited access to productive land and external inputs. There is also a concentration of settlements in these areas, which exerts a negative force on the environment. While land is being converted for settlements and production, it is worth noting that energy scarcity also drives vegetation loss. Malawi experiences chronic shortage of energy, especially in the rural areas. Fuel for cooking, heating, lighting, and other activities is typically sourced from biomass, as there are few alternatives. Pursuit of biomass, especially for a growing population, has resulted in a high rate of deforestation and added pressure on households, as resources diminish. Women and children bare most of the burden as the principal collectors of biomass. Given the current demographics, it is likely that the pressure on the environment will only continue to rise, further exacerbating the county's vulnerability to climate change.

[36] *IBID*

Chronic Poverty: High levels of chronic poverty characterize the country. Due to poverty, and its associated depravations, households have limited assets and resources to diversify their livelihoods and manage climate hazards, this is especially the case of women and other disadvantaged groups, like the elderly and the youth. Thus, when a shock occurs, households often fall even further into poverty. Fluctuations of the poverty rate within a year are evident, further indicating the strong relationship between seasonality and the wellbeing of households. Poverty is at its lowest immediately after the harvest from April to July and tends to increase in the following months, reaching its highest just before the following harvest. Looking at the larger picture, the current proportion of the population living in moderate poverty is 51.5%. Previous assessment, estimated poverty was roughly the same at 50.7 % in 2010/11[37]. While this remains high, the stabilization is quite notable given that this was a period of various shocks. Ultra-poverty even managed to decline from 24.5% to 20.1% of the population[38]. Analysis has shown that the stabilization was made possible by the scale up of social protection programs and relief assistance provided during this period. As noted before, following the El Niño event, over 40 % of the population was targeted with humanitarian, food assistance[39]. As such, its reach was almost equal to the number of people living in poverty, especially those in extreme poverty. This illustrates the need to further enhance livelihoods and incomes of those in poverty and who are vulnerable to shocks, with an emphasis on the most marginalized.





NSO & WB, HIS 4, 2018

[37] "Malawi Poverty Statistics, 2016/17", The National Statistics Office and the World Bank Group, http://microdata.worldbank.org/index.php/catalog/2939

[38] *IBID*

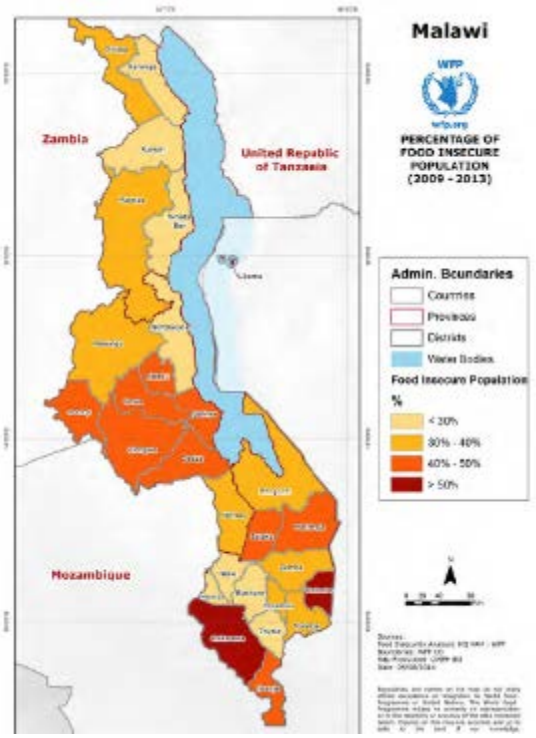
[39] "WFP Malawi Situational Report", WFP Malawi, https://reliefweb.int/sites/reliefweb.int/files/resources/WFP%20Malawi%20Situation%20Report%20%2302%2C%2009%20February%202017.pdf

NSO & WB, HIS 4, 2018

Chronic food insecurity: Food insecurity is a chronic issue in Malawi. So, while numbers may spike in response to an unpredictable shock, they remain at high levels most of the time, even in the absence of shocks, much like poverty. A look back to the period 2009-2013 shows that food insecurity, as shown by the prevalence of food insecure people in the population, generally remained above 30 % across most of the country. Districts like Chikwawa and Phalombe had over 50 % of the population affected by food insecurity in this period[40]. Analysis has shown that the most food insecure households in the country are those that depend on agriculture for their subsistence and livelihood. The trend is most pronounced in the southern region. In this context, food insecurity within a year follows the seasonal calendar, thereby, dropping after the harvest is realized, but growing as time passes, leading up to the next harvest. The period right before the harvest is therefore the most sensitive period, when people are most food insecure. This is referred to as the peak lean season. When events such as dry spells, drought, or floods occur during this period, and affect crop production, the peak lean season is extended, leaving households with few avenues to cope with the shock, since they have consumed most (if not all) their available food stocks. Income is, as shown above, also strained in the lean period, constraining food purchases. When shock years are consecutive, the avenues for coping are further reduced. This has been the case for the recent five years and evidence also shows that the food gap is most pronounced in female headed households and among those affected by HIV/AIDS. The latest figures from 2016/17 show that the prevalence of 'high food security' dropped from 57.6% to 24% and the prevalence of 'very low food security' increased from 32.5% to 61.4%[41]. It is in this context, that the country has experienced a historic increase in relief assistance being delivered to support food security. The Malawi Vulnerability Assessment Committee (MVAC) undertakes annual assessments of food insecurity to establish the possible need for relief assistance. A look at the MVAC assessments from 2005 to 2016 shows that every year a caseload has been identified for relief assistance. The number of individuals requiring assistance, however, spikes considerably starting from 2012 with an overall caseload of 1,972,993 individuals. The caseload reaches its highest level in 2016 with 6,692,114 individuals being targeted that year, or 40 % of the population. Between 2005 and 2016 the districts with the most number of

[40] "Integrated Context Analysis 2014", WF & Government of Malawi, http://www1.wfp.org/countries/malawi
[41] "Malawi Poverty Statistics, 2016/17", The National Statistics Office and the World Bank Group, http://microdata.worldbank.org/index.php/catalog/2939

years included in the MVAC response include Chikwawa, Nsanje, Balaka, Blantyre, Zomba, and Phalombe[42].

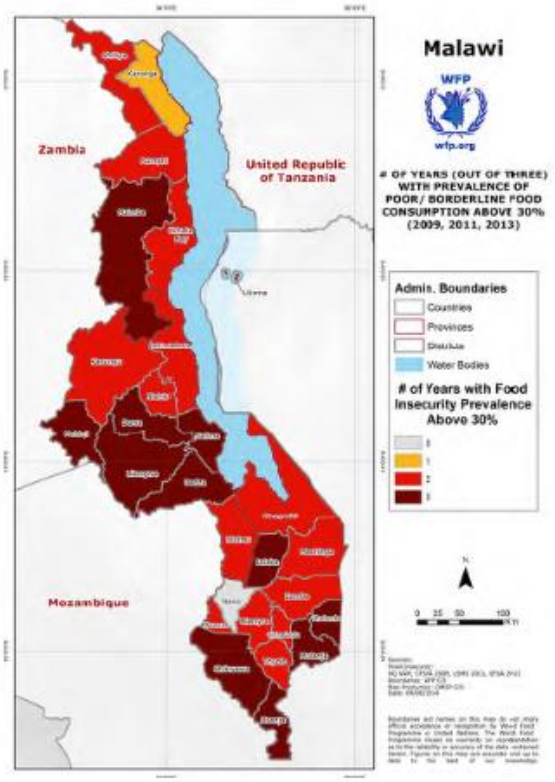


WFP, ICA, 2014

Malnutrition: Malnutrition is rampant in Malawi. Malnutrition does not follow closely seasonal or geographical trends, rather it affects the whole country at all times. The map below shows this, using the food consumption score as a proxy. The food consumption score (FCS) is based on dietary diversity, food frequency, and relative nutritional importance of the various food that groups consumed. The higher the FCS is the higher the dietary diversity and frequency. High food consumption increases the possibility that a household achieves nutrient adequacy. Households are divided into one of three groups based on their food consumption score: poor, borderline or acceptable food consumption. The map below shows that poor and borderline FCS have been registered across all corners of the country, with many districts experiencing this 2 or 3 years during this period. In this context, 37 % of children under the age of 5 are malnourished[43]. In addition, wasting and micro-nutrient deficiencies (especially anemia) are also prevalent across the country. Overall, it is estimated that malnutrition in all its forms causes over 10 % losses in annual GDP[44]. The increased frequency of weather-related shocks can exacerbate this. Drought and dry spells cause a decrease of water availability to grow and process a diversity of foods to meet the nutritional needs of households. Floods, on the other hand, can drive the incidence of disease, placing a greater emphasis on a proper nutrition, but making it at the same time much harder to realize. Underscoring this is the fact that there are groups at risk across the country that need to be considered. Pregnant and lactating women, children under 5, individuals affected by HIV/AIDS (and other diseases), as well as adolescents are

[42] "MVAC Population of Missing Food Entitlements Requiring Humanitarian Assistance by District Since 2005 – 2016" WFP Malawi.
[43] "Integrated Context Analysis 2014", WF & Government of Malawi, http://www1.wfp.org/countries/malawi
[44] "The Cost of Hunger in Malawi: Social and Economic Impacts of Child Undernutrition in Malawi - Implications on National Development and Vision 2020" WFP et al, https://reliefweb.int/report/malawi/cost-hunger-malawi-social-and-economic-impacts-child-undernutrition-malawi

overrepresented in the figures of malnutrition and require special attention. Malnutrition is therefore a complex challenge that will likely become worse with the impacts of climate change.



WFP, ICA, 2014

Barriers: The complex relationship across the factors noted above act as a barrier to climate adaptation. Based on these, the following barriers have been identified as the most critical.

At the government/national level

- Assistance focused on addressing acute needs due to weather related shocks
- Chronic problems left unaddressed, making it so that future weather shocks further necessitate relief assistance
- Lack of interconnectedness across climate interventions due to the cross-sectoral nature of the problem
- Due to fiscal constraints, assistance is donor driven with few long-term commitments from the government and other national stakeholders, like the private sector
- Agricultural sector characterized by volatility resulting in fragmented and unsustainable food system
- Policies and programs are not linked to climate trends and future climate forecasts
- Inadequate technical capacities and resources at national and district levels (knowledge and resources)

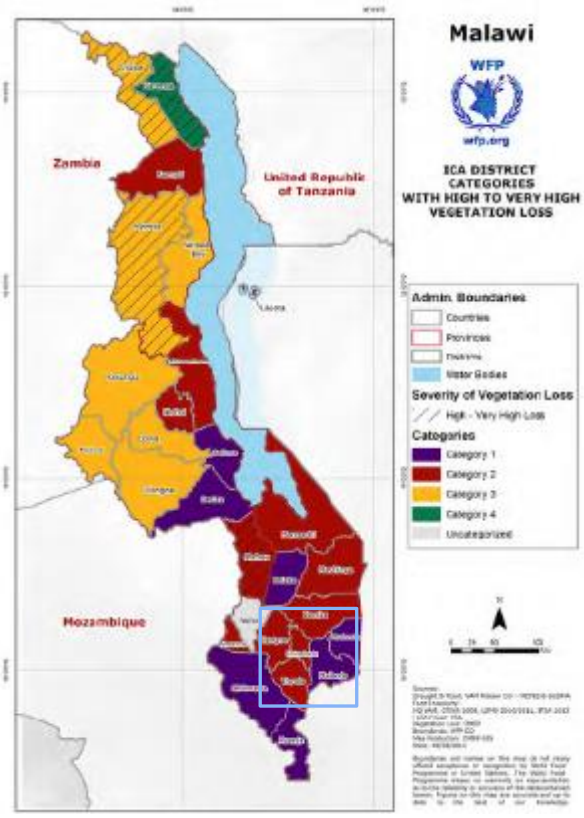
At the household/community level

- Inadequate awareness and knowledge of climate change and its impact on livelihoods
- Mismanagement of natural resources and lack of awareness of unsustainable practices that results in widespread land/environmental degradation
- Poor adaptation options and practices that reduce vulnerability and strengthen preparedness to climate related hazards
- Non-diversified, low output livelihoods increase vulnerability to climate impact
- Inadequate of access to information and knowledge to better manage increased climate variability and recurrent climate shocks.
- Poor access to agricultural markets for accessing inputs and for marketing agricultural produce

Project Area and Target Groups

The project seeks to enhanced climate adaptation and food security of households through access to integrated climate risk management strategies and structured market opportunities, with a focus on the most vulnerable. The project, thus, purposely targets those who are most affected by climate change, poverty, food insecurity, and rely on agricultural livelihoods that are limited by and vulnerable to climatic shocks, especially women and other marginalized groups. The identification of these project locations is informed by the 2014 Integrated Context Analysis (ICA), which is a historical analysis, and is supported by the findings of the most recent Integrated Household Survey (HIS IV) looking at the period 2010/11 and 2016/17. The ICA involves the creation of maps which use overlays of relevant information to identify patterns of vulnerability. Historical trend analyses of food security, natural shocks, and land degradation (as an aggravating factor heightening the risk of natural shocks) are overlaid on to each other to identify areas of convergence. These are then used to identify and discuss the most appropriate programmatic strategies in specific geographical areas - including resilience building, disaster risk reduction, social protection, and emergency preparedness - between government and partners. This is cross-referenced with prevailing trends shown in IHS IV. The map presented below is the main output of the ICA, highlighting food insecure, at risk and densely populated geographic areas, along with the suggested project area (in the blue rectangle). Priority is given to districts under categories 1 and 2. In addition, besides HIS IV, the selection was guided by national resilience commitments, as expressed in different strategies and policies, including the presence of ongoing programs, or initiatives, which could help this project. The National Agricultural Investment Plan and the National Resilience Strategy were keenly influential. As a result, 32,000 households in Balaka, Zomba, and Machinga districts are to be targeted by the project. The proximity and similarities across the districts offer the project an opportunity to test and validate the proposed integrated climate risk management strategies and structured market opportunities, prior to scaling these further to other more diverse contexts.

CATEGORY 1	Districts where 30% or more of the population have been consistently identified as food insecure with High/ Moderate exposure & risk to natural shocks
CATEGORY 2	Districts where 30% or more of the population have been identified as food insecure half of the time with High/ Moderate exposure & risk to natural shocks
CATEGORY 3	Districts where 30% or more of the population having been consistently identified as food insecure, yet with a low exposure 7 risk to natural shocks
CATEGORY 4	Low reoccurrence of food insecurity above 30%, yet with a high/ Moderate exposure & risk to natural shocks
UN-CATEGORIZED	*Low reoccurrence of food insecurity prevalence above 30%. Low exposure & risk to natural shocks*



WFP, ICA, 2014

Project / Programme Objectives:

The overall goal of the project is to enhance climate adaptation and food security of households through access to integrated climate risk management strategies and structured market opportunities. The project will achieve this by pursuing the following outcomes:

1. Improved access to insurance as a risk transfer mechanism for targeted farmers affected by climate change and food insecurity;
2. Adopted climate-resilient agriculture practices among targeted farmers contributing to the integrated climate risk management approach; and
3. Strengthened market access strategies and approaches for smallholder farmers.

Each outcome has corresponding outputs as follows:

Outcome 1, outputs

1.1 Design a weather index micro insurance product for drought and dry spells that can cover farmers' needs at scale.
1.2 Raise awareness on weather index insurance (WII) among farmers and enable vulnerable farmer access to weather index micro insurance.
1.3 Strengthen national capacities and systems to provide weather index insurance, working with the private and public sector.
1.4 Support the inclusion of insurance (not limited to WII) as risk transfer mechanisms in national agriculture programs and schemes.

Outcome 2, outputs

2.1 Promote soil and water conservation practices through individual and group asset creation including irrigation development.
2.2 Promote climate resilient agriculture among farmers through extension service support.
2.3 Support crop diversification with a focus on drought tolerant and nutritious crops.
2.4 Provide climate services to inform livelihood decision-making among farmers.
2.5 Strengthen national capacities and systems to provide these integrated climate risk management approaches.

Outcome 3, outputs

3.1 Strengthen financial capacities and market access opportunities to enhance investment in climate-resilience agriculture (including saving, credit, and financial literacy)
3.2 Strengthen performance and outreach of farmer organizations/cooperatives and enhance their capacity to engage in farming as a business
3.3 Support access to storage and aggregating infrastructure for targeted farmers for greater market access, including establishment of rural warehouses
3.4 Provider market information to inform business planning & activities
3.5 Promote smallholder procurement through government/private sector strategies and programs

Each outcome is treated as a project component. All the components will be implemented across the target districts. This means that every targeted household will be provided access to all the project activities simultaneously. Throughout the 5-year period, the activities will be sequenced, or phased in, as the capacities of the household are enhanced and better able to engage with all these components. The exact phasing will be further determined by additional assessments on households' capacities and local markets, among others.

The project approach is to establish sustainable and viable mechanisms for vulnerable and food insecure households to access different strategies and tools under an integrated climate risk management approach, and market based opportunities. Therefore, it focuses on developing the adequate systems and approaches by leveraging the comparative advantages of both the private and public sectors, while also working on the capacities of households to adapt to climate change and become self-reliant. In this context, the project will pursue the transitioning of vulnerable, farming households from subsistence to surplus-producing status, to ensure they have access to diversified and strengthened livelihoods. This is to be supported by the adequate market and financial services and conditions being fostered in favor of the targeted farmers, leveraging microfinance institutions, insurance companies, agro-dealers, and agribusinesses. The role of the government will be bolstered to act as the enabler of such processes, providing the guidance, skills, tools and systems that are necessary. WFP will leverage its expertise in-country and globally to catalyze these changes and support the implementation of project activities by the relevant national stakeholders, considerate of the farmers (farmer organizations), private sector actors, and government entities.

Project / Programme Components and Financing

Expected Outcome/Project Component	Expected Concrete Outputs	Amount (US$)
Improved access to insurance as a risk transfer mechanism for targeted farmers affected by climate change and food insecurity	1.1 Design a weather index micro insurance product for drought and dry spells that can cover farmers needs at scale	$ 1,600,000.00
	1.2 Raise awareness on weather index insurance among farmers and enable vulnerable farmer access to weather index micro insurance (cash or work)	$ 1,600,000.00
	1.3 Strengthen national capacities and systems to provide weather index insurance working with the private and public sector	$ 25,000.00
	1.4 Support the inclusion of insurance (not limited to WII) as risk transfer mechanisms in national AG programs and schemes	$ 23,000.00
Adopted climate-resilient agriculture practices among targeted farmers contributing to the integrated climate risk management approach	2.1 Promote soil and water conservation practices through individual and group asset creation including irrigation development	$ 768,000.00
	2.2 Promote climate resilient agriculture among farmers through extension service support	$ 384,000.00
	2.3 Support crop diversification with a focus on drought tolerant and nutritious crops	$ 210,000.00
	2.4 Provide climate services to inform livelihood decision-making among farmers	$ 600,000.00
	2.5 Strengthen national capacities and systems to provide these integrated climate risk management approaches	$ 50,000.00
Strengthened market access strategies and approaches for smallholder farmers	3.1 Strengthen financial capacities and market access opportunities to enhance investment in climate-resilience agriculture (including saving, credit, and financial literacy)	$ 450,000.00
	3.2 Strengthen performance and outreach of farmer organizations/cooperatives and enhance their capacity to engage in farming as a business	$ 1,024,000.00
	3.3 Support access to storage and aggregating infrastructure for targeted farmers for greater market access, including establishment of rural warehouses	$ 1,024,000.00
	3.4 Provider market information to inform business planning & activities	$ 600,000.00
	3.5 Promote smallholder procurement through government/private sector strategies and programs	$ 50,000.00
	Total Operational Cost	$ 8,408,000.00
	Project/Programme Execution cost (9.5%)	$ 798,760.000
	Total Project/Programme Cost	$ 9,206,760.000
	Project/Programme Cycle Management Fee charged by the Implementing Entity (8.5%)	$ 782,574.60
	Amount of Financing Requested	**$ 9,989,334.60**

Projected Calendar:

MILESTONES	EXPECTED DATES
Start of Project Implementation	May 2019
Mid-term Review	May 2022
Project/Programme Closing	May 2024
Terminal Evaluation	June 2024

PART II: PROJECT / PROGRAMME JUSTIFICATION

A. Describe the project / programme components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience.

The Government of Malawi has made a commitment to address climate change and to promote resilience, with a special emphasis on breaking the cycle of hunger. This project has been developed with representatives of the Government of Malawi to be illustrative of these priorities. To this end, a special Task Force was set up for the design of the project with representation from the following entities: The Ministry of Finance, specifically the Economic Planning and Development Department (EPD), The Ministry of Agriculture, Irrigation and Water Development (MoAIWD), Department of Climate Change and Meteorological Services (DCCMS), Department of Disaster Management Affairs (DoDMA), Ministry of Industry, Trade and Tourism (MoITT), Environmental Affairs Department (EAD), and the Ministry Local Government and Rural Development (MLGRD). Through the engagement of these national stakeholders in the design of the project and through deliberate efforts, project alignment to national priorities on climate change adaptation and resilience has been pursued.

Before outlining in detail each of the project components, it should be noted that the project's three components are standalone yet interrelated. While they each contribute to specific outcomes, together they help achieve the overall objective. In this context, each component will be presented, while acknowledging the linkages throughout.

COMPONENT 1

1. Improved access to insurance as a risk transfer mechanism for targeted farmers affected by climate change and food insecurity

Insurance is a risk transfer mechanism that is commonly used across the world. In developing countries, it is less prevalent and often limited to life or auto insurance. However, given the high levels of risk and vulnerability associated with the local models of agriculture and the hard-felt impacts of climate change, there is a great opportunity to leverage this mechanism for farmers in developing countries. In this context, insurance is sought by the project recognizing that weather-related shocks are due to persist, and that while efforts will be made to build resilience to these, there will be shock events that surpass the coping capacities of those affected.

The protection of the insurance and compensation when triggered can help households maintain their level of wellbeing even when shocks occur. In shock-free years, insurance can act as an enabler for investments and diversification in livelihoods, as it provides a guarantee for credit and the security of compensation, if something does go wrong. Insurance, therefore, has a dual role of protecting and promoting diversified livelihoods, which in the context of climate change is key.

Weather-index insurance in particular has proven effective, as it is able to single out the risk of specific weather-related shocks and provide adequate protection against this. Specifically, when rainfall levels go below an established threshold, in weather index insurance, compensation is triggered to help farmers recover and adapt from the shock. This is, therefore, appropriate in contexts like Malawi, where dry spells and drought are increasing in frequency and variability.

The index, which is monitored using satellite data, makes the weather index insurance scheme more time and cost effective. Less field visits are needed to set up the parameters of the insurance and to assess the damages for payouts. This unique feature makes it a fitting tool for those who have a limited income and are unable to access traditional insurance. It also makes it more effective in stimulating a timely recovery for stressed livelihoods, helping avoid the use of negative coping strategies with long-term impacts on wellbeing.

Weather index insurance could serve as an entry point for other types of insurances and financial services with more provisions as the production systems adopted change and evolve. This transition is underpinned by the greater financial capacity of the individual. So, while various and appropriate insurance and financial products will be explored as the needs and capacities of the targeted households change, while maintaining a focus principally on weather index micro-insurance.

The Government of Malawi with support from the World Food Programme began a weather index micro insurance pilot in 2015. This is called the R4 Rural Resilience Initaitive (R4). The pilot focused on testing the feasibility of weather index insurance and exploring the systems and approaches that could be leveraged to support a sustainable expansion of the mechanism. The index product proved to be effective, since it triggered twice, once after the El Niño drought event and another after the 2017/18 dry spells. The first payout reached 500 farmers with 3,000 USD and the second over 7,000 farmers with a total value of over 4000,000 USD. For this project, leveraging the success and lessons learned, the Government of Malawi and the World Food Programme are seeking to expand and adapt R4 to the emerging country needs, as part of a government-owned initiative. This is project will be distinct from R4 although complementary to it: it will reach households not currently under R4, it will bring new risk management elements to households already on R4 and other resilience initiatives, and it will undertake this work through government led-strategies. It is worth noting that the index for this project can be adapted to look at other crops, not limited to maize, like under R4.

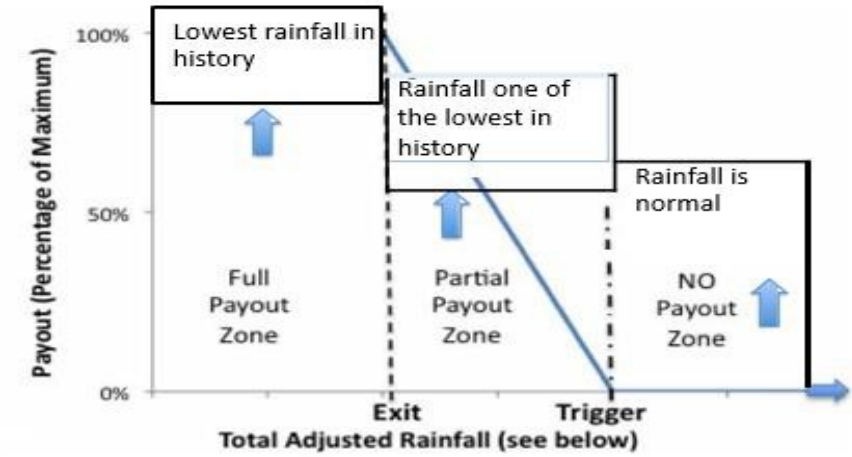
Output group 1.1

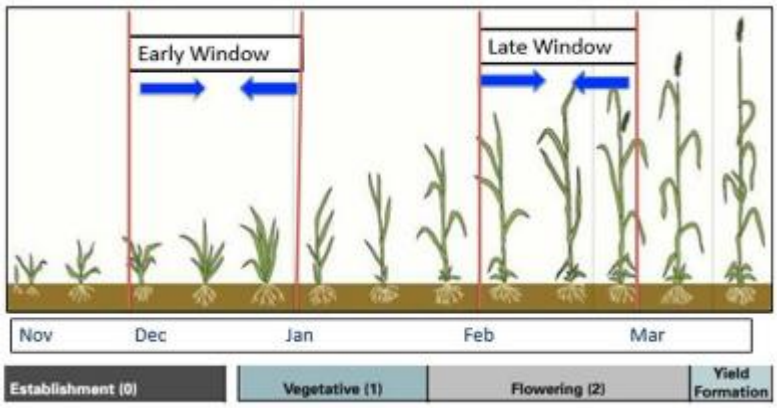
1.1 Design a weather index micro insurance product for drought and dry spells that can cover farmers' needs at scale
    - 1.1.1 Collect and analyze historical rainfall and agrometeorological data for the index design.
    - 1.1.2 Work with farmers using a participatory index design approach to establish the triggers for the insurance and windows of protection.
    - 1.1.3 Collaborate with the national insurance association to underwrite the insurance product as per the agrometeorological parameters required and farmer feedback.

A national group of index design experts was fostered during the pilot. The group consists of key government institutions involved in the insurance scheme. They actively engage in the design and monitoring of the insurance product. To do so, they have received training from the World Food Programme and the University of Columbia's International Research Institute for Climate and Society.

Building on the national capacities, the project will support the index design group to collect the historical rainfall and agrometeorological data for the index design. This is a process to be led by the DCCMS, while supported by the rest of the group. The data will be analyzed to establish the years that the rainfall levels fell below the crop requirements and resulted in a bad year. Similarly, good years for crop production on rainfall will be identified. This is done to help establish the thresholds that must be met for the insurance to trigger a payout. If the rainfall levels fall below the establish threshold, then

compensation will be realized. Also, the threshold can be surpassed with too much water, also resulting a payout due to crop losses.





The identified good and bad years, as well as the thresholds for the insurance, are presented by the index design group to a representative sample of targeted smallholder farmers. The objective of this exercise is for them to validate the historical data analysis, and thus, support the setting of thresholds for the insurance. Farmer opinion is also sought for the setting of protection windows, which refer to the critical times during the crop cycle that they wish to be insured. Commonly, farmers establish two windows of protection. While one protects the establishment of the crop, the other protects the flowering stage. This is shown in the illustration below. The engagement of the farmers in the design of the insurance product is a very important stage of the process. It is through this exercise that farmers become better acquainted with the product, buy in into the process, and are able to ensure it is fitting with their needs.

The index design group is not the only innovation to be taken forward by this project. The project is also to develop mobile technology solutions for collecting, analyzing, and archiving the data for the index design. The purpose behind the digitization of these processes is to enable the scale up of the initiative without facing barriers of reach. The index design group, for example, is to be furnished with tablets that have electronic forms and prompts to support the data collection, including the participatory index design approach with farmers. In addition, mobile technology will be leveraged to solicit direct and specific feedback form farmers on the insurance to strengthen their involvement in the design and monitoring of the index, with a focus on securing the effective performance of the index. A proposed digital platform

will host and analyze the data further supporting index design and monitoring functions by the index design group.

The use of technologies for the insurance can facilitate the analysis and communication with the Insurance Association of Malawi, specifically the NICO General Insurance, who has been appointed by the Association to underwrite the insurance product, on the packaging of the insurance product as per the specifications noted by the farmers and the requirements noted through historical analysis. In turn, this facilitates the local and global reinsurance of the product in a timely manner leading up to the protection period. Notably, the Insurance Association of Malawi is represented in the index design group. As such, they are involved throughout the process and understand the product that is required. So, they can leverage that information to facilitate their work, which is key to establishing a sustainable and financially viable product beyond the project cycle.

Output group 1.2

1.2 Raise awareness on weather index insurance among farmers and enable vulnerable farmer access to weather index micro insurance
    - 1.2.1 Develop consumer education and protection materials to promote an improved understanding of insurance and financial literacy.
    - 1.2.2 Conduct community sensitization and mobilization on the insurance product to stimulate an informed demand.
    - 1.2.3 Establish a cash payment avenue for more productive farmers affected by weather related shocks to seek insurance protection.
    - 1.2.4 Establish a non-cash payment avenue for less productive farmers affected by weather related shocks, as they develop the capacity to pay for this in cash.

As insurance is a new climate risk management tool, the intended users must be well informed of the opportunities and challenges that this entails. In this way, an informed demand can be stimulated across targeted farmers, helping enhance their uptake and satisfaction with the product, which is key for the long-term sustainability of the initiative. The project aims for the insurance clients to adopt insurance as part of their regular practices. For this, communication and sensitization is key so that farmers see and understand the proposition of value of insurance. While these activities will be done by the project implementing team, through the district level staff, the project also seeks to create the local structures and capacities to carry out this informed dialogue. For this, the project seeks to mobilize local development structures and identify community champions to act as resources to the community. This work is to be underpinned by the development of consumer education and protection materials that will be supported by the project team and for the Reserve Bank. The materials will help maintain standards across the sector on how to engage clients in weather index micro insurance schemes, in line with the new Directive on Inclusive Insurance. As such, trainings on these will also be organized across the sector.

Stimulating the demand for index insurance requires for the mechanisms to provide this service to be established. Recognizing that different farmers have varying levels of capacity to engage in the insurance scheme, while they may all have a need for it, the project has made it a priority to develop fitting mechanisms to access the insurance. Principally, the mechanisms that will be explored are to target vulnerable smallholder farmers with limited cash to pay for the insurance premium, while also establishing traditional channels through which more productive farmers, who are still affected by climate change, can access the insurance with cash. This approach is intended to help crowd in the market and stimulate its growth going forward even beyond the project. In support of this, non-cash paying farmers will be supported to transition to cash payment. The intended approach is to introduce partial cash contributions after 2 or 3 years that increase with time so that they may end up paying for the insurance in whole with cash. The non-cash paying group will be able to access the insurance by meeting a certain conditionality, which if completed by the farmer will result in the project paying for the premium on behalf of the farmer. The conditionality will be defined in such a way that contributes to climate adaptation and improved risk management. For example,

households can be requested to propagate seeds for drought tolerant crops, which can help diversify their diets, incomes, and risks.

Output group 1.3

1.3 Strengthen national capacities and systems to provide weather index insurance working with the private and public sector
    - 1.3.1 Continue to train and support the activities of the national index design group
    - 1.3.2 Develop and test tools and systems that can support the work by the national index design group
    - 1.3.3 Establish a handover strategy of the insurance scheme to the national index design group

Building on the above, the project will continue to foster a group of national experts on index design. The group was established in 2017 (at the end of the insurance pilot) and has representation from DoDMA, EPD, MoAIWD, DCCMS, and IAM. Each institution contributes to the insurance scheme in a way that is in line with their mandate and role in taking forward the initiative beyond the project cycle. For example, DCCMS collects the historical and observed rainfall data to support index design and monitoring. MoAIWD collects the agricultural records for the targeted locations. DoDMA and EPD, along with the others, contribute to the field data collection, especially the farmer engagement component. IAM underwrites the insurance product and makes payouts as needed.

The group is also intended to support the institutionalization of insurance as a risk management tool across key policies and strategies. This includes the NRS which is housed with DoDMA, the MNSSP with EPD, the NAIP with MoAIWD, and the Inclusive Insurance Directive that guides the work by the IAM. Besides these sectoral approaches, the group works to mainstream in broader policies related to climate change and resilience. This is intended to guarantee that in the long run the group is able to take the work forward beyond any given project.

By strengthening their core capacities, getting their buy in and ownership of the initiative, and supporting the institutionalization of the approach, the national group is a strategic part of the sustainability of the project's activities. This is to be further articulated and operationalized in the context of the project, supported by tailored trainings and tools development that will enable each entity to carry out their functions as per the handover strategy. The trainings aim to be a combination of practical and theoretical sessions, where first the team is exposed to the principles and then asked to put these into practice. The best way to put these into practice is to marry the training with the ongoing work related to the index design and monitoring. As such, each entity is will be working on the key components of the scheme for which they will be ultimately responsible for. Many of the innovations that will support this work have been noted, which are focused on developing the technologies needed to systematize, streamline, and scale up the processes for index design and monitoring.

Output group 1.4

1.4 Support the inclusion of insurance (not limited to WII) as risk transfer mechanisms in national agriculture programs and schemes
    - 1.4.1 Provide technical advice and expertise to the MoAIWD on insurance as a risk transfer mechanism that can be leveraged across different programs
    - 1.4.2 Strengthen and transfer skills on insurance to MoAIWD technical staff operating sector wide programs
    - 1.4.3 Strengthen the risk transfer technical working group by the MoAIWD and other relevant sectoral approaches

Insurance as a risk transfer mechanism is a tool that is relevant to different projects operated by the MoAIWD, not limited to this one. As such, the project team will work to establish the tools and capacities within the MoAIWD to leverage insurance across other programs, as is fitting. In addition, the project team

and partners will provide technical advice and guidance to the MoAIWD in the design and roll out of other programs with insurance components. This is also intended to set up a comprehensive and common approach through which insurance as a risk transfer tool is mainstreamed across different interventions focused on climate adaptation and making agriculture more resilient. The risk transfer technical working group housed within the MoAIWD will be targeted as a vehicle for this work, as it brings together key staff within the Ministry, but it also acts a convening group for other relevant actors, including the private sector. As such, efforts will be made to strengthen this pre-existing group to help take forward this work in a systematic and multi-sectoral manner. Through this work, efforts will also be made to enhance risk layering across macro, meso, and micro levels, seeking to support alignment and work throughout. In particular, the project will explore linkages to the country's engagement with Africa Risk Capacity's (ARC) WII at the macro level.

COMPONENT 2

2. Adopted climate-resilient agriculture practices among targeted farmers contributing to the integrated climate risk management approach

This component is very closely linked to the previous. Global evidence has shown that insurance is most effective as part of an integrated climate risk management package, rather than a standalone intervention. Insurance is a measure against catastrophic risk[45]. However, an individual's capacity to deal with catastrophic risk is influenced by the other less severe shocks, or stressors, that they may face. For example, if a farmer is unable to secure the right type of seeds or agricultural implements, then their whole production is compromised, even before rainfall becomes an issue. In this context, the project seeks to offer an integrated package of support that tackles the different challenges that farmers face, which interact with the insurance. The objective of this component is to deliver assistance in a way that develops the individual's capacity to adapt to climate change and become self-reliant. This way, they will be able to undertake their livelihoods with confidence knowing that they have the capacities to deal with the issues that may arise. In addition, they will be insured for shocks beyond their control, further offering a peace of mind.

Output group 2.1

2.1 Promote soil and water conservation practices through individual and group asset creation, including irrigation development
    2.1.1 Enable individual and group work on the creation, rehabilitation, and maintenance of water and soil conservation structures
    2.1.2 Contribute to local irrigation structures, as most appropriate and fitting with the context

The priority of the project is to enhance the natural productive capacity of the environment upon which farmers depend. Hence, the project will promote a dual focus on conservation agriculture (see 2.2 below) and the development of individual and community assets that support water harvesting. This is done recognizing that to have a significant impact this sort of work needs to be done at the larger scale, not just in the farming plots. As such, the project will support the creation, rehabilitation, and upkeep of water and soil conservation structures at the community and household levels. Trenches, swales, gully reclamation, and similar structures will be promoted at the community and household levels. These are intended to further promote the natural capacity of the environment to provide the ecosystem services upon which farmers rely for their wellbeing. To the extent possible, this approach will be married to the ongoing work at the district level on integrated watershed management and guided by the national catchment guidelines.

Through consultations with farmers, limited access to water for production and consumption has been noted as a critical challenge, which is exacerbated by climate change. Water conservation practices will help farmers store and make use of water in a more efficient manner. Where appropriate, irrigation schemes will

[45] "The Potential for Scale and Sustainability in Weather Index Insurance for Agriculture and Rural Livelihoods", IFAD & WFP, http://lib.riskreductionafrica.org/bitstream/handle/123456789/1215/the%20potential%20for%20scale%20and%20sustainability%20in%20weather%20index%20insurance.pdf?sequence=1

be explored, with a focus on community structures that are fitting with the local environment. These are intended to direct local water sources to the fields and minimize the time and resources spent in procuring water for production. In Balaka, there are parts where there is natural flooding during the rainy season, which can be targeted. Similarly, in Zomba and Machinga, there are small lakes that can be tapped for irrigation. Recognizing that there are other development actors working on irrigation, with a focus on infrastructure development, the project will try to align to these efforts. To ensure the sustainability of the scheme, the project will also liaise with the district council sector leads and community development structures to select the appropriate locations and approaches for this activity.

Output group 2.2

2.2 Promote climate resilient agriculture among farmers through extension service support
- 2.2.1 Promote minimal tillage for the enhancement of soil quality and water retention for crop production
- 2.2.2 Encourage the retention of crop residues to support soil processes and fertility
- 2.2.3 Encourage crop diversification and rotation for improved production and consumption

Conservation agriculture will be promoted as a climate resilience agricultural practice. Three (3) key CA principles will be promoted, namely: Minimum Soil Disturbance, Retention of Crop Residues, and Crop Diversification and Intercropping.

- Manual minimum tillage is characterized by planting stations (basins) that enable the farmer to plant the crop after the first effective rains when the basins have captured rainwater and drained naturally. Seeds are placed in each basin at the appropriate seeding rate and covered with clod-free soil. The advantage of using basins is that they allow to capture water as soon as the wet season starts and enable precision application of both organic and inorganic fertilizer directly into the pit rather than being broadcast. Hence, basins allow for water and nutrients to be collected/stored in vicinity of the roots and thus to be used in a more efficient way.
- Retention of crop residues is important to improve soil organic matter and soil structure. With increased amounts of soil organic matter, microbes that are responsible for nitrogen fixation can thrive and conduct processes that help improve soil fertility. As a result of this, the use of inorganic fertilizers is reduced over time. The same applies for herbicides through regular weeding, which together with mulching, progressively limits weed growth.
- In addition to this technique, the project will also promote crop rotation, including legumes that support soil fertility. In addition, this helps with pest management, by interrupting the infection chain between subsequent crops and making full use of the physical and chemical interactions between different plant species. To the extent that a new balance between the organisms of the farm-ecosystem, pests, crops and weeds, becomes established and the farmer learns to manage the system, the use of synthetic pesticides and mineral fertilizer tends to decline to a level below that of the original farming system, while allowing for improvements in the productivity of the system.

Farmers will be supported through trainings and demonstrations to follow the conservation agriculture calendar. See illustrative calendar below.

Conservation Farming Calendar – First-Year Farmer

Farmer Activities	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Winter weeding												
Mark out												
Mulch/residue management												
Land preparation/dig basins												
Apply manure/fertilizer (lime where necessary)												
Pre-plant weeding, if necessary												
Plant												
Postplant weeding												
Apply N topdressing at 5 to 6 leaf stage												
Post topdressing weeding												
Clean weeds at harvest time												
Harvest												

Output group 2.3

2.3 Support crop diversification with a focus on drought tolerant and nutritious crops

Under the CA framework, the project will support crop diversification to enhance productivity in the context of climate change. Therefore, it is a key adaptation strategy being pursued. Besides it being an adaptation strategy for productive purposes, it is also seen as a strategy to address the prevailing issues around malnutrition. The diet in Malawi is largely dependent on maize. Besides this being a weather-sensitive crop, often stressed under the changing climate, when consumed almost exclusively, it is of little nutritional value. Maize is rich in vitamin C, magnesium, B vitamins and carotenoids, but it is a poor source of protein. As such, there is a need to explore crops that can supplement maize that are both climate resilient and nutritious. Through these efforts, specific crops will be sought and promoted, besides legumes, crops like millet and sorghum will be considered. The specific crops by district (with possibilities for overlap) to be promoted will be selected on the following basis and supported by the fitting assessments:

- Fitting to local agrometeorological conditions
- Palatable and fitting with the local diet
- Marketable for profit
- Fitting with local practices
- Desirable by local communities

Upon selection of the crops for promotion, these will be integrated into the CA trainings and support rendered for their production and marketing (Component 3). In addition, messaging will be offered to the targeted farmers and communities on the benefits of the crops both for production and consumption to further support their adoption. To the extend needed, cooking demonstration and other practical teaching will be offered to facilitate the uptake of these crops into diets. The messaging will be integrated into the other information services being rendered by the project to maximize the reach and impact of the communication.

Notably, the specific activities under this output group will be further elaborated at project proposal development stage based on the findings of the assessments proposed. In accordance with further community consultations and assessments, the project might support other cost-effective measures that promote community and household adaptation to climate shocks, including for example seed banks.

Output group 2.4

2.4 Provide climate services to inform livelihood decision-making among farmers

2.4.1 Facilitate the collection of historical agrometeorological data to inform the climate services
2.4.2 Produce downscaled seasonal and in-season forecasts for each district
2.4.3 Develop advisories to accompany the dissemination of the seasonal forecasts
2.4.4 Support extension officers to access, interpret, and disseminate the climate services
2.4.5 Disseminate climate services through SMS and radio platforms

Livelihood decision-making by farmers is plagued by uncertainty. Without knowledge about the upcoming season, it is difficult to establish the types and quantities of input needed, the right type of practices, the suitable market to target, and thus, the investments needed to successfully harvest for both consumption and profit. Climate services are intended to support with this process of decision-making by providing farmers with information on the upcoming season accompanied by advisories for their livelihood decision-making. Climate services, therefore, marry weather and agricultural information to help inform farmers' actions. Besides working on the basis of a seasonal forecast, which provides an overview of the upcoming agricultural season, in-season updates are provided to further inform the farmers. The in-season forecasts are tobe provided every 10 days.

To optimize the use of the climate information in decision-making, the provision of climate services is integrated into the extension support offered at the district level. In this context, extension officers are trained

to collect, interpret, and disseminate climate services. The training of extension officers is based on the methodology developed by the University of Reading called the Participatory Integrated Climate Services for Agriculture (PICSA). PICSA has been used in Malawi since 2015, when it was first introduced by the World Food Programme in the context of a WMO-supported Global Framework for Climate Services project focused on climate adaptation. Through PICSA, farmers, with support from the extension officer, are able to develop livelihood plans that help inform the way they undertake their agricultural practices. This plan is informed by historical climate information and agronomical advice. This is further supported by the seasonal forecast and in-season forecasts. So, this way the livelihoods of farmers can be adapted to the changing climate. The use of SMS and radio platforms to disseminate updated information allows to reach farmers beyond the extension services.

The climate services production that underpins this activity is supported by DCCMS. They collect the historical data and produce the forecasts. Notably, since the WMO-supported programme, DCCMS has been supported to generate downscaled forecasts that provide district specific details. This was a significant advancement which has enabled for the production of more suitable climate services. This is applied to the in-season forecasts. Thus, throughout the season, farmers are receiving the most relevant information as possible. The forecasts are merged with the advisories through the national content creation platform which is housed within the MoAIWD. This is a multi-stakeholder platform that produces and clears content that is disseminated to farmers through extension support. Therefore, it benefits greatly from the guidance of the Department of Agricultural Extension Support (DAES). This project will continue to engage this national platform and support its operations. Farm Radio Trust (FRT) is a partner of the project and member of the national content creation platform. They will support with the dissemination of the climate services through the SMS and radio platforms. Notably, SMS, radio, and extension support were selected by farmers as the most appropriate channels for the delivery of this information based on consultations with them conducted as a baseline for the WMO-supported project. Verification of this has been conducted for the purposes of this project.

As noted, many of these techniques and approaches have begun to be used in the country. As such, the aim of the project is to build upon this to generate a comprehensive and uniform approach to the delivery of climate services for agriculture and food security. To this end, national capacities and tools will be fostered, while also work will be done to coordinate and enable the work of the different stakeholders involved. Emphasis will be placed to leverage the national structures in place for this, such as the content creation committee and the extension services by the MoAIWD. Accordingly, these will be the principal avenues for work on this output.

Output group 2.5

2.5 Strengthen national capacities and systems to provide these integrated climate risk management approaches
- 2.5.1 Foster cross-sectoral collaboration to facilitate access to integrated climate risk management approaches
- 2.5.2 Support institutionalization of the integrated climate risk management approach
- 2.5.3 Strengthen national capacities to deliver the integrated climate risk management approaches

Many of the approaches outlined above are already taking place in one way or another within Malawi. The impact of these interventions, however, is compromised, when they are implemented in a disjointed manner. The project will try to link these initiatives in terms of practice and concept, working to bring together sectors at the local levels for project delivery, but also working at the strategic policy level to encapsulate and institutionalize such approaches. The national group of experts for index design can be leveraged for this. The risk transfer technical working group can also be a group to target to promote the integrated approach. The goal is to ensure that the different sectors are working together to deliver this support.

In addition, it is important to further develop the capacities in place to deliver on each of these activities. For example, and building on the above, the project will work with others implementing PICSA to create a national pool of experts that can be called upon to train extension officers and support the roll out of PICSA across the country. The project will also explore opportunities to further tailor the approach to the needs of other vulnerable groups. In addition, the PICSA mobile application will be tested in this context to support extension officer engagement with the methods as they are in the field. Support will continue to be rendered to the DCCMS on data rescue for historical data and the analysis needed to develop the down-scaled seasonal forecasts. CA and irrigation are areas where actors are already working, as previously noted, so the project will liaise with them to align and support ongoing capacity strengthening efforts at the national and sub-national levels.

➔ Links to other components

- CA support will assist with the improvement of agricultural practices making the insurance component more effective, especially in terms of ensuring that the farmers adhere to a calendar of activities which is in line with the protection period of the insurance.
- CA and work on soil and water conservation structures at the community and households level can be considered as the conditionality for the non-cash paying farmers to access the insurance. Upon completion of the pre-specified work, then the project can pay the premium on behalf of the farmer, while they develop the capacity to pay for this in cash.
- Collection of historical rainfall and agricultural data for climate services and index design are one in the same. So, the same mechanisms can be used for this, including leveraging DCCMS and MoAIWD expertise. This reduces financial and time resources, making the project more cost-effective.
- Climate services, by informing livelihood decision making using forecasts, can be a tool to promote the uptake of the insurance. Should the farmers be made aware of a poor season up ahead, they will be motivated to purse the insurance. For this reason, messaging through the climate services is also intended to support the creation and dissemination of content on insurance, as part of the component on client education and protection, as well as awareness raising and sensitization.
- The crops promoted through the diversification activities will be supported by the marketing activities under component 3 to make sure that these are commercially viable and part of a sound livelihood strategy.
- The communication channels used for the climate services can be leveraged for the market information activities under component 3. As noted earlier, the project intends to minimize the use of multiple communication channels to enhance the reach and impact of the messages delivered.

COMPONENT 3

3. Strengthened market access strategies and approaches for smallholder farmers

Component 3 seeks to enhance climate adaptation and resilience-building through three avenues, specifically: the promotion of climate-resilient value chains, the strengthening and diversification of livelihoods, and the valorization of climate-resilient activities, which help ensure adherence to these. The approach is enhanced by the focus on fostering Farmer Organization development and contract farming opportunities for vulnerable farmers. This will be pursued in line with the Farmer Organization Development Strategy (2018) and the Contract Farming Strategy (2018). Component 3, with components 1 and 2, are therefore expected to facilitate the transition of farmers from subsistence to surplus producing, even in the context of climate change.

The component is primarily focused on making investments in climate-resilient production sustainable in the medium-long term. To do so, the demand side of agricultural production is to be stimulated. The project will achieve this objective by fostering FO formation and capacities. In addition, the project will also work to support aggregation, processing, storage and local purchase These activities are intended to contribute to

the establishment of a reliable market outlet providing sustained prices for farmers' increased production. In the long run, this will decrease the need for seasonal/conditional food assistance as smallholders will be able to produce their own food as well as protect and continue investing in climate-resilient practices, resorting only to the private market.

Output group 3.1

3.1 Strengthen financial capacities and market access opportunities to enhance investment in climate-resilience agriculture (including saving, credit, and financial literacy)
- 3.1.1. Strengthen the financial literacy of targeted famers to enable them to make informed and effective decisions about their financial resources.
- 3.1.2. Promote savings as a buffer against idiosyncratic shocks and a means to support productive investments for diversified livelihoods.
- 3.1.3. Enable access to credit for farmers to adapt and diversify their livelihoods making them more productive and resilient.

Through the project financial literacy trainings will be conducted to develop the capacity of farmers to access and benefit from financial institutions (both formal and informal). Financial literacy refers broadly to the skills and knowledge that allow individuals to make informed and effective decisions regarding financial matters, specifically in relation to accessing formal and informal financial services. Timings for saving, investment, and ways to do these are discussed through the trainings, in conjunction to their use for building household resilience and food security. As such, the financial literacy and trainings are focused on making financial tools part of the strategies that households use to build resilience and wellbeing.

Savings is intended to provide a means for households to manage idiosyncratic shocks and develop reserves for investment in better lives and livelihoods. Idiosyncratic shocks are individual events that negatively affect the household economy. The death or illness of a household member, theft, and fires are examples of idiosyncratic shocks. These shock events often require incomes to be diverted to meet unexpected expenses. Poor households with little disposable income are limited in their capacities to manage these shocks. Having savings to rely on can help them manage the consequences of these shock events and minimize the negative impacts on the household economy. In normal times, where there are no shocks, these reserves can be tapped to strengthen livelihoods through investment and enhance household wellbeing by increasing their consumption levels.

Bank and microfinance institution (MFI) penetration tends to be low in rural areas. Financial services tailored for these communities are often missing, and when they do exist, access to these is strained. Farmers and other rural populations also tend to have little knowledge and capacity to readily engage with these services. An initial strategy to overcome these challenges is to facilitate the creation of group savings. Group savings are a means to foster participant's saving and investment capacities, making them more apt for formal financial services, and familiar with the ways these can be used for productive purposes aimed at building resilience and food security. Group savings hence have a dual purpose which include fostering financial capacities and knowledge, but also to add to the protection and promotion features of the integrated risk management approach which farmers use.

The objectives of the credit component are to empower participants to take prudent risks and to develop livelihoods that are less exposed to increasing climate risks. Small farmers are often reluctant to invest land, labor, or capital in activities that are vulnerable to external shocks. They may thus prefer to stick to low input – low output production systems that guarantee a predictable, although low, income. Investment is also limited by MFI's reluctance to offer credit to farmers because of the perceived high risk of default in bad seasons. With increased food security and a stronger asset base, farmers in the project can increase their savings and stocks, using them along with insurance as collateral to obtain credit for investing in productive assets such as seeds, fertilizers and new technologies that increase productivity. Moreover, insured farmers are more confident to take out loans and invest in productive inputs and alternative livelihood activities,

knowing that the risk of drought is covered. This activity, overall, is geared towards helping enhance adaptive capacity by supporting investments in the growing and diversification of livelihoods.

The project will specifically try to leverage the credit component to remove the barriers related with the uptake of climate-resilient agriculture, which as noted by farmers include limited access to the technologies and inputs needed for this. A strategic partnership with a MFI will be sought to help develop a tailored input loan package for project participants that can be accessed by requesting an invoice from local agro-dealers who then invoice the package to the MFI releasing the products to the farmers. The input loan package will include the inputs needed for CA uptake, including diversified seeds. The loan can be offset by payments received from contract payment arrangements, which will be further described below.

Output group 3.2

3.2 Strengthen performance and outreach of farmer organizations/cooperatives and enhance their capacity to engage in farming as a business
   3.2.1. Promote farmer organization through the linking of farmers to existing structures or the formation of new organizations, as most appropriate
   3.2.2. Enhance the performance of farmer organizations so that they be better able to engage with buyers

Farmers, who have adopted climate resilient practices and complemented this with the uptake of climate risk management strategies, have struggled to adhere to these practices overtime, because they are unable to reach markets, which make investments in these types of activities financially viable and attractive. In this context, to truly be effective in supporting long term changes on climate adaptation and resilience, this project aims to ensure that the farmers that apply climate resilient agriculture and risk management strategies have market options, helping them sustain the changes to their livelihoods. Farmer organizations are a conduit for this change as together larger groups of farmers can aggregate their produce and better market their produce. In addition, the farmer organization structure offers an avenue for targeting that structure with the different project components 1 and 2.

In recent years, the number of farmer organizations (FOs) in Malawi has grown considerably. This is an encouraging trend. However, there are also observations that many of these FOs lack the capacities to operate in a meaningful manner, thereby, enabling their interactions with input and output markets. The project intends to reverse this trend to ensure that the objectives of the FO Strategy are fulfilled. To do so, the project will facilitate the processes for FOs to be created, thereby, providing specific support on collaboration, coordination, and overall good governance. Rather than creating new organizations, the project will seek to support pre-existing FOs, especially if these are failing to meet their full potential. When needed, new FOs will be supported, where there are none present, or it is not feasible to link farmers to preexisting organizations. The solidarity networks fostered under the group saving activities could be leveraged to this end. Besides the lack of coordination and weak governance structures, the project seeks to address other challenges to FO performance that limits their potential, such as the lack of business skills and leadership. Trainings on business planning will be conducted and FOs supported to operationalize these. In addition, trainings will be offered on FO leadership and engagement, the latter focusing on how the FO interacts with stakeholders beyond the organization. Lastly, another proven challenge for FOs performance is their lack of capital. For this, the saving component noted previously can be leveraged and further developed to capitalize the organization, especially through the accruing of interests related to the loan component of the groups.

Output group 3.3

3.3 Support access to storage and aggregating infrastructure for targeted farmers for greater market access, including establishment of rural warehouses
   3.3.1. Enable the set-up of FO-own warehouses to support the aggregation and storage of produce for sale.

3.3.2. Support the connection of FOs to formal warehouse networks in the country that help guarantee the quantity and quality of produce to buyers.
3.3.3. Develop capacities of storage including on quality assurance.

Many of the existing FOs have arisen from the promotion of grain banks. Grain banks helped cement the group dynamics and kick-started ideas on business and marketing. Much like the saving activities, the grain banks also function as a buffer to shocks, such as weather-related events, which help FOs manage shared shocks in support of the other strategies promoted by the project, such as the insurance. Besides these benefits, there are the practical more direct benefits, which principally include the promotion of improved crop handling and storage after the harvest, allowing farmers the opportunity to maximize their production and sell greater quantities of their produce for a better price at a time that is suitable for them. They no longer have to rush to sell immediately after the harvest at depressed prices. They can hold off and wait for the prices to be more favorable and to aggregate greater volumes for greater profits. In this context, grain banks and post-harvest loss management techniques and technologies will be promoted under this output. Where possible, these will be supported to grow to warehouses, or be linked to established warehouses. Warehouses are a crucial element as they can help aggregate for specific buyers and through that function act as a formal guarantee of the quality and quantity of the produce that is being collected. As a result, it is necessary for the FO and its members to also become familiar with practices and techniques to improve the quality and quantity of produce. This will be supported through tailored trainings, in line with the post-harvest loss management activities.

Output group 3.4

3.4 Provider market information to inform business planning and activities
3.4.1. Collect market data from across the country leveraging on existing efforts.
3.4.2. Package the collected data to be ready for sharing with farmers to inform their business planning.
3.4.3. Disseminate the collected and packaged data through different channels, specifically targeting FOs.
3.4.4. Report back on the details of FOs enabling the mapping of procurement capacities and needs.

Variability in climate often translates in variability in food prices. This trend has negatively affected farmers, since the lack of stability of food prices makes it hard to plan as a business and get clarity on the best options for marketing their produce. Therefore, climate change and variability is exacerbating a prevailing challenge that farmers face, namely: farmers are typically unable to sell their produce for competitive prices because they lack market information to guide them. As a response to this challenge, the MoAIWD with partners provides market information to farmers. However, there are many dynamics at play which make the provision of market information very complex. In response, the project aims to support government activities on market collection, packaging of the data, and its dissemination. For data collection, the project partners will work together to scope the country and gather the most indicative and realistic prices based on the observed patterns. On data packaging, the project partners will work together to provide the data collected in an easy to understand and act upon manner. Dissemination will focus on the timely delivery of this information at critical times of the agricultural year, while it also relates to making use of the most appropriate technologies. For the latter component, the communication channels used by the climate services component will be leveraged once more to minimize the number of information sources and enhance the impact of the communications.

Besides providing data to farmers, especially farmer organizations, to help inform their business planning, it is important to do the same for buyers. In this context, data collection on FOs will be supported. This will help develop a repository of FOs, which can be accessed by buyers to orient their procurement strategies. The basic details will be collected upon registration and updated regularly through interactions with the FOs, which can leverage the market data channels, creating a feedback loop. This can also be a tool to map out capacity needs and better target capacity strengthening activities by the project.

Output group 3.5

3.5 Promote smallholder procurement through government and private sector strategies and programs
- 3.5.1 Foster an enabling environment for FOs to engage with input and output markets.
- 3.5.2 Facilitate contract farming arrangements linking smallholder farmers with buyers.
- 3.5.3 Promote smallholder procurement by the government to meet strategic food security objectives.

To further ensure the valorization of climate resilient activities, supporting their long-term adoption by farmers, it is important to ensure that farmers are connected to input and output markets, This sentiment is echoed in the FO development strategy, which stresses the need to create an enabling environment for the FOs. This includes addressing the lack of clear regulations and governance of FOs and their interactions across the value chain. In this context, efforts will be made to reverse this negative trend supporting also the operationalization of the Contract Farming Strategy which aims to connect FOs to private sector buyers.

The Contract Farming Strategy has been formulated to create an enabling environment for all entities participating in contract farming or supporting its implementation in Malawi, including farmers, buyers of agricultural output, suppliers of farm inputs and third-party entities providing support services to contract farming arrangements. The Strategy aims at facilitating contract farming to take place in Malawi in an efficient, competitive and fair manner. As such, the Strategy provides guidance on the actions of various stakeholders engaged in contract farming arrangements in Malawi and outlines the broad regulatory frameworks necessary to make contract farming work to the benefit of all. The ultimate impact, which this Strategy seeks, is to use contract farming, where appropriate, as a mechanism for creating wealth, reducing poverty and inequality through increased profitable market access for farmers and buyers of agricultural outputs. In the context of this project, more specifically the Contract Farming Strategy is expected to contribute significantly to work done on ensuring farmers have access to the climate resilient inputs they need to adapt to the changing climate.

Leveraging the potential gains from the implementation of the Contract Farming Strategy, the Government can seek to make use of this approach to procure from smallholder farmers in a way to meet strategic food security objectives, particularly the replenishing of national food stocks. Different strategies will be scoped for this work. For example, the feasibility of linking local, smallholder procurement to meet the needs of social protection programs will be explored. Particularly, linkages to work on homegrown school feeding will be assessed, leveraging on the policies and strategies that underpin this work. It is worth noting that activities under components 1 and 2 will enhance the production of farmers, making it less variable from year to year, enhancing their attractiveness to buyers, public and private alike. Hence, the components are sought in conjunction.

➔ Links to other components
- Support through contract farming and FO trainings the uptake of crops being promoted by the project that are both climate-resilient and of nutritional value.
- Insurance is a financial tool that can be used for climate risk management along with the saving and credit activities. Therefore, these need to be closely aligned. For example, saving cycles can be made to align to the agricultural calendar promoted by the project as well as the insurance protection period. Similarly, the value of the sums insured for the insurance can be aligned to the farmer's gross margins including the costs for taking loans promoted by the project.
- Communication channels across components need to be uniformed and/or coordinated to enhance the impact of the messaging and minimize potential confusion. This refers to messaging on the insurance, climate services, nutrition, and market information.

The integrated approach

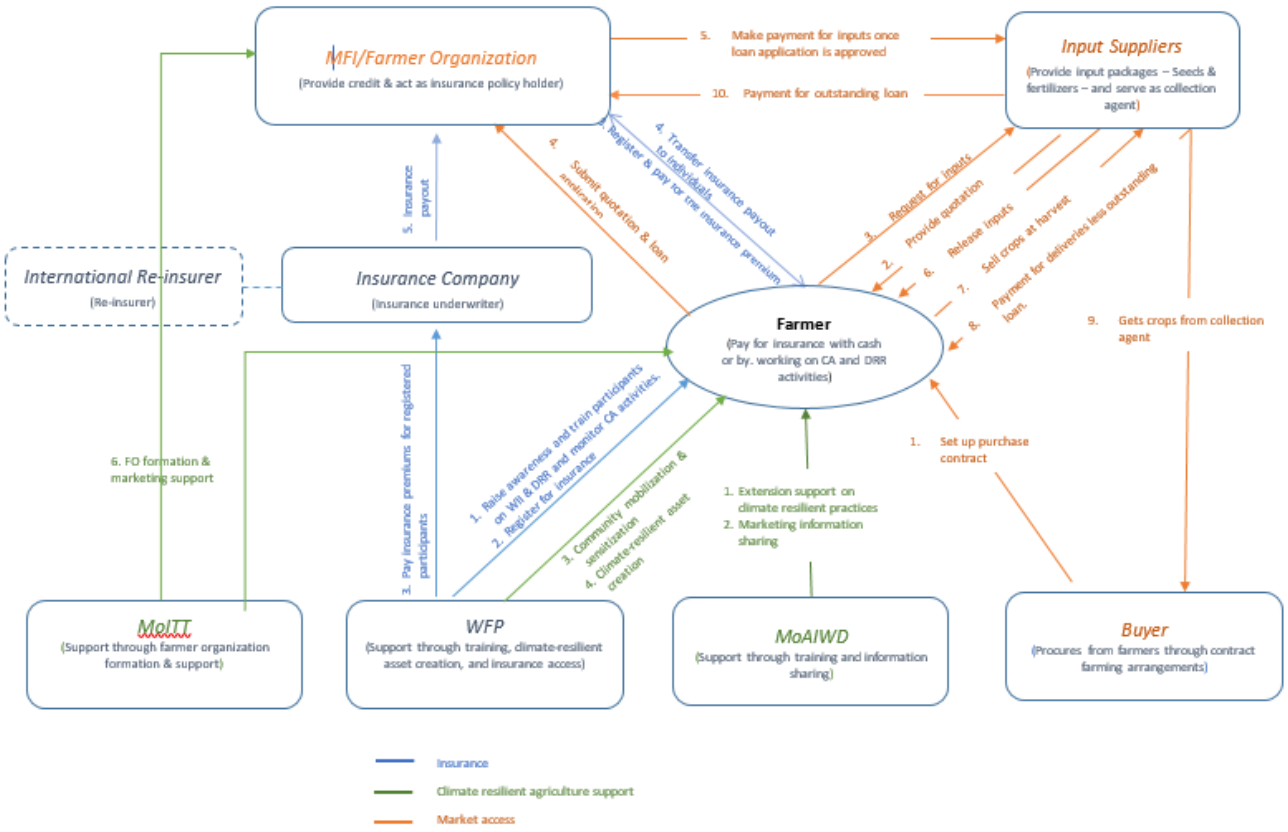
Asset creation – component 2 – is the entry activity for the integrated resilience approach as it aims at creating productive assets through a watershed management approach. Asset creation comprises mostly of soil and water conservation activities, thus playing a fundamental role of rehabilitating many degraded landscapes and improving soil quality. Trenches, swales, gully reclamation, and similar structures will be promoted at the community and household levels. Water conservation practices will help farmers store and make use of water in a more efficient manner. Where appropriate, irrigation schemes will be explored, with a focus on community structures that are fitting with the local environment. Water and soil conservation measures are intended to further promote the natural capacity of the environment to provide the ecosystem services upon which farmers rely for their wellbeing. Asset creation activities also focus on supporting crop production through more resilient and climate-smart approaches. Component 2 will promote conservation agriculture (CA). The three key CA principles that will be promoted (minimum soil disturbance, retention of crop residues, and crop rotation and intercropping) will contribute to improving soil quality and fertility and increase production. In addition, the project will support crop diversification to enhance productivity in the context of climate change. The diet in Malawi is largely dependent on maize. Besides this being a weather-sensitive crop, often stressed under the changing climate, when consumed almost exclusively, it is of little nutritional value. Other crops that can supplement maize and that are both climate resilient and nutritious will be explored and promoted, including legumes, millet and sorghum. Finally, component 2 will provide farmers with information on the upcoming season accompanied by advisories for their livelihood decision-making.

Component 2 will therefore contribute to improving the quality of degraded landscapes and support farmers in diversifying their crops and produce in a more sustainable way. All the activities of this component combined will support farmers to adapt to a changing climate and have more resilient livelihoods.

For bigger shocks, insurance is introduced through component 1. The protection provided by the insurance and compensation when triggered can help households maintain their level of wellbeing even when big shocks occur. In shock-free years, insurance can act as an enabler for investments and diversification in livelihoods, as it provides a guarantee for credit and the security of compensation, if something does go wrong. Insurance, therefore, has a dual role of protecting and promoting diversified livelihoods, which in the context of climate change is key. Adding to the integrated climate risk management package, savings and credit are introduced in component 3. Savings is intended to provide a means for households to manage idiosyncratic shocks and develop reserves for investment in better lives and livelihoods. Idiosyncratic shocks are individual events that negatively affect the household economy. The death or illness of a household member, theft, and fires are examples of idiosyncratic shocks. Having savings to rely on can help households manage the consequences of these shock events and minimize the negative impacts on the household economy. In normal times, where there are no shocks, these reserves can be tapped to strengthen livelihoods through investment and enhance household wellbeing by increasing their consumption levels. With increased food security and a stronger asset base, farmers in the project can increase their savings and stocks, using them along with insurance as collateral to obtain credit for investing in productive assets. Moreover, insured farmers are more confident to take out loans and invest in productive inputs and alternative livelihood activities, knowing that the risk of drought is covered. This activity, overall, is geared towards helping enhance adaptive capacity by supporting investments in the growing and diversification of livelihoods.

Finally, the other activities of component 3 complement the approach by enabling farmers to organize, aggregate, add value to their produce and find a market for their surplus. All project activities will build on each other and will be introduced to the same beneficiaries gradually, taking into consideration capacities and conditions for an adequate and sustainable uptake.

To summarize, and show clearly the flow of interventions across components, the below illustration has been developed. In addition, an illustration of the project logframe is also included to orient the reading of the flow of interventions.


MFI/Farmer Organization
(Provide credit & act as insurance policy holder)
Input Suppliers
(Provide input packages – Seeds & fertilizers – and serve as collection agent)
International Re-insurer
(Re-insurer)
Insurance Company
(Insurance underwriter)
Farmer
(Pay for insurance with cash or by. working on CA and DRR activities)
MoITT
(Support through farmer organization formation & support)
WFP
(Support through training, climate-resilient asset creation, and insurance access)
MoAIWD
(Support through training and information sharing)
Buyer
(Procures from farmers through contract farming arrangements)
5. Make payment for inputs once loan application is approved
10. Payment for outstanding loan
4. Register & pay for the insurance premium
4. Transfer insurance payout to individuals
4. Submit quotation & loan application
5. Insurance payout
3. Request for inputs
Provide quotation
2.
6. Release inputs
7. Sell crops at harvest
8. Payment for deliveries less outstanding loan.
9. Gets crops from collection agent
1. Set up purchase contract
6. FO formation & marketing support
3. Pay insurance premiums for registered participants
1. Raise awareness and train participants on WII & DRR and monitor CA activities.
2. Register for insurance
3. Community mobilization & sensitization
4. Climate-resilient asset creation
1. Extension support on climate resilient practices
2. Marketing information sharing
Insurance
Climate resilient agriculture support
Market access


Enhanced climate adaptation & food security of households through access to integrated climate risk management strategies and structured market opportunities
Improved access to insurance as a risk transfer mechanism for targeted farmers affected by climate change and food insecurity
Adopted climate-resilient agriculture practices among targeted farmers contributing to the integrated climate risk management approach
Strengthened market access strategies and approaches for smallholder farmers
Design a weather index micro insurance product for drought and dry spells that can cover farmers needs at scale
Raise awareness on weather index insurance among farmers and enable vulnerable farmer access to weather index micro insurance (cash or work)
Strengthen national capacities and systems to provide weather index insurance working with the private and public sector
Support the inclusion of insurance (not limited to WII) as risk transfer mechanisms in national AG programs and schemes
Promote irrigation along with soil and water conservation practices through individual and group asset creation
Promote climate resilient agriculture among farmers through extension service support
Support crop diversification with a focus on drought tolerant and nutritious crops
Provide climate services to inform livelihood decision-making among farmers
Strengthen national capacities and systems to provide these integrated climate risk management approaches
Strengthen financial capacities and market access opportunities to enhance investment in climate resilience agriculture (including saving, credit, and financial literacy)
Strengthen performance and outreach of farmer organizations/cooperatives and enhance their capacity to engage in farming as a business
Support access to storage and aggregating infrastructure for targeted farmers for greater market access, including establishment of rural warehouses
Provider market information to inform business planning & activities
Promote smallholder procurement through government/private sector strategies and programs

B. Describe how the project / programme provides economic, social and environmental benefits, with reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project / programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy of the Adaptation Fund.

Social & Economic Benefits

A variety of social and economic benefits have been identified to stem from the proposed project. These are enlisted and detailed as follows.

- **Improved incomes**

The integrated climate risk management package is intended to help farmers adapt and improve their agricultural practices by tackling some of the major challenges that they face. By having greater access to improved soil and water resources, agricultural inputs, and information for livelihood-decision making, the expectation is that farmers will be able to realize greater yields even in the face of a changing climate. This will be enough to meet household food needs, which should reduce household expenditure on food items. In addition, the surplus they produce, through the contract farming arrangements including adequate storage, should help guarantee an income, which they can rely on and continue to grow. In this way, variability is minimized, addressing the fluctuations in income within and across years. In addition, through more disposable income, participants will be better able to invest in their farming activities further improving their livelihoods and wellbeing, helping diversify and adapt these to the changing climate. The insurance helps protect their investments and helps promote confidence in their livelihood diversification and growth. This premise is supported by evidence stemming from the insurance pilot by WFP Malawi, which show that between the period 2015-2017 household expenditure grew by 31%, with female headed households experiencing more significant gains (33% over male headed households at 29%)[46]. In addition, household expenditure on non-food items in the same period grew from 35% to 58%, showing the growing household capacity to invest in health, education, and livelihoods for the improvement of household wellbeing. Similar, and greater gains, are expected from this project.

- **Enhanced food security and nutrition**

The combination of the integrated climate risk management package with the insurance encourages and supports farmers in diversifying the crops they grow. In addition, the accompanying messaging and guidance supports the integration of these new food crops into their diets. As drought-tolerant, nutritious crops will be promoted and protected through the project for both production and consumption, the expectation is that this will result in improvements in food security and nutrition. This is supported by evidence from the insurance pilot in Malawi between 2015 and 2017. Improvements in overall food security, as measured by the food consumption score, were visible. The share of households with an 'acceptable' FCS[47] grew from 58% to 89%. In addition, the share of the population with both 'poor' and 'borderline' FSC decreased from 45% jointly to 11%. As the FCS is based on dietary diversity, food frequency, and relative nutritional importance of the various food that groups consumed, this is a good marker for both food security and nutrition. This project can equal and surpass these achievements, given the closer focus on crop and diet diversity.

- **Improved resilience**

Resilience is a complex term that is also dynamic and context-specific. As such, there is no single definition for this. Similarly, there is no single measure. To overcome this, the project defines resilience as the set of capacities required before, during, and after the onset of shocks and stressors; it entails the ability to: i)

[46] The figures presented are from the monitoring and evaluation work done by WFP on its resilience interventions. At present, these are internal figures. Future plans look to share these broadly, including a potential publication.

[47] The higher the FCS is the higher the dietary diversity and frequency. High food consumption increases the possibility that a household achieves nutrient adequacy. Households are divided into one of three groups based on their food consumption score: poor, borderline or acceptable food consumption.

absorb: resist a shock or the eroding effects of a stressor by reducing risk and buffering its impact, which leads to endurance and continuity of livelihoods and systems; ii) adapt: respond to change by making proactive and informed choices, leading to incremental improvements in managing risks; and iii) transform: change the set of available choices through empowerment, improved governance and an enabling environment, leading to positive changes in systems, structures and livelihoods. Accordingly, the project will adopt a way to measure the different abilities, making use of composite indicators and different standalone indicators. Given the fact that the project will target both the chronic and acute challenges and shocks that households face, with a focus on building the capacities of households to better manage these, gains across different resilience indicators are expected. With reference to the insurance pilot, between 2015 and 2017, the share of participating households using negative livelihood coping strategies had decreased from 60% to 29%. The biggest drop was in the use of coping strategies categorized as 'crisis' and 'emergency'. Such types of coping strategies include the selling of land, livestock, and other productive assets. These have negative impacts on the long-term wellbeing of the household, since they take a long time to recover from such setbacks. So, this is promising for the long-term perspective. This is also supported by the improvement in the composite resilience measurement. Using the Resilience Index Measurement and Analysis tool (RIMA II), it has become clear that households are benefiting from improvements in their resilience capacity index (RCI)[48]. The RCI at the baseline was 47.5 and has grown to 56.2 for treatment households. For the control group, RCI has remained at 30 throughout the period. The project aims to meet and surpass these achievements.

- **Improved livelihood decision-making & adaptive capacity**

Adaptive capacity is the ability of a household to adapt to a new situation and develop new strategies of livelihood. This is underpinned by having the information necessary and the resources to make such changes. The project's integrated climate risk management, insurance, and market access components, especially the information-sharing activities, are all geared to facilitate gains in adaptive capacity based on improved livelihood decision-making and strategies. From projects that use these approaches, evidence shows that 73% of participants use the information provided for livelihood-decision making. This includes information offered via SMS, radio, extension officers, NGO partners, and lead farmers. They applied the advisory to decision-making on subjects related to the types of seeds to use, the best time for planting, in-season monitoring, as well as post-harvest management and marketing. The majority used it for deciding on seed types and planting times, 55% and 54% of the reporting population respectively. The proposed project is intended to meet and go beyond these figures, seeking broad endorsement of the advisories for decision-making and adaptive capacity.

- **Financial & market inclusion**

By embedding insurance with saving and credit opportunities, financial inclusion and economic empowerment gains can be achieved, especially for women. This is evidenced by recorded increases in household savings, credit uptake and repayment, as well as changes in household income and expenditure from similar projects. Building on the growth and stabilization of incomes, supported by average expenditure increases, households have used these to create buffers to shocks and make investments through saving and credit. For savings, activities have grown considerably, especially for women who increased the amount saved by 274% [Figures compare baseline in 2015 to outcomes by end 2017]. This has in turn supported increases in loan amounts access. In 2017, alone female headed households successfully accessed loans that were 33% larger than the previous season, for men it was a 22% increase. No defaults have been recorded under the initiative's credit supported product. This has spurred interactions with input and output markets, which overall has supported greater economic gains for the targeted households. With the additional element of contract farming and farmer organization development, this project is expected to achieve greater gains in terms of financial and market inclusion.

[48] The RCI is the output of the RIMA II analysis, which takes into account key features on resilience, which are grouped into 4 categories, namely: access to basic services, assets, adaptive capacity, and social safety nets.

– **Economic empowerment & equity**

The project targets both low and medium productivity farmers, with variable degrees of vulnerability to climatic shocks, as such, it has a strong emphasis on equity, ensuring sustainable development outcomes for all. Special emphasis is placed on vulnerable and marginalized populations, including women. As such, strategies are in place to guarantee these groups are able to access the project and achieve gains that help them get up to par and surpass those who are less vulnerable. Consultations with these groups have shown that the greatest difference is in terms of asset ownership and economic empowerment. Without these, the adaptive capacities of households are limited. As such, the project will focus on targeting inequalities in this regard, working also towards economic empowerment. Evidence has shown that this is possible. As referenced above, women headed households have achieved greater gains in income, saving, and credit. This has materialized into benefits in terms of their livelihoods, but also improved standards of living. Women headed households have noted anecdotally that these gains have allowed them to improve the building materials of their house, school attendance for their children, and access to basic services. As such, these gains are having spillover effects to their households and broader community. This further justifies a focus on those further behind, especially women, who are key catalysts for change. This project is expected to also achieve such gains in economic empowerment and equity.

– **Culture & tradition**

The project will ensure that community and religious leaders, along with the communities themselves, are part of the solutions that aim to contribute to adaptation. In addition, the project will seek to protect and promote local indigenous practices that bolster this approach. Such examples, include the promotion of local, traditional crop varieties, which have proven to be drought tolerant and of nutritious value. Similarly, through the climate services and other types of advisories, local, indigenous knowledge is incorporated, as appropriate. Therefore, components 2 and 3 specifically will contribute to this, and overall, project planning and design will incorporate this through the use of participatory approaches that are culture- and context-sensitive.

– **Gender**

The project will contribute to gender equality, through strategies to empower women and girls with concrete commitments to ensure equal rights, access and opportunities for participation and leadership in the project and in community decision-making. In empowering women, the project will ensure that men and women are informed on the need to improve women's involvement in decision making as well as the benefits of women's progress to the family.

In addition, the project seeks to guarantee the equitable benefit of women form the initiative. As such, the following gains are deemed possible in the context of the project, as informed from evaluations of similar projects[49]:

- Insured female-headed households increased agricultural investments more than male-headed households. Female-headed households increased their spending on hired labor and hired oxen more than other insured farmers and more than the uninsured across all districts, which may explain partly how they were able to start cultivating more of their own land.
- Insured female-headed households decreased the amount of land that they sharecrop out more than other insured farmers and more than the uninsured. "Sharecropping out" land is a significant obstacle to improving livelihoods, as the person who farms the land retains one-half or two-thirds of the yields. Sharecropping out land is more common among female-headed households because they are more likely to lack oxen and the labor needed to cultivate their own land.

[49] Madajewicz, M., Tsegay A.H., and Norton, M., 2013. *Managing Risks to Agricultural Livelihoods: Impact Evaluation of the HARITA/R4 Program in Tigray, Ethiopia, 2009-2012*. Oxfam America. Available here: http://www.oxfamamerica.org/static/media/files/Oxfam_America_Impact_Evaluation_of_HARITA_2009-2012_English.pdf

- Across all districts, insured female-headed households increased the amount of land planted more than other insured farmers and more than the uninsured. They also increased the amount of improved seeds and the total amount of compost more than all other groups.
- Insured female-headed households increased the number of loans more than other insured farmers and more than the uninsured. The increased borrowing may have enabled them to increase their inputs.

The project's gender mainstreaming approach is to be guided by the developed strategy for R4 Rural Resilience Initiative in Southern Africa, which provides further details on the Malawi context and viable programming options. This is provided in Annex 4.

– **Transparency & accountability**

The project aims to strengthen national capacities and institutionalize the approach that is being promoted. This is done by leveraging national and sub-national strategies and policies that offer a regulatory and guiding framework, which enhances the transparency and accountability of these processes. Examples include the Inclusive Insurance Directive, the Contract Farming Strategy, the Farmer Organization Strategy, the National Agriculture Investment Plan, the National Adaptation Plan, among others. Besides ensuring the alignment to these, the project seeks to establish a handover strategy that clearly outlines how the project activities and responsibilities will be assumed by national stakeholders for the sustainability of the approach. Transparency and accountability within the project will also be ensured by holding community-based participatory planning sessions with the participation of representatives of all socio-economic groups present in the community to discuss and jointly agree on decision making processes related to project planning, beneficiary identification, activity implementation and regular monitoring for all project components. Also, a sound complaints and feedback mechanism will be established, which allows project participants to make queries and complaints for the project team to resolve based on the standard operating procedures in place.

Environmental Benefits

Implementation of an integrated watershed management approach, under Component 2, will be central to promote enhanced climate adaptation and food security of the targeted communities and households and achieve long-term environmental benefits in the project areas. Such approach entails the rational utilization of land and water resources for optimum production but with minimum impact on natural and human resources. Through asset creation activities such as soil and water conservation measures, soil erosion will be reduced, water retention will increase helping to the replenishment of the water table, vegetative cover will increase and soil fertility will be improved. Many degraded landscapes are expected to be rehabilitated with a multiple of environmental benefits in addition to livelihood restoration, food security and nutrition improvements and resilience building. Locations with highly degraded landscapes will be prioritized.

The expected environmental benefits are detailed below:

– **Improved soil functions** from the integration of minimum tillage practices, crop diversification, organic matter retention, and the use of organic fertilizers and inputs, as well as the household and community structures promoted. The improvements derive from reduced soil erosion and enhance soil processes supported by organic matter integration.
– **Improved water availability** from the integration of minimum tillage practices and conservation structures promoted such as swales, trenches, and gully reclamation work, which will be done at the household and community levels.
– **Improved productivity of land** based on enhanced land and soil quality, but also better agricultural practices that are more sustainable and climate-resilient.
– **Improved organic waste management** which is promoted through the CA, including the retention of organic matter from the fields. This replaces negative practices such as slash and burn, which typically implies the clearing of land using fire, resulting in the loss of organic matter and soil quality, too.
– **Reduction in disaster risk** can be achieved as the soil structure will be consolidated and less prone to being destabilized through external hazards. By decreasing soil erosion (through plantation of vetiver

grass and trees, introduction of minimum tillage practices and organic matter retention, among others), and water retention (swales, trenches, gully reclamation, etc.) risk for flooding is reduced. Also, all the asset creation activities aim at improving soil fertility and water harvesting, therefore rendering communities more resilient to droughts.

Avoiding or mitigating negative impacts

The following measures will ensure that project activities are designed and implemented in a way that does not cause negative social or environmental impacts:

- Inclusive and representative community engagement in planning and implementation of the programming, including in the monitoring of the project's activities.
- Government collaboration and alignment through the integration of project plans with the local development plans.
- Technical support sought from experts in the field especially in relation to sensitive or specialized services. Examples include gender and protection issues as well as irrigation and integrated resource management.
- Implementation in accordance to national standards and safeguards articulated in various strategies and guidance documents.
- Complaints and Feedback Mechanism established to get feedback from communities on the project and with established protocols for the resolution of complaints filed.
- Overall (i.e. at project level) environmental and social screening and categorization against AF's Environmental and Social principles at full project formulation stage.
- Activity-level environmental and social screening for component 2 activities at project implementation stage.
- Environmental management plan, commensurate with the risks assessed, to be developed at project formulation stage.
- Planning, implementation and monitoring of necessary mitigation measures as identified by the activity-level environmental and social screening.

C. Describe or provide an analysis of the cost-effectiveness of the proposed project / programme.

The cost effectiveness of the proposed project is evident across several factors, which are noted below.

- Compared to status quo

At present, the country is experiencing huge losses in terms of the impacts of weather-related shocks on the agricultural sector, which is quite significant given that the sector accounts for the bulk of the country's GDP. For example, this year over 270,180 hectares were affected by dry spells, affecting about 707,389 farming households[50]. In addition, it is known that the secondary effects of this, such as malnutrition, is costing the country over 10 % of its GDP[51]. So, the costs can be measured and compounded in the short and long term, showing clearly the negative impacts on the country's growth and development potential. By contributing to the reversal of these trends, the project can help achieve great gains, when compared to the investments made.

- Sustainable model

The project is intended to develop the capacities, tools, and systems for national stakeholders, ranging from the farmers, to the communities, all the way up to national actors, with the intension to develop a self-

[50] "Malawi Country Brief May 2018", WFP, https://reliefweb.int/report/malawi/wfp-malawi-country-brief-may-2018
[51] "The Cost of Hunger in Malawi: Social and Economic Impacts of Child Undernutrition in Malawi - Implications on National Development and Vision 2020" WFP et al, https://reliefweb.int/report/malawi/cost-hunger-malawi-social-and-economic-impacts-child-undernutrition-malawi

sustaining model that can continue beyond the project cycle. By developing viable market opportunities for both inputs and outputs and developing the capacities of farmers to benefit from these, the activities fostered by the project with time can become self-sustaining. This applies for the insurance provision, as well as for the saving and credit component and the contract farming activities. Local structures such as the farmer organizations and local institutions are also promoted to this end. As such, the project is cost-effective in the sense that it does not rely on continuous injection of investments to be sustained. Rather, the investments over time are expected to decrease.

- Leveraging other resources

The project also seeks to be cost effective by leveraging ongoing national and sub-national processes and structures that can be used to enhance the reach of the project. This includes many of the initiatives such as the NAIP, NAPA, NRS, Contract Farming Strategy, Farmer Organization Development Strategy, and Inclusive Insurance Directive. Besides being cost-effective in the short run, it is also a way to guarantee that the project activities are integrated into these longer-term plans, therefore, having long term gains as well.

- Leveraging experience & best practices

The project is cost effective in the sense that it builds on the previous experiences by the implementing team and other national stakeholders. This means that the project does not have to start from scratch testing and developing new tools, systems, and approaches that may prove to be costly. The lessons learned, best practices, and achievements under previous initiatives will help ensure savings in this regard. It also makes it so that the investments that are made under this project are more likely to be successful and render the desired benefits, without having to make repeated investments. The proposed approach and suggested adaptation options have been tested and proved to be working in the Malawi context. Lessons and best practices informed the design of this project.

- Extensive field presence & networks

Building on the above point, the implementing team benefits from an extensive field presence and network of partners. This reduces the need to make investments in developing these. In addition, it means that the existing capacities and partnerships can be easily mobilized in favor of the project. This secures savings in both time and financial resources. It is also worth noting that as the networks that are being leveraged for the project include local government staff, like the extension officers, the project is making use of permanent structures, which are more cost-effective, since they do not require parallel and short-lived investments.

- Integrated nature of activities

The integrated nature of the project's activities means that the delivery mechanisms that are developed can be leveraged across different components. This reduces costs in terms of time and financial resources, because instead of developing different contracts and agreements, comprehensive ones can be developed for the delivery of the project, convening all the relevant stakeholders. In addition, this is the case for the procurement of any project implements. Instead of procuring items separately and in small quantities, the project can use its size and planning to make purchases in bulk and timely fashion, which result in savings for the project.

D. Describe how the project / programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

The Government of Malawi has made a commitment to address climate change and to promote resilience, with a special emphasis on breaking the cycle of hunger. This project has been developed with representatives of the Government of Malawi to be illustrative of these priorities. To this end, a special Task Force was set up for the design of the project with representation from the following entities: The Ministry of

Finance, specifically the Economic Planning and Development Department (EPD), The Ministry of Agriculture, Irrigation and Water Development (MOAIWD), Department of Climate Change and Meteorological Services (DCCMS), Department of Disaster Management Affairs (DoDMA), Ministry of Industry, Trade and Tourism (MoITT), Environmental Affairs Department (EAD), and the Ministry of Local Government and Rural Development (LG&RD). Most notably, EPD houses the National Designated Authority to the Adaptation Fund and EAD houses the country's UNFCCC focal person. Through the engagement of these national stakeholders in the design of the project and through deliberate efforts, project alignment to national priorities on climate change adaptation and resilience has been sought as follows:

- The **National Climate Change Management Policy's** goal is to promote climate change adaptation and mitigation for sustainable livelihoods through measures that increase levels of knowledge and understanding and improve human well-being and social equity while pursuing economic development that significantly reduces environmental risks and ecological scarcities. → Project alignment: adaptation, economic development, increase levels of knowledge and understanding
- **The National Adaptation Programmes of Action (NAPA)**[52] has the following top 4 priority areas: (1) Sustaining life and livelihoods for the most vulnerable communities, (2) Enhancing food security and developing community based storage systems for seed and food, (3) Improving crop production through the use of appropriate technologies, (4) Increasing resilience of food production systems to erratic rains by promoting sustainable production of maize and vegetables → Project alignment: focus on livelihoods and food security, as well as increasing resiliene and sustainable production
- Two **UNFCCC communications** are registered for Malawi, one in 2003 and the other in 2012, as well as (I)**NDC submission** in 2015. They commonly stress that Malawi produces little emissions, but is severely affected by the impacts of climate change, making issues on equity, justice, and adaptation a key priority. → Project alignment: focus on adaptation as well as equity and justice by focusing on the most vulnerable.
- **The Malawi Growth and Development Strategy (MGDS III)**: aims at building a productive, competitive and resilient nation. MGDS has five priority areas, including agriculture and climate change management. The pillar on agriculture and climate change management's goal is to achieve sustainable agricultural transformation that is adaptive to climate change and enhances ecosystem services. → Project alignment: nutrition enhancement, environmental management, agro-processing and value addition
- **The National Resilience Strategy (NRS)** defines resilience as the ability of urban and rural communities, households, and individuals, to withstand, recover from, and reorganize in response to crises, so that all members of Malawian society can develop and maintain their ability to benefit from opportunities to thrive. Strengthening people's capacity for resisting, coping, recovering, and bouncing back from shocks and extreme events requires well targeted and long-term investments that recognize that adaptation to a changing climate must be tackled at multiple scales. → Project alignment: focus on adaptation and capacity to withstanding shocks
- The **National Agriculture Policy (NAP)** and its **National Agricultural Investment Plan (NAIP)** replaces the previous Agriculture Sector Wide Action (ASWAp), which was phased out in 2017 and used to govern the agricultural sector. The NAIP, which is anchored and guided by the NAP, has four pillars on institutional development, resilient smallholder farmers, production and productivity (focused on infrastructure development), as well as market access. →Project alignment focus on resilience smallholder farmers, market access.

In addition, there are a number of subnational strategies and district development strategies in the project areas that will inform the design and implementation of the proposed project interventions; these include:

- District Development Plans (DDP) which are the overarching development strategy frameworks at district level which are linked to both short, medium and long-term development aspirations of the

[52] Through this alignment has also been sought to the National Climate Change Investment Plan and the working draft of the National Adaptation Plan

Central Government. DDP provide a development roadmap to increase consistency and coordination in promoting socio-economic development in the district. The DDP are able to translate the strategies into policy outputs (projects and programmes).

- Socio-Economic Profiles (SEP), also at district level, which are a snapshot of the overall physical, social and economic situation of the districts. A SEP paves way for a better appreciation of the socio-economic situation of an area or locality within a district.
- Other sub-national development strategies that feeds into DDP, including: i) Decentralized Environment Management Guidelines, ii) District State of the Environment Reporting (DSOER), iii) District Contingency Plans iv) District Environmental Action Plans. v) District Development Investment Plan.

All these plans are aligned to sectorial strategies and National Development Frameworks (Malawi Growth and Development Strategy – MGDS III).

E. Describe how the project / programme meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund.

The interventions will adhere to the Environmental Quality Standards as well as Environmental Management protocols as outlined in the Environment Act, 2008. Any asset construction will be done in line with existing national building standards that will inform the design and construction.

The proposed interventions will be compliant with all national technical standards, particularly those relating to concrete adaptation measures, including water and soil conservation, integrated watershed management, and crop management and quality standards, among others. Specifically, the Malawi National Guidelines: Integrated Catchment Management and Rural Infrastructure will guide the technical design and implementation of CA activities and accompanying land and soil structures. Additionally, the project team will work closely across relevant entities to design and implement the work, linking experts at the national and subnational levels. This also includes liaising with other relevant sector leads such as hydrology, forestry, and others, as needed.

Ongoing consultations with the following entities will take place at all stages of project design and implementation to ensure that all project activities comply with the relevant national technical standards:

- MoAIWD
- DoDMA
- DCCMS
- EAD
- EPD
- MLGRD
- Local Development Fund (LDF)
- Ministry of Natural Resources, Energy and Environment

The necessary safeguards will be incorporated into project design and implementation. The project will also comply with the Environmental and Social Policy of the Adaptation Fund and WFP's environmental policy.

F. Describe if there is duplication of project / programme with other funding sources, if any.

Overall, while there is a recognition that there are other actors working on related issues, the sentiment is that this project is different since it takes on board issues pertaining to adaptation and climate risk management in a holistic and comprehensive manner, while also addressing chronic issues which are exacerbated by the changing climate. It also builds on past experiences by different actors to scale up approaches that have proven to be effective. This is done in the context of government-lead initiatives, helping operationalize commitments on climate change adaptation and resilience building for food and income security. Therefore, the project offers a vehicle for bringing together the other existing initiatives

under a common approach and to build national capacities and systems to take forward this work leading up to 2030.

In practice, this will be done by working with the same coordination structures (in particular, the Disaster Risk Reduction and Climate Change Management Technical Committees at national and local level) to ensure harmonization of implementation approaches and supporting the development of national guidelines for designing and implementing insurance projects, climate resilient approaches and capacity strengthening for farmer organizations/cooperatives, as well as standard operating procedures to ensure application of common approaches for delivering climate adaptation and resilience projects. The project will also support documentation of best practices and dissemination of the same through several channels including learning events and/or review sessions. It is worth highlighting that the layering of integrated resilience building activities is articulated in many national strategies and programmes (e.g. National Social Support Programme II, National Resilience Strategy) and this project will serve to contribute to the government realizing these ambitions, but also serve as a best practice for how to do this.

Finally, it is worth noting that this project explicitly builds on the resilience activities implemented by WFP and its partners in the country. The recurring weather-related shocks experienced in the country and the increasing humanitarian caseload in recent years motivated WFP to leverage its dual mandate as a humanitarian and development actor to transition vulnerable households away from relief to multi-year resilience-building initiatives. In 2015, WFP started these efforts through its Food Assistance for Assets (FFA) programme, which was used as an entry point for subsequently introducing an integrated climate risk management package consisting of weather index insurance, saving, credit, and climate services. Balaka was the first target district with the integrated approach. Zomba and Blantyre were also targeted in the 2017/18 season. Currently, these resilience activities have been expanded in addition to the districts of Mangochi, Chikwawa, and Nsanje. From 500 farmers in 2015, in 2018, over 39,000 farmers now benefit from the resilience package. The objective of building on this WFP initiative for the proposed project is three-fold: introduce additional components that complement and strengthen the integrated approach, extend the reach of the integrated approach to more vulnerable households, and institutionalize this approach through government capacity strengthening, ensuring sustainability.

The table below enlists the projects that are similar in nature and to which this proposed project will seek to align and complement.

Project Name	Entity	Duration	Description	Alignment
Scaling Up the Use of Modernized Climate Information and Early Warning Systems (M-CLIMES)	UNDP/ DODMA	2017-2023	Improving weather- and climate-related services, including Early Warning Systems, with a focus on both floods and drought across different livelihood types and the extension of the coverage of hydro-meteorological observational systems	Common approach to CS for agriculture using PICSA and content creation committee This project will not make significant investments in the coverage of hydro-meteorological observation systems without seeking alignment to the M-CLIMES plans
Building urban climate resilience in southeastern Africa	UNHABITAT/DODMA	2017 – 2018	Enhanced capacity of municipal authorities in the target countries to integrate risk reduction and resilience concepts into urban plans and municipal strategies. Focus on improved tools, strategies, policies, and capacities.	Zomba is a target district for both projects, so close coordination will be sought at national and sub-national levels, recognizing that one works on the urban sector and the other rural settings, but on related topics.
Programme for Rural Irrigation Development (PRIDE)	IFAD/MoAIWD	2015 - 2022	It will establish and strengthen the capacity of the Water Users' Association to manage, operate and maintain irrigation schemes for appropriate land and water governance. It will also identify market opportunities for farmers.	Project is implemented in the northern and southern regions of the country, in the southern region, where there is overlap, the project teams will collaborate making sure to promote common approaches to water management and governance.
Financial Access for Rural Markets,	IFAD/MoAIWD	2017 - 2024	Nation-wide promotion of social payment graduation programmes, community-based financial	This project will seek to work with MFIs for the saving and credit components, while working with a local insurance company,

Smallholders and Enterprise Programme (FARMSE)			organizations, financial cooperatives, micro-finance institutions and commercial banks.	as such links to FARMSE will be sought to ensure similar approaches to engagement with these institutions.
R4 Rural Resilience Initiative (R4)	WFP	2014-ongoing	R4 aims to increase food and income security through a combination of four risk management strategies, specifically: improved resource management through asset creation (risk reduction); insurance (risk transfer); livelihoods diversification and microcredit (prudent risk taking); and savings (risk reserves).	The project will leverage the learnings and approaches developed under R4 and take these to scale through national programs, systems, and capacities. Principally, the approach to WII index design and monitoring will be leveraged, while new innovations will be trialed for the accessing of the insurance, saving, and credit components.
Food Assistance for Assets (FFA)	WFP	2014-ongoing	FFA addresses immediate food needs through cash, voucher or food transfers, while at the same time it promotes the building or rehabilitation of assets that will improve long-term food security and resilience.	The social and environmental tools and guidance used for the FFA asset creation activities will be used and adopted by this project, specially under component 2. This includes both planning, implementation, and monitoring tools.
Purchase for Progress (P4P)	WFP	2009-ongoing	Through the Purchase for Progress (P4P) programme, WFP encourages national governments and the private sector to buy food in ways that benefit smallholders.	The P4P experience will be leveraged, especially guidance on FO capacity strengthening including approaches to business planning, postharvest loss management, quality assurance, among other topics. WFP's procurement capacity will also be leveraged in support of this project, to the extent possible.
Climate Services (CS)	WFP	2014-ongoing	CS initiative focuses on helping rural communities access tailored weather and climate information that they can easily understand and use to take decision to strengthen food security and improve their livelihoods.	Common approach to CS for agriculture using PICSA, content creation committee, and capacity strengthening on national stakeholders.
African Risk Capacity (ARC)	Government	2015-2016	Malawi subscribed to the ARC only for the 2015/16 season, just before the El Nino event occurred which triggered a payout. If Malawi were to be insured again under ARC, any payouts triggered will be directly made to the Government of Malawi (as it is a macro-insurance scheme) to be utilized towards activities for school feeding, water and sanitation, and health and nutrition, as agreed under the contingency plan. The geographical scope for these interventions will be determined as per the contingency plan.	If the Government of Malawi were to subscribe to ARC again, several areas of linkages and complementarities between ARC and the proposed insurance activities are envisioned. Any payouts triggered under the micro-insurance component of the proposed project will be directly made to the insured households (as it is a micro-insurance scheme) in Balaka, Zomba and Machinga. Payouts from the two schemes, either in the form of interventions (ARC) or cash (micro-insurance), will be phased-in at different times and geographical areas to offer a more coordinated approach to drought management.
Pilot Program for Climate Resilience (PPCR)	Government with various stakeholders	2018-ongoing	The Government, in collaboration with the World Bank and African Development Bank, has formulated a Strategic Program for Climate Resilience (SPCR) under the Pilot Programme for Climate Resilience (PPCR) to act as a framework for addressing the challenges of climate change that impact on the national	Intervention efforts under this project will complement those under the PPCR/SPCR in the agriculture, water resources and climate information sectors principally by bringing to scale some common interventions focusing on geographical areas that have not been covered by these interventions. Moreover, this project will introduce

			economy and community livelihoods. The overall objective of the SPCR is to ensure that all stakeholders address climate change impacts and their causes in a coordinated manner through application of appropriate measures, while promoting sustainable development and a green economy.	some interventions that are not covered by the PPCR such as the weather insurance schemes.

G. If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

The project will focus on rigorously testing the integrated approach being promoted and its effectiveness. As such, this project is conceived as a critical learning opportunity to develop and test a set of next generation of climate risk management, adaptation, and safety net approaches across different locations 6and contexts.

The project's approach to learning and knowledge management is made up of components.

1. The approach is intended to support iterative learning and on-going knowledge generation. The foundation of the approach is to continue to test by doing the innovative programming with an emphasis on the feasibility and effectiveness of the mechanisms employed for its implementation. This is identified as the act of "acquiring" lessons learned and experiences, through which knowledge can be generated.
2. Naturally, the second component of the approach is to create knowledge by distilling key pieces of information from the testing of different mechanisms.
3. The third component is communication, which focuses on making the new knowledge accessible to the project team and beyond. By facilitating access to knowledge, the intent is to assist the take up of good practices.
4. The fourth component focuses on the take up of good practices to support improvements through further innovation and new opportunities for learning. Thereby, with new methods, the approach makes full circle and goes back to acquiring new experiences and lessons from implementation. This approach to learning and knowledge management enables the project to continue to develop its capacity to innovate.

Because the project strives to be at the cutting edge of innovation, the lessons being learned with be shared with relevant stakeholders working on climate risk management, adaptation, and safety net approaches in different contexts. Therefore, learning is not regarded to benefit only the project team. It is planned to foster knowledge-sharing across networks. The emphasis on knowledge-sharing is supported by the drive to raise awareness and understanding about integrated risk manage approaches, but even more so by the ambition to foster cross-germination and further innovation.

Overview of learning under the project:

H. Describe the consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund.

A wide stakeholder consultation workshop with the government, NGOs and UN agencies took place in May 2018. Findings from the discussions and lessons learned shared by the consulted stakeholders informed the design of the proposed project. Communities consultations also took place during that period. The consultations were done through Focus Group Discussions (FGDs) at village level in the districts of Zomba and Balaka. In addition, the ICA and district specific Community Based Participatory Plans (CBPPS) and Seasonal Livelihood Plans (SLPs) for Zomba, Balaka, and Machinga were used to inform the project concept. Finally, the project concept was validated in a national workshop on August 1, 2018, which directly followed up on the national consultation in May. In the proposal development stage, further consultations will be extended to a broader section of the community and will also be extended to the local district councils. The latter will be done to ensure closer alignment to local priorities and needs.

See Annex 1 for the summary of the National Stakeholder Consultation Workshop, Annex 2 for a summary of community consultations, and Annex 3 for the summary of the National Validation Workshop.

I. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

The weather index insurance product will be designed to address covariate risks (drought) which affects a wider community while other risk mitigating strategies are employed to address household specific shocks. The integration of the interventions will provide participants with more than the benefit of each component alone. While participation in the risk reduction activities (assets creation) aims at improving the natural resource base of the farmers involved, with beneficial effects on their agricultural production, insurance offers protection for crop losses in case of drought, thereby safeguarding their livelihoods, and also guaranteeing that their investment in crops will not go wasted due to extreme drought event. It also helps unlock formal credit provision, as microfinance institutions become more willing to offer credit as they will be guaranteed that the credit will not be used for consumption but rather to be invested in productive ways because borrower's food gaps will be met through their participation in asset creation activities. The formal credit along with promotion of savings for individual households through village savings and loans (VSL) groups will be intended to create another layer of protection against household specific shocks, and also provide additional capital for investments. This will provide vulnerable households with a collection of tools, options, assets and skills to avoid negative coping strategies in the

face of droughts and other shocks, protect development gains and provide a chance to move to sustained food and nutrition security.

COMPONENT 1

Improved access to insurance as a risk transfer mechanism for targeted farmers affected by climate change and food insecurity

Baseline scenario:

Currently there are two projects in the country that offer index based micro insurance, of which, only one offers the weather index insurance product (the other offers area yield micro-insurance as part of an input loan package). The weather index insurance project is the WFP and Government of Malawi project being referenced, the R4 Rural Resilience Initiative (R4). Through this project the feasibility of weather index insurance was established and built upon. The R4 initiative is limited to the WFP-supported households who are part of the Food Assistance for Assets Programme (FFA). In this context, the weather index insurance is limited in reach and has limited integration within Government-run initiatives. As such, there are farmers who could stand to benefit from the insurance product to better manage climate shocks, but are unable to access this. The result is that many are having to resort to negative coping strategies that undermine their long-term wellbeing. This undermines national efforts on adaptation.

Additionality:

This project seeks to take weather index insurance beyond the FFA programme. The objective is to provide weather index insurance as part of an integrated climate risk management approach that supports adaptive capacities and resilience building. It will target the most vulnerable, like in the case of FFA households, but also more productive farmers that are affected by the impacts of climate change. Insurance is also being promoted to protect the investments and efforts made by farmers to support adaptation to a changing climate, thereby, helping build resilience to weather-related shocks.

The level of risk to be insured will be assessed based on climatology analysis complemented with agronomy practices in the project locations and further validated with community-based participatory exercises. The insurance product offered is “crop-agnostic”, meaning that farmers do not ensure against a specific crop loss but rather against a rainfall deficit. The index (that triggers insurance payouts) is developed according to the agricultural specificities of three reference crops: maize, groundnuts and pigeon peas. It is calibrated to reflect the adoption of resilient agricultural practices and crops. This means that farmers are free to decide which crop and what practices to apply, however, if a payout is triggered, it will reflect more closely the loss occurred to resilient crops grown through resilient climate practices rather than the loss occurred to maize under traditional agricultural practices. Farmers are informed and educated on this and are therefore incentivized to apply adaptation measures, grow more resilient crops, and turn to conservation agriculture.

Educating farmers about the level of risk they are facing for specific crops in their specific localities will be an integral activity in this project through both the climate services and insurance components. The climate services will support farmers decision-making process (including timing agricultural activities, establishing the types of crops and quantities of agri-inputs needed, the right type of agricultural practices, the suitable markets to target, and thus, the investments needed to successfully harvest for both consumption and profit) by providing them with information on climate risks and the upcoming season accompanied by advisories for their livelihood decision-making. Under the insurance component, the various community-based participatory exercises conducted during index design, validation and seasonal assessment stages as well as community sensitization processes include education on the economic cost of risk (e.g. higher implicit deductibles for high risk crops such as maize) and try to incentivise practices that will increase their adaptive capacity.

The project also has an explicit focus on mainstreaming this approach via government-operated programs and capacities through the related policies and strategies, especially focused on adaptation. Therefore, it

seeks to scale up sustainably the approach and to institutionalize these practices. This way the benefit of the insurance can be realized and sustained over time. In addition, WFP has experience with other types of insurance products and is looking to share these insights with national stakeholders to take these forward as alternatives to the weather index insurance product. This includes insights into livestock products, area yield index insurance, and hybrid models that combine different approaches, like weather and area yield indexes.

COMPONENT 2

Adopted climate-resilient agriculture practices among targeted farmers contributing to the integrated climate risk management approach

Baseline scenario:

Malawi has made resilience building and climate adaptation top priorities. This is demonstrable through a review of all the key policies and strategies. Examples like the MGDS III, NRS, MNSS II, NAIP, and NAPA have already been noted to fall under this category. This has motivated actors across the development and humanitarian sectors to embark in activities related to these objectives. Many are taking narrow sectoral approaches and failing to integrate fully into the national systems. Therefore, they are falling short of their objectives. Agriculture extension in the country has tried to incorporate elements of climate change, but the reach of these activities has been inadequate and inconsistent. In addition, agriculture extension has not been married to the right type of support that helps farmers adopt climate resilient agricultural practices. Lastly, the extension support itself has not been consistently linked to the other supporting services that farming households need to adapt to climate change, for example the WII product. More could be done to bring together these different approaches for greater impact. Multi-sectoral, integrated approaches are needed to help farmers adapt and build resilience to climate change.

Additionality:

The integrated climate risk management approach offers a guiding framework to orient different actors. It also offers a flexible and adaptive programming approach that can tackle the different chronic and acute challenges that households face and which are aggravated by the changing climate. Besides being able to offer this package in a comprehensive manner at the household and community level, the project has the added value of aiming to mainstream this approach through national institutions. Therefore, it is an anchor for the implementation of the policies previously noted. So, while the project will have direct, targeted participants, there will be additional spillover effects from the positioning of this approach as an umbrella for other projects aiming to support climate risk management for adaptation and resilience building.

COMPONENT 3

Strengthened market access strategies and approaches for smallholder farmers

Baseline:

Currently, climate considerations are not included in initiatives focused on strengthening market access for smallholder farmers. This means that the full potential of these interventions is yet to be realized and that there is scope to bring into this area of work activities on climate-resilient crop promotion, agricultural practices, and livelihood strategies. There are two reasons for this shortcoming, specifically the absence of fully functioning FOs, which can be targeted systematically with these sorts of initiatives, as well as an absent demand for commodities produced by smallholder farmers, to sustain climate resilient activities. The table below shows some of the challenges that FOs face, based on the FO development strategy, which need to be addressed, in lieu of efforts to use these as mechanisms to mainstream climate-resilient agriculture and investments. As such, it is important to look at the strengthening this organizational unit. Under the Farmer

Organization Strategy, a SWOT analysis was conducted to establish the baseline of FO capacities. It identifies the current strengthens, weaknesses, opportunities, and threats of promoting FOs and fostering linkages to markets. This is used to inform this proposed project and is shown below.

Strengths	Weaknesses
A supportive legal and regulatory environment for FOs Existence of agricultural investment programmes supporting development of FOs Growing appreciation of the role of social enterprises in economic growth and development Existence of few successful FOs with a long-standing history from which upcoming FOs can learn valuable lessons Increasing number of salaried employees and technocrats going into farming and adopting certain models of FOs Willingness among players to run cooperatives based on ICA principles	Weak collaboration and coordination between MoAIWD and MoITT Limited capacity within MoAIWD and MoITT to adequately support the development of FOs. Poor funding for FO development in MoAIWD, MoITT, and (Ministry of Education, Science and Technology (MoEST) Lack of harmonization of approaches amongst players on technical messages going to FOs Lack of harmonization of management information systems (MIS) amongst players in the sector making it difficult to monitor progress and identify the status of FOs High illiteracy levels among FO members Lack of interface between the cooperative movement in Malawi and research institutions/higher education institutions The FO founder syndrome is perpetuating issues of weak governance, mismanagement, and poor management Weak capacity among FO members to run FOs as professional entities
Opportunities	**Threats**
Different models of FOs provide a framework for organizing producers and to enable them to speak with one voice on matters of their mutual interest Drive by government and NGOs to develop various models of FOs through various initiatives Existing degree level courses on cooperative management (e.g. at Pentecostal Life University) and the willingness of other institutions of higher learning (LUANAR) to introduce such courses at their institutions Willingness by structured market platforms to provide collateral financing through the Warehouse Receipt System (WRS) to farmers	High population growth rates, degraded soils, climate change, are some of the threats to agriculture and development of agricultural FOs. Unrealized markets for agricultural produce and high volatility of agricultural prices High cost of borrowing Weak coordination among FO sector players

Additionality:

The climate additionality of this component is primarily focused on making investments in climate-resilient production sustainable in the medium-long term. To do so, the demand side of agricultural production needs to be stimulated. The project will achieve this objective by fostering FO formation and capacities. In addition, the project will also work to support aggregation, processing, storage and local purchase These activities are intended to contribute to the establishment of a reliable market outlet providing sustained prices for farmers' increased production. In the long run, this will decrease the need for seasonal/conditional food assistance as smallholders will be able to produce their own food as well as protect and continue investing in climate-resilient practices, resorting only to the private market.

In addition, the proposed project, using the framework above, tries to tackle the most pressing weaknesses and threats faced by FOs, while leveraging the associated strengthens and the opportunities. Thereby, the project proposes a comprehensive and government-led solutions to the barriers that have kept FOs and market access interventions from realizing their full potential, especially in terms of climate adaption and resilience building. Under the weaknesses, the project will: foster collaboration within the FOs and the institutions that support these; promote capacities of FOs and supporting entities to create an enabling environment; support harmonize information sharing; and tackle poor governance issues that plague FOs. On the weaknesses, the climate-sensitive agricultural practices, as part of the integrated risk management approach, as well as the work on the Contract Farming Strategy, will help address some of the volatility issues around agriculture as a business. This will be done in a cross-sectoral manner working with all the

relevant stakeholders and leveraging the experiences of successful FOs. In this context, the project will be able to advance on the issues put forward in the FO development strategy, with a focus on supporting FOs (long term strategy), which is markedly different from the status quo that focused on FO formation (short term strategy). All of this in the context of the national adaptation plan and through the integrated risk management approach being promoted in components 1 and 2.

J. Describe how the sustainability of the project/programme outcomes has been considered when designing the project / programme.

Sustainability is at the core of this project. As such, the project has placed great emphasis on developing its sustainability strategy. Accordingly, the project has determined that sustainability is underpinned by three factors: 1. The capacity to effectively transition households from subsistence to surplus-producing farmers; 2. The capacity to foster national capacities and systems to integrate this approach into public programs working in a cross-sectoral manner, and 3. The capacity to stimulate viable market opportunities for farmers to benefit from the broad strategies in put forward.

The first factor will be pursued through the integration of the components as part of one holistic approach that can take farmers from high vulnerability and low productivity to the opposite spectrum of low vulnerability and high productivity. While a top priority against this objective will be to layer all the interventions at the household level, simultaneously offering access to all the project's services, even more importantly the project will make sure to phase in and out the different activities to meet the evolving needs of the household. Therefore, the project has to be dynamic and adaptive to the changes that are brought about. The ability of the targeted households to transition from the non-paying groups to pay their own insurance in the medium to long term rests on their potential capacity to uptake the support towards their diversified and strengthened livelihoods to become self-reliant. The transition from non-paying to paying households has been measured in Senegal and Malawi. For example, in Senegal, it started with 5% in 2016, 10% in 2017 and 15% this year[53] while in Malawi farmers contributed over 7% in 2017/18 season in a few villages in Balaka[54]. Part of the insurance component, is also focusing on creating the framework, the capacities and the market for the micro-insurance to become sustainable and affordable to smallholders. Another principle is to monitor and consult closely with communities and stakeholders about the adequate sequencing of support to truly enable this transition. This is also intended to help foster ownership over the assets, skills, and activities fostered under the project, helping ensure these are integrated into individual and group dynamics. For this, the project will work with community-based organizations to ensure adherence and continuation of project supported-initiatives.

The second and third factors will be pursued by engaging and interacting with country systems and stakeholders in the project and by embedding it in their priorities. Both private and public stakeholders will be engaged in such a manner, given that after the social support programs, market based approaches are the ones that will be able to support the household (e.g. provision of insurance, credit, information, banking services, etc.). As such, local, rural markets need to be supported to guarantee the take up of social support participants and to provide commercial opportunities for all (focusing also on retail outlets for farmers). Engagement and interaction with these actors is done with the objective of fostering ownership and the capacities needed to carry over the project. For this, technical trainings will be conducted, as well as multi-stakeholder meetings, sharing of best practices, joint implementation, reporting, and evidence-based advocacy. In addition, a lot of the work is focused on developing the tools and systems that will allow the project to be taken to scale and for the government to take over these mechanisms. Latent demand for these services will also be stimulated to further support the growth of markets. This will be done by reaching out to more productive farmers, who are able to engage readily with the services offered. By showing the benefits of the approach, demand is also likely to increase.

[53] 2017 R4 Annual Report (page 12): https://www.wfp.org/content/2018-r4-rural-resilience-initiative-annual-report-2017
[54] Ibid, page 17

K. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project / programme

The type of activities of this project and the way they will be designed, planned and implemented will minimize any risk for negative social impacts. The project and specific activities are designed in close consultation with the beneficiaries – including most vulnerable groups – and stakeholders, and take into account the different needs and constraints of these groups. The project team will also ensure that the most vulnerable and food insecure groups and people have access to and are included in these activities. In addition, government advocacy and technical support stemming from this project will focus on enhancing the condition of women and marginalized and vulnerable groups, such as elderly, youth, and disabled.

Components 1 and 3 mainly include activities on capacity strengthening, information sharing, data and systems improvements, awareness raising, as well as government advocacy and technical support. These types of activities do not entail environmental risks. Environmental risks are primarily associated with Component 2. Component 2, which focuses on climate-resilient agriculture and the integrated climate risk management approach, specifically outputs 2.1 – 2.3, may present an environmental risk. This is because these activities are focused on soil and water conservation, climate-resilient agriculture, and crop diversification. CA has been adopted as the most appropriate approach for undertaking work across these outputs. It is a well-recognized and accepted method that works with the environment to enhance its natural capacities. In this context, it is not perceived as a high-risk approach. In fact, it is a low to moderate risk approach as noted in the table below, which makes use of WFP's screening tool for its own programs. In the design phase, this will be further verified against the specific local context and the asset-specific standards used by technical experts from the district councils.

Activity Area and Description	Potential Environmental Risk * (low, moderate, high)
SOIL AND WATER CONSERVATION	
Physical soil and water conservation:	
Level soil bund	Low
Stone bunds and stone-faced soil bund	Low
Level Fanya Juu	Low
Bench terracing	Low
Conservation tillage using local plough	Low
Broad bed and furrows maker (BBM)	Low
Hillside terraces	Moderate
Hillside terrace with trenches	Low, Moderate
Water harvesting:	
Hand-dug wells	Low
Low-cost water lifting	Low, Moderate
Low-cost micro-ponds	Low, Moderate
Underground cisterns (hemispherical, dome cap, bottle shape, sphere sausage shape)	Low
Percolation pit	Low
Percolation pond	Low, Moderate
Farm Pond construction	Low, Moderate

Activity Area and Description	Potential Environmental Risk * (low, moderate, high)
Spring development	Low, Moderate
Family drip irrigation system	Low
Roof water harvesting system	Low
Farm dam construction	Low, Moderate
River-bed or permeable rock dams	Moderate
Small stone bunds with run-on and run-off areas	Low
Narrow stone lines along contours (staggered alternatively)	Low
Stone faced / soil or stone bunds with run-on/ runoff areas	Low
Conservation bench terraces(s)	Low
Tie ridge(s)	Low
The Zai and planting pit system	Low
Large half-moons (staggered alternatively)	Low
Diversion weir design and construction	Moderate
Soil fertility management and biological soil conservation:	
Compost making	Low
Fertilization and manuring	Low, Moderate
Live check dams	Low
Mulching and crop residues management	Low
Grass strips along contours	Low
Stabilization of physical structures and farm boundaries	Low
Vegetative fencing	Low
Ley cropping	Low
Integration of food/feed legumes into cereal cropping systems	Low
Strip cropping	Low
Crop rotation	Low
Intercropping	Low

A preliminary social and environmental risk assessment was performed based on the 15 Adaptation Fund's environmental and social principles outlined in the AF related policy. As mentioned above, compliance with the principles will mainly be integrated into project design. In-depth consultations and engagement with stakeholders and communities throughout project design and implementation will ensure that the project is culturally, socially and environmentally appropriate.

For CA activities at the plot level and CA-related activities at the homestead and community levels (Component 2) social and environmental risk screenings will be performed at activity level during project implementation. The process and tools used will be WFP's ones, adapted to align with national environmental legislation and expanded to include AF's social principles.

Because of the asset creation activities that are not totally defined and the subsequent environmental and risk screening process that will be used, the project is categorized as medium risk, Category B.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law	X	**Low/no risk** Relevant national, regional and district authorities have been and will continue to be consulted during the proposal development process to ensure compliance with all relevant laws.
Access and Equity		**Low/no risk** Through in-depth consultations with communities and stakeholders during the proposal development process and throughout project implementation, and through the engagement of community leaders, this project will ensure that no activity will interfere with access to basic services or exacerbate existing inequities. This project will promote the equitable access to activities and assets by youth, elders and women in targeted communities. Action Required: When designing and planning the activities, ensure that any activity with communities targets women and includes marginalized and vulnerable groups such as elderly, youth, and disabled. The CBBP methodology will be used, making sure to incorporate the representation and opinions of all, with a principal focus on the typically marginalized. In addition, the gender and HIV/AIDS strategy of R4, annex 4, will be used and amended to develop this project's own strategy for ensuring access and equity.
Marginalized and Vulnerable Groups		**Low/no risk** Marginalized and vulnerable groups – especially women - will be consulted during the proposal development process to ensure that their identified threats, priorities and mitigation measures are reflected. This project will empower vulnerable groups to make decisions on concrete adaptation actions, valuing their traditional and local knowledge. This project will create a space for women, elders and youth to choose adaptation activities in a transparent and participatory manner. Additionally, this project will consider traditional belief of the community as well as land, property and customary rights. Action Required: When designing and planning the activities, ensure that any activity with communities targets women and includes marginalized and vulnerable groups such as elderly, youth, and disabled. As part of this, perform social and environmental screening of assets during CBPP. The project's strategy on gender and HIV/AIDS mainstreaming will also be developed to account for issues related to marginal and vulnerable groups.
Human Rights	X	**Low/no risk** This project affirms the rights of all people and does not violate any pillar of human rights.
Gender Equity and Women's Empowerment		**Low/no risk** Through targeted consultations with women, project design and implementation will ensure that gender considerations are integrated in each activity. This project will promote women leadership in public spaces and decision-making power for climate change adaptation and food security and nutrition. In project formulation, gender experts will be consulted to ensure that the project effectively responds to the unique needs of women and girls and promotes gender equity. This will be enhanced by the gender mainstreaming strategy developed by WFP and other similar materials. Action Required: When designing and planning the activities, ensure that any activity with communities targets at least 50% of women. The same principle will be applied to project targeting. As part of this, the project will perform social and environmental screening of assets and project activities during CBPP. In addition, the gender mainstreaming strategy annexed and the updated version for this project will be used to select activities that support gender equity and women's empowerment.

Core Labour Rights	X	**Low/no risk** The project will ensure respect for international and national labour laws and codes, as stated in WFP's policies.
Indigenous Peoples	X	**Low/no risk** This project is not implemented in areas where there are sub-groups within the general target population that self-identify as indigenous groups. The overall sentiment is that there are prevailing traditional practices that need to be observed by the project. This includes the inclusion of traditional leaders and structures in the project formulation and delivery. To this end, the project has and will continue to conduct extensive consultations and participatory planning events to ensure that the project appropriately incorporates the priorities and needs of this population in all activities. These consultative events will include women, elders and youth as well as traditional and religious leaders.
Involuntary Resettlement	X	**No risk** The project will not lead to involuntary resettlement.
Protection of Natural Habitats		**Low/no risk** By implementing ecosystem-based adaptation activities, such as those promoted by CA and integrated watershed management, the project will ensure the protection of natural habitats. In addition, consultations with government stakeholders, community leaders and communities will ensure that conversion or degradation of critical natural habitats (including those that are legally protected, officially proposed for protection, recognized for their high conservation value, or recognized as protected by traditional or indigenous local communities) is avoided. Action Required: Perform environmental screening of assets/activities during CBPP.
Conservation of Biological Diversity		**Low to moderate risk** Crop diversification activities could lead to a deterioration of biological diversity if seed and crop types are not correctly selected (e.g. inadvertent introduction of invasive species) and diversified. To ensure this risk is addressed, this project will prioritize local species and avoid the use of non-native and invasive species. Additionally, these activities will be designed in close collaboration with the MoAIWD. By working with local leaders and village chiefs to rescue traditional and native plants and crop species, this project will support the conservation of biological diversity and increase ecosystem resilience. Action Required: Perform environmental screening of assets/activities during CBPP.
Climate Change	X	**Low/no risk** The project will not generate any significant emissions of greenhouse gases and will not contribute to climate change in any other way. All project components and activities contribute to increasing local capacities to sustainably face climate change in the long-term and climate variability in the short and medium terms.
Pollution Prevention and Resource Efficiency	X	**No risk** The project will not release pollutants. Energy efficiency, minimization of material resource use, and minimization of the production of wastes will be embedded in project design.
Public Health		**Low/no risk** The project will be designed and implemented in a way that avoids any negative impact on public health. Attention will be given to activities related to water harvesting and storage and communities will be sensitized on how to use and store the water in a safe and efficient way. The same attention will be given to nutrition-sensitive activities that are part of the project ensuring a positive impact on health and alignment to nutrition and health services offered beyond the project. The project will ensure that the targeted populations will not face restrictions to their access to public healthcare. Action Required: perform social environmental screenings of the project activities during CBPP, including health considerations.
Physical and Cultural Heritage		**Low/no risk** Under all components, traditional and local knowledge will be understood and enhanced with scientific information for environmental management and food security and nutrition. Consultations and engagement with stakeholders and communities will ensure that any

		physical cultural heritage present on the project site is identified and potential negative impacts are avoided through project design. Action Required: perform social screening of project activities during CBPP, including cultural considerations.
Lands and Soil Conservation		**Low to moderate risk** The adaptation activities in component 2, could have negative impacts on lands and soils conservation, if not designed properly. In addition, increased agricultural production and livelihoods may lead to increased investment in livestock which may have an unintended effect on the environment, mostly on soils and water resources. Sensitization and trainings in component 2 will ensure these issues are well understood. The project will identify mitigation and monitoring measures to ensure that unintended negative impacts resulting from its activities are avoided or minimized. Action Required: perform social and environmental screening of project activities during CBPP.

PART III: IMPLEMENTATION ARRANGEMENTS

A. Describe the arrangements for project / programme implementation.

The project will be executed by the MoAIWD with input from MoITT, DCCMS, EAD, DoDMA, EPD, MIA, and MLGRD for specific technical activities.

WFP, as the MIE, will provide support across all project components related to: fund management, monitoring, activity tracking, process and outcome monitoring, contract management, as well as operational and technical advice.

The table below indicates the specific roles and contributions to the project by each entity.

Expected Outcome/Project Component	Expected Concrete Outputs	Contributing Entities	Role
1. Improved access to insurance as a risk transfer mechanism for targeted farmers affected by climate change and food insecurity	1.1 Design a weather index micro insurance product for drought and dry spells that can cover farmers needs at scale	MoAIWD	Provide agronomical data for index design Input into field data collection for index design
		DoDMA	Input into field data collection for index design
		EPD	Input into field data collection for index design
		MIA	Input into field data collection for index design Package the index as an insurance product
		DCCMS	Provide historical rainfall and climate data Input into field data collection for index design
	1.2 Raise awareness on weather index insurance among farmers and enable vulnerable farmer access to weather index micro insurance (cash or work)	MIA	Develop education & protection materials Conduct sensitization activities Underwrite the insurance product Organize re-insurance arrangements Support index monitoring Conduct payouts, as needed
		MFI (TBD)	Support sensitization activities Act as policy holder, as needed Facilitate payouts, as needed
	1.3 Strengthen national capacities and systems to provide weather index	MoAIWD	Participate in index design group Engage in the handover strategy development & implementation

	insurance working with the private and public sector	DoDMA	Participate in index design group Engage in the handover strategy development & implementation
		EPD	Participate in index design group Engage in the handover strategy development & implementation
		MIA	Participate in index design group Engage in the handover strategy development & implementation
		DCCMS	Participate in index design group Engage in the handover strategy development & implementation
	1.4 Support the inclusion of insurance (not limited to WII) as risk transfer mechanisms in national AG programs and schemes	MoAIWD	Provide leadership to direct efforts on the inclusion of insurance
		MIA	Support technically the inclusion of insurance into AG programs and schemes
		DCCMS	Support technically the inclusion of insurance into AG programs and schemes
Expected Outcome/Project Component	**Expected Concrete Outputs**	**Contributing Entities**	**Role**
2. Adopted climate-resilient agriculture practices among targeted farmers contributing to the integrated climate risk management approach	2.1 Promote irrigation along with soil and water conservation practices through individual and group asset creation	MoAIWD	Lead on irrigation and soil and water conservation practices
		LG&RD	Support irrigation and soil and water conservation practices through extension officers
	2.2 Promote climate resilient agriculture among farmers through extension service support	MoAIWD	Lead on climate resilience agricultural practices
		LG&RD	Support climate resilience agricultural practices through extension officers
	2.3 Support crop diversification with a focus on drought tolerant and nutritious crops	MoAIWD	Lead on crop diversification practices
		LG&RD	Support crop diversification practices through extension officers
	2.4 Provide climate services to inform livelihood decision-making among farmers	MoAIWD	Provide agricultural data Lead the content creation committee Support PICSA roll out
		LG&RD	Provide input to content creation Support CS activities in the field through extension officers Support PICSA roll out
		DCCMS	Historical climate/rainfall data rescue Production of downscaled seasonal forecast Production of downscaled in-season forecasts Support PICSA roll out Provide input to content creation
		NGO (FRT)	Support PICSA roll out Provide input to content creation Support dissemination through SMS, radio, extension officer
	2.5 Strengthen national capacities and systems to provide these integrated climate risk management approaches	MoAIWD	Convene relevant actors Participate in capacity and systems strengthening activities
		LG&RD	Participate in capacity and systems strengthening activities
3. Strengthened market access strategies and approaches for smallholder farmers	3.1 Strengthen financial capacities and market access opportunities to enhance investment in climate-resilience	MFI	Support VSL and credit Foster links to agro-dealers
		RB	Support technically with standards for VSL and credit

	agriculture (including saving, credit, and financial literacy)	NGO (TBD)	Community mobilization
	3.2 Strengthen performance and outreach of farmer organizations/cooperatives and enhance their capacity to engage in farming as a business	MoAIWD	Co-lead on FO development and technical support
		MoITT	Co-lead on FO development and technical support
		NGO (TBD)	Community mobilization
	3.3 Support access to storage and aggregating infrastructure for targeted farmers for greater market access, including establishment of rural warehouses	MoAIWD	Support technically and operationally to activities on storage and aggregating infrastructure
		MoITT	Lead technically and operationally to activities on storage and aggregating infrastructure
Expected Outcome/Project Component	**Expected Concrete Outputs**	**Contributing Entities**	**Role**
3. Strengthened market access strategies and approaches for smallholder farmers	3.4 Provider market information to inform business planning & activities	MoAIWD	Develop & disseminate market information
		MoITT	Lead on business planning activities technically & operationally
	3.5 Promote smallholder procurement through government/private sector strategies and programs	MoAIWD	Support technically and operationally activities on market access as informed by the contract farming strategy and other relevant government initiatives
		MoITT	Lead technically and operationally activities on market access as informed by the contract farming strategy and other relevant government initiatives
		Private Buyer	Procure from smallholder farmers (their FOs) as informed by the contract farming strategy

B. Describe the measures for financial and project / programme risk management.

The project's risk management matrix is as follows:

Risk Description	Potential impact	Probability of occurrence			Mitigation action
		High	Medium	Low	
Unavailability of weather and climate data in the targeted district for analysis	Major				Make use of historical archives Prior assessments have been done to indicate this is unlikely
Partners failure to integrate the project activities into their regular work (framework)	Moderate				Detailed discussions and planning sessions with partners, ensuring that the project plans are integrated into the regular work plan
Humanitarian emergency –	Moderate				Through contingency planning with partners, this sort of shocks can be addressed, while

A medium/large scale humanitarian emergency occurs in the country, necessitating a diversion of focus for key executing partners and stakeholders.					enabling the continuation of project activities
Low stakeholder support/buy in for the project – Key stakeholders do not participate fully in project activities.	Moderate				Stakeholder meetings held on a regular basis, especially prior to and at the early stage of the project. Communications strategy prepared for the project to inform different target audiences.
Lack of risk diversification and operation in high risk zones may discourage insurance partners	Moderate				The project will consider the high-risk factors when selecting the targeted districts, ensuring that insurance partners will be able to operate in the context.
Political risk considering upcoming presidential elections	Moderate				In view of the risk that political volatility and civil unrest could interrupt the project, the team will seek to reduce the effects by establishing strong operational partnerships with various national organizations and engaging in advocacy. WFP will strive to establish a sentiment of full ownership amongst government stakeholders
Technical Capacity of government partners	Low				Because unexpected constraints relating to the capacities of national partners could result in delays in implementation, the project will continue to develop partnerships with a broad range of development organizations to ensure sustainability and to limit risks. Capacity strengthening will also be prioritized throughout the project.

C. Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy of the Adaptation Fund.

WFP has a tool and established process to screen for environmental impacts. A revised version of WFP's screening tools and processes, integrating social principles, will be developed and used for this project. These efforts also include expanding upon the gender and HIV/AIDS strategy annexed to this proposal to account for issues pertaining to gender equity and women's empowerment; access and equity; as well as marginalized and vulnerable groups. Further consultations with the Government will ensure that the revised tools will also align with national environmental legislation and social standards. **The final tools to be used will be attached to the full project proposal.**

The screening will take place during the CBPP process, together with communities, once the assets to be created are identified and their exact location and design are defined. At that stage, potential environmental impacts are discussed with communities and a checklist is filled in by the entity/partner facilitating the CBPP. If risks are identified, a more detailed analysis (and another checklist) is performed to better qualify and quantify the potential impacts and to be able to categorize the activity as low, medium or high risk. The risks are then managed differently, depending on the categorization result: low risk activities are implemented without further assessment or special measure; for medium risk activities, avoidance or mitigation measures are planned and recorded in an Environmental Management Note (which also indicates how these will be monitored); and for high risk activities, an Environmental Impact Assessment is required with subsequent Environmental Management Plan.

Project partners and stakeholders involved in asset creation activities will be trained on the use of the screening tool. They will be capacitated to identify environmental risks, quantify them, and identify and plan for avoidance or mitigation measures. Technical support from a governmental partner or WFP, where needed, will be provided to deal with medium and high-risk activities and manage them properly.

From previous experience, it is expected that most asset creation activities will be low risk, with some possibly being medium risk. It is not expected that asset creation activities will be high risk because of the usual type, size and nature of assets. Nevertheless, the screening will be mandatory for all asset creation activities and filled-in checklists will be kept and recorded as part of the monitoring system.

Finally, a grievance and complaint mechanism will be set up to enable beneficiaries to raise their voice and report any irregularities in project/activity design and implementation. Awareness will be raised among communities, targeting especially vulnerable groups such as women, to inform them of their rights and use of the complaint mechanism.

D. Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan.

Project monitoring, reporting and evaluation will be carried out in accordance with WFP established procedures and standards and will be based on WFP's internal "Evaluation Quality Assurance System" (EQAS). Financial monitoring and accounting by the Multilateral Implementing Agency will follow WFP standards that are based on the International Public-Sector Accounting Standards (IPSAS).

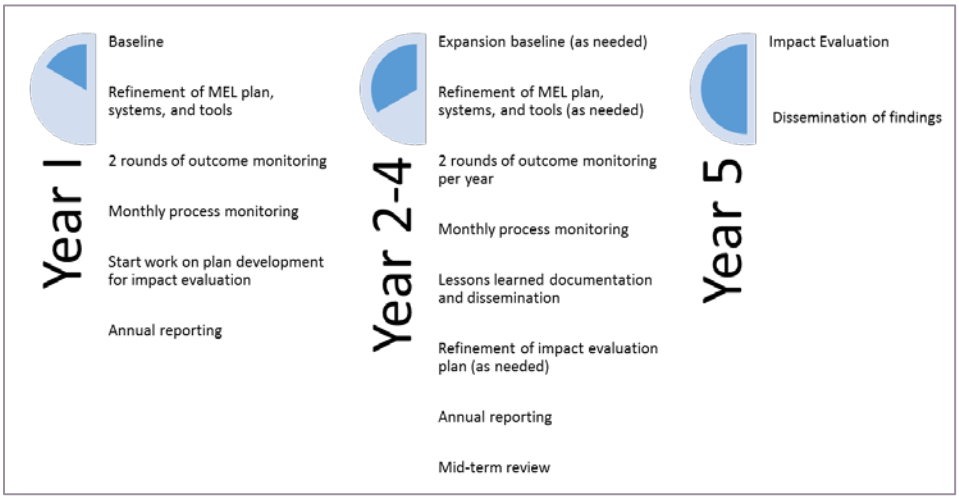
The M&E system informs program reporting, as follows:

- **Inception workshop –** Held by project executing team before the start of the project. The inception report to be provided on the basis of the workshop will form the basis for the first detailed annual work plan.
- **Baseline –** Done by WFP 2-3 months prior to project start to establish a benchmark for monitoring progress. Indicators for the logframe will be established upon indication of the baseline findings.
- **Monthly –** Done by executing entity and submitted to WFP for review based on the output level indicators and other process level indicators from agreements in place intended to track performance.
- **Quarterly –** Done by WFP based on the outcome level indicators, considering the output level data collected by partners.
- **Annually –** Done by WFP based on the outcome and output level data collected to present a yearly snapshot of progress.
- **Mid-term -** Done by WFP with support from an external third party to assess progress towards the

intended impact of the project, leading up to the end line assessment.

- **End line –** Done by an external third party intended to assess the impact of the whole intervention at the end of the project (6 months after) using the panel data collected through the project. (Impact evaluation)

The following diagram shows the project's milestones.



E. Include a results framework for the project proposal, including milestones, targets and indicators.

Impact		**Impact Indicator**	
Enhanced climate adaptation and food security of households through access to integrated climate risk management strategies and structured market opportunities		SDG 2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES) SDG13.1 13.1 Strengthen resilience and adaptive capacity to climate related hazards and natural disasters, based on the Resilience Index Measurement Analysis (RIMA II) SDG 2.2.1a: Percentage of children under five years of age who are stunted	
Expected Outcome/Project Component	**Outcome Indicators**	**Expected Concrete Outputs**	**Output Indicators**
1. Improved access to insurance as a risk transfer mechanism for targeted farmers affected by climate change and food insecurity	% change of HH with improved Livelihood Coping Strategy Index (LCSI) % change of HH that have improved Household Resilience Capacity Index as informed by the Resilience Index Measurement Analysis (RIMA) Number of HHs transitioning to a different wealth group (RIMA/SISMOD) (very poor/poor, middle income, better off) % change in HHs accessing the insurance (cash, non-cash)	1.1 Design a weather index micro insurance product for drought and dry spells that can cover farmers needs at scale 1.2 Raise awareness on weather index insurance among farmers and enable vulnerable farmer access to weather index micro insurance (cash or work) 1.3 Strengthen national capacities and systems to provide weather index insurance working with the private and public sector 1.4 Support the inclusion of insurance (not limited to WII) as risk transfer mechanisms in national AG programs and schemes	# of people insured (non-cash, partial cash payment and full cash payment) Total value of premiums (non-cash, partial cash payment and full cash payment) Total sum insured (IFA, partial cash payment and full cash payment) Total value of insurance premiums Total value of pay-outs # of HHs with pay-outs # of people trained on index design # of people sensitized on insurance as a risk transfer mechanism
2. Adopted climate-resilient agriculture practices among targeted farmers contributing to the	% change in food and nutrition secure HHs (based on: Food Consumption Score (FCS); Diet Diversity Score (DDS);	2.1 Promote soil and water conservation practices through individual and group asset creation, including irrigation development	# of HHs involved in CA (minimum tillage, crop diversity, retention of crop residues) # of HHs working on water/soil conservation structures (hh/community)

integrated climate risk management approach	Minimum Dietary Diversity – Women (MDD-W); Coping Strategy Index (CSI); Food Expenditure Share (FES)) % change in total assets (by type) % change in HH crop diversity (by type of crop) % change in annual crop production (by type of crop) % change in HH applying minimum tillage % change in HHs applying retention of crop residues % change in HHs with improved access to water (by source type) % change of integrated risk management strategies accessed by the HH (by type) % change in HHs using climate services to inform livelihood decision-making (by type)	2.2 Promote climate resilient agriculture among farmers through extension service support 2.3 Support crop diversification with a focus on drought tolerant and nutritious crops 2.4 Provide climate services to inform livelihood decision-making among farmers 2.5 Strengthen national capacities and systems to provide these integrated climate risk management approaches	# of crops grown by HHs (by type) # of HH accessing intergated climate risk management strategies # of delivery channels used in targeted communities for the dissemination of climate services (i.e. in-person intermediaries, radio advisories, and SMS # of households within the targeted communities trained to access and use climate information to support decision-making # households within the targeted communities that receive climate services, disaggregated by source (i.e. farm intermediaries, radio advisories, and SMS) # households using climate services to inform livelihood-related decision # of intermediaries trained in how to access, interpret and communicate climate information to households, to support household decision-making related to food security, livelihoods, and DRR # of intermediaries trained in how to access, interpret and communicate climate information to households, to support household decision-making related to food security, livelihoods, and DRR
3. Strengthened market access strategies and approaches for smallholder farmers	% change in HH expenditure (food and non-food monetary value) % change in number of HH income sources % change in HHs using improved agricultural inputs (incl. labour) % change in credit take up (disaggregated by source, amount and purpose) % change in HH savings (by type: individual, group, formal, informal) % HHs with marketable surplus (main crops, measured in KG) % of HHs accessing markets to sell surplus % change in HH savings (by type: individual, group, formal, informal) % change in HHs within the targeted communities using market advice to make livelihood related decisions (by type) % change in HH participating in FOs Food purchased from aggregation systems in which smallholders are participating, as % of national and local purchases	3.1 Strengthen financial capacities and market access opportunities to enhance investment in climate-resilience agriculture (including saving, credit, and financial literacy) 3.2 Strengthen performance and outreach of farmer organizations/cooperatives and enhance their capacity to engage in farming as a business 3.3 Support access to storage and aggregating infrastructure for targeted farmers for greater market access, including establishment of rural warehouses 3.4 Provider market information to inform business planning & activities 3.5 Promote smallholder procurement through government/private sector strategies and programs	# HH who are a member of a formal / informal savings scheme (by type) Value of HH savings # of HH accessing credit (by type) Value of HH credit accessed (formal) Quantity of food purchased locally from pro-smallholder aggregation systems (in mt # of farmers' organizations trained in market access and post-harvest handling skills # of smallholder farmers supported # of agricultural inputs used by HH # of HHs receiving market advice (by type)

Crosscutting	Indicators
Gender equality and empowerment improved	Proportion of assisted women, men or both women and men who make decisions over the use of cash, vouchers or food within the household
	Proportion of women beneficiaries in leadership positions of project management committees
Protection and accountability to affected populations. Project assistance delivered and utilized in safe, accountable and dignified conditions	Proportion of assisted people who do not experience safety problems travelling to, from and/or at project sites
	Proportion of assisted people informed about the programme (who is included, what people will receive, where people can complain)
Partnerships. Food assistance interventions coordinated and partnerships developed and maintained.	Number of partner organizations that provide complementary inputs and services

F. Demonstrate how the project / programme aligns with the Results Framework of the Adaptation Fund

Project Objective(s)[55]	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
Enhance climate adaptation and food security of households through access to integrated climate risk management strategies and structured market opportunities	• SDG 2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES) • SDG13.1 13.1 Strengthen resilience and adaptive capacity to climate related hazards and natural disasters, based on the Resilience Index Measurement Analysis (RIMA II) • SDG 2.2.1a: Percentage of children under five years of age who are stunted	1. Reduced exposure to climate-related hazards and threats 2. Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses 3. Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level 5. Increased ecosystem resilience in response to climate change and variability-induced stress 6. Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas 7. Improved policies and regulations that promote and enforce resilience measures	1. Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis 2.1. Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased 3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses 3.2. Percentage of targeted population applying appropriate adaptation responses 5. Ecosystem services and natural resource assets maintained or improved under climate change and variability-induced stress 6.1 Percentage of households and communities having more secure access to livelihood assets 6.2. Percentage of targeted population with sustained climate-resilient alternative livelihoods 7. Climate change priorities are integrated into national development strategy	

[55] The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

Project Outcome(s)	Project Outcome Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)
1. Improved access to insurance as a risk transfer mechanism for targeted farmers affected by climate change and food insecurity	• % change of HH with improved Livelihood Coping Strategy Index (LCSI) • % change of HH that have improved Household Resilience Capacity Index as informed by the Resilience Index Measurement Analysis (RIMA) • Number of HHs transitioning to a different wealth group (RIMA/SISMOD) (very poor/poor, middle income, better off) • % change in HHs accessing the insurance (cash, non-cash)	1.2. Targeted population groups covered by adequate risk reduction systems 2. Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events 7. Improved integration of climate-resilience strategies into country development plans	1.2.1. Percentage of target population covered by adequate risk-reduction systems 2.1.2 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks (by type, sector and scale) 7.1. No. of policies introduced or adjusted to address climate change risks (by sector)	3,248,000
2. Adopted climate-resilient agriculture practices among targeted farmers contributing to the integrated climate risk management approach	• % change in food and nutrition secure HHs (based on: Food Consumption Score (FCS); Diet Diversity Score (DDS); Minimum Dietary Diversity – Women (MDD-W); Coping Strategy Index (CSI); Food Expenditure Share (FES)) • % change in total assets (by type) • % change in HH crop diversity (by type of crop) • % change in annual crop production (by type of crop) • % change in HH applying minimum tillage • % change in HHs applying retention of crop residues • % change in HHs with improved access to water (by source type) • % change of integrated risk management strategies accessed by the HH (by type) • % change in HHs using climate services to inform livelihood decision-making (by type)	2. Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events 3. Targeted population groups participating in adaptation and risk reduction awareness activities 5. Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability 6. Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	2.1.2 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks (by type, sector and scale) 3.1 No. of news outlets in the local press and media that have covered the topic 5.1. No. and type of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type of assets) 6.1.1.No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies	2,012,000

3. Strengthened market access strategies and approaches for smallholder farmers	• % change in HH expenditure (food and non-food monetary value) • % change in number of HH income sources • % change in HHs using improved agricultural inputs (incl. labour) • % change in credit take up (disaggregated by source, amount and purpose) • % change in HH savings (by type: individual, group, formal, informal) • % HHs with marketable surplus (main crops, measured in KG) • % of HHs accessing markets to sell surplus • % change in HHs within the targeted communities using market advice to make livelihood related decisions (by type) • % change in HH participating in FOs • Food purchased from aggregation systems in which smallholders are participating, as % of national and local purchases	6. Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	6.1.1. No and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies 6.2.1. Type of income sources for households generated under climate change scenario	3,148,000

G. Include a disbursement schedule with time-bound milestones.

Budget Breakdown	Y1	Y2	Y3	Y4	Y5	Total
Project Funds	$ 2,438,190.00	$ 2,418,190.00	$ 2,413,190.00	$ 1,937,190.00	$ -	$ 9,206,760.00
Implementing Entity Fee (8.5%)	$ 156,514.92	$ 156,514.92	$ 156,514.92	$ 156,514.92	$ 156,514.92	$ 782,574.60
Total	$ 2,594,704.92	$ 2,574,704.92	$ 2,569,704.92	$ 2,093,704.92	$ 156,514.92	$ 9,989,334.60

PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government[56] *Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:*

Peter K. Simbani, Director, Ministry of Finance, Department of Economic Planning and Development	Date*: August 1, 2018*

B. Implementing Entity Certification *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.	
…… *Benoit Thiry, WFP Country Director* Implementing Entity Coordinator	
Date: *August 1, 2018*	Tel. +2651774666 Email: Benoit.thiry@wfp.org
Project Contact Person: Bernard Owadi	
Tel. +2651774666 Email: Bernard.owadi@wfp.org	

6. Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

ANNEXES

ANNEX 1 – NATIONAL CONSULTATION WORKSHOP REPORT
ANNEX 2 – COMMUNITY CONSULTATIONS REPORTS (2)
ANNEX 3 – NATIONAL VALIDATION WORKSHOP REPORT
ANNEX 4 – GENDER & HIV/AIDS MAINSTREAMING STRATEGY
ANNEX 5 – ENDORSEMENT LETTER FROM NDA

MINUTES FROM THE NATIONAL CONSULTATION WORKSHOP ON THE ADAPTATION FUND
MAY 16, 2018, IN LILONGWE'S BICC

Introduction

The National Consultation Workshop on the Adaptation Fund held on May 16, 2018, in Lilongwe was convened by the Acting Chief Director for Economic Planning and Development, Mr. Peter Simbani, as the National Designated Authority to the Adaptation Fund (AF), in conjunction with the WFP Resident Representative, Mr. Benoit Thiry. The purpose of workshop was to consult relevant stakeholders in the development of a project concept to be developed for approval by the AF, supported by the Government of Malawi and the World Food Programme (WFP). During the workshop, insights into the AF were presented in respect to the Malawi context; a discussions paper with project entry points was presented for feedback; and a workplan for the development of the AF proposal shared for endorsement. The minutes note the discussions under each of these elements, including a recap of next steps and the way forward.

Insights into the AF & the Malawi Context

The workshop opened with discussions on the background to the AF. It was noted that the United Nations Framework Convention on Climate Change (UNFCCC) is intended to bring together countries to halt climate change and help address its impacts. UNFCCC is supported by treaties such as the Kyoto Protocol (KP), which commits its parties to emission reduction targets. Recognizing that there are differentiated, yet common responsibilities, especially between developed and developing countries, the KP has set up ways for developing countries to adapt and grow in climate-sensitive ways. Such mechanisms, include the AF.

The AF specifically seeks to finance projects on 'reducing vulnerability and increasing the adaptive capacity of human and natural systems to respond to the impacts of climate change'. In terms of the AF for Malawi, a project will be sought for 5 years with a budget for 10 million from the AF. The proposed in-country coordination structure is as follows:

To contextualize the consultation discussions, the Ministry of Agriculture, Irrigation, and Water Development (MoAIWD) presented on the impacts of climate change on the food and agriculture sector. It was highlighted that the sector is critical as it accounts for up to 40% of GDP and 64% of the total income for rural populations. However, the sector is very vulnerable to climate change, as evidenced by shifting rainfall season, longer dry season, and overall reduction of the growing season duration. Climate change also drives severe weather events that negatively affect agriculture such as floods, drought, hailstorms and dry spells. These changes are also having an impact on related hazards such as pests and diseases. To illustrate the impact, in 2017/18, about 19% reduction in maize production is anticipated due to prolonged dry spells and Fall Army Worm infestation across the country. In short, there is a strong imperative to address the impacts of climate change through mitigation and especially adaptation measures, as Malawi continues to explore further grow its agriculture and food security sector.

Entry Points for the Project

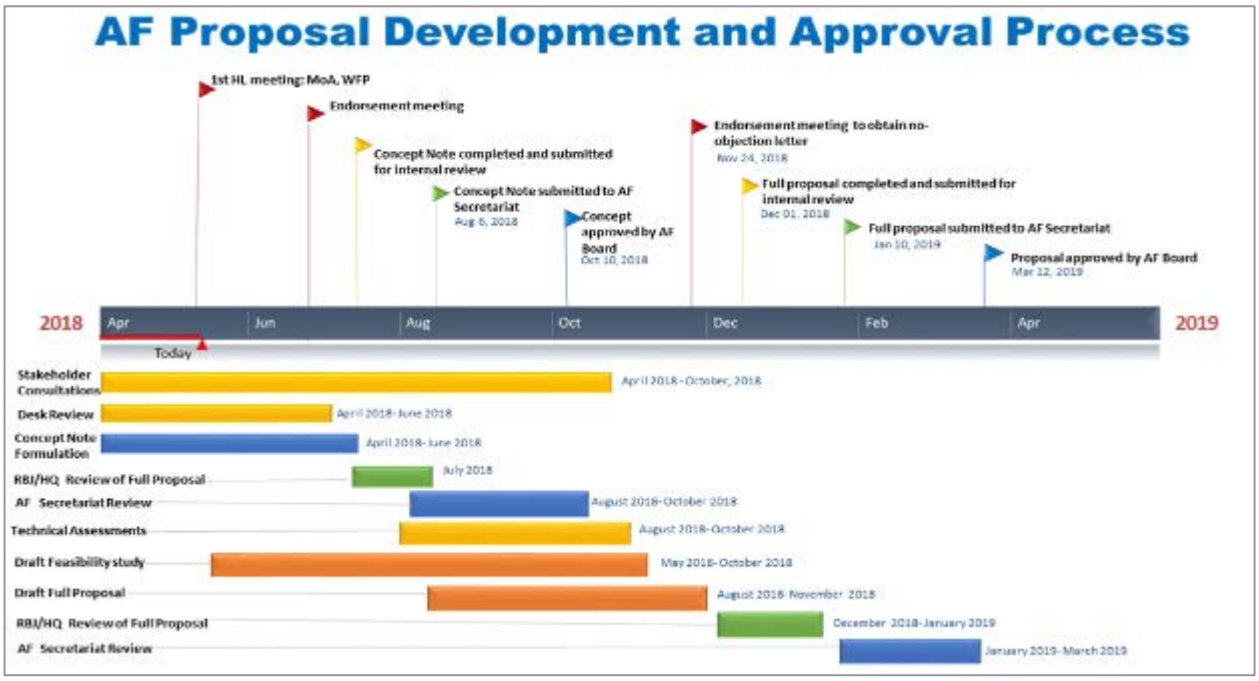
The entry points for the project were presented with reference to the discussion paper shared during the workshop. It was noted that insurance, as a mechanism to support climate risk management in agriculture, especially for vulnerable smallholder farmers, has not been utilized to its full potential. There is also a recognition that insurance alone cannot address all the challenges that smallholder farmers face due to the changing climate. Therefore, it is important to explore the provision of insurance as part of an integrated package of support. The proposed integrated package of support has three pillars, specifically: 1. Insurance as a protection for smallholder agriculture, 2. Complementary risk management approaches, and 3. Market Access for smallholder farmers. While the first pillar acts as the top layer of protection to large-scale shocks that often exceed individual coping capacities, the second pillar acts as the second layer of protection by promoting individual risk management strategies to shocks and other challenges faced by farmers, and lastly pillar 3 is the third layer of protection which supports sales by smallholder farmers, making their production not only climate resilient but also economically viable. The joint project offers the opportunity to embed this approach into national systems and institutions, including the private sector, to help scale up the initiative and ensure sustainability.

Workplan for Proposal Development

The work plan for the proposal development was presented. The process is split into two. The first part is focused on the concept note development. The second part is focused on the project proposal development. While the latter has more details on the implementation arrangements, the former has more details on the

context for implementation, setting the foundation for the project. The concept note, with the accompanying context assessments, is due for submission to the AF by August 2018. If the project concept note is endorsed by the AF Board, a full proposal will be developed and submitted in January 2019. The chart below shows the actions needed to reach these two milestones.

Throughout the process, national and subnational consultations will take place. In addition, to ensure a participatory and country-owned process, a technical task force with representation form the relevant line ministries is proposed to feed into the concept note and proposal development throughout. While the MoAIWD will lead the task force, with support from WFP, representation from the Department of Disaster and Management Affairs (DODMA), Department of Economic Development and Planning (EPD), Department of Climate Change and Meteorological Services (DCCMS), and the Environmental Affairs Department (EAD). The Ministries of Local Government and Rural Development and Industry, Trade and Tourism will be encouraged to join and support the task force through the nominated departments.



Feedback from Stakeholders

The feedback from the participating stakeholders is summarized below per themes to inform and guide the process. Overall, national stakeholders welcomed the initiative and contributed significantly to the definition of the project scope, outlining as well where complementary initiatives/policies could be leveraged.

Project Scope

Irrigation

- While irrigation is a key priority, irrigation alone cannot solve all the issues around water for production. Other solutions such as the regeneration of ecosystems through the watershed approach are also important to promote.
- Irrigation opens the potential to produce different crops and this should be pursued to encourage crop diversification, which supports both adaptation, but also better food and nutritional outcomes.

Crop diversification & improved agricultural practices

- UNDP supports irrigation and applies a conditionality to beneficiaries that they need to diversify their production. This could be a good model to reproduce.

- Fall Army Worm (FAW) severely affected production this year and seems to remain a concern going forward. In addition, FAW has shown a preference for maize, further indicating that crop diversification is needed.
- Improvements in agricultural practices should be pursued. Through these efforts, effective local knowledge and best practices should be supported. In this vain, information and practices shared should be localized to the extent possible to ensure adoption.

Access to inputs & microfinance

- In addition to irrigation, access to inputs may be something to pursue, including seeds and fertilizer.
- Microfinance is seen as a tool to support investments for adaptation and resilience, which expands access to a variety of services from which farmers can draw on that are linked to the insurance.

Market Access

- Insurance can unlock market opportunities. The 2006 weather index insurance pilot made seeds available through credit that was supported by the insurance. However, it failed to guarantee a market for farmers, undermining the project efforts. The AF project should pursue insurance linked to credit, but should also ensure the market outlet for the production achieved.

Information

- Access to information is a key obstacle for farmers. This limits their decision-making and practices. Information should be promoted across areas.
- Information may come from different channels but a common channel is often the extension officers. However, extension officer coverage and reach is limited. So, they should be targeted by the project.

Governance & local structures

- District structures and capacities are at the core of successful project delivery. As such, the new district structures should be supported and promoted by all project to ensure alignment to the context and ongoing efforts.
- Participatory approaches and information sharing are the key to ensuring the local ownership and sustainability of the initiative. As such, they should be prioritized by the project.

Learning & evidence generation

- Metrics from the integrated approach should be pursued with a rigorous monitoring approach.
- The project should aim to pick up the lessons learned and expertise fostered under other insurance initiatives trialed in the country, including ARC.
- For the project development, it was noted that sustainability measures should be considered from the start, borrowing from the lessons learned and experiences of others.

Alignment

- Reserve Bank will be launching an initiative on inclusive insurance and they look forward to this project supporting those efforts.
- It was noted that besides inclusive insurance, this project could foster collaborations with the reserve bank by also promoting inclusive microfinance (e.g. VSL, credit, etc.).
- On national policy alignment, the National Climate Change Investment Plan should be considered, as well as the National Adaptation Program of Action (NAPA) and working National Adaptation Plan.
- Support from the Green Climate Fund (GCF) has been sought to finalize the NAP. Country efforts on the GCF have also focused on getting a National Accredited Entity. This project and efforts by WFP should be complementary to this.
- The National Agricultural Investment Plan (NAIP) should guide the formulation of the proposal, as it frames the priority areas of work for the MoAIWD.
- Key priorities under the agriculture sector focused on adaptation include the promotion of climate smart agriculture among the most vulnerable farmers which needs to be supported by climate services.
- Given how little climate finance is leveraged for the country in comparison to the great need, this initiative is welcomed. However, to effectively complement ongoing efforts alignment is encouraged to existing initiatives. As an example, the GCF project M-CLIMES is supporting climate services through the use of ICTs for dissemination as well as the data systems for the generation of the information.

- As a point for clarification it was noted that the NAIP replaces the ASWAP, which phased out last year. The NAIP has four pillars on institutional development, resilient smallholder farmers, production and productivity (infrastructure), as well as market access.
- The NAIP and the Climate Change Investment Plan should move together.
- In relation to localized information, DCCMS is producing downscaled seasonal forecast at the district level, with attempts to go down to the TA level.
- UNDP is supporting these efforts by extending the network of Automated Weather Stations. UNDP is also supporting the digitizing of weather data as far back as 1903. In addition, with DoDMA a national assessment of community-based early warning systems has been commissioned to help generate national guidelines.
- In terms of financing for climate change, EPD also stressed the importance of setting up a multi-donor trust fund.

Proposal Development Process

- The AF had previously closed application stream for MIEs, due to limitations in funds, since the Paris Agreement, the AF has been replenished, opening the opportunity for MIEs to apply. This does not negatively impact submissions by national entities.
- Another notable change to the AF is the openness of the Fund to supporting insurance schemes. In this context, the Malawi submission would be breaking new ground.
- Beyond the 10 million USD being sought, the MIE and EE are encouraged to leverage own resources to optimize the impact of the project. WFP noted in response that over 700,000 beneficiaries across 10 districts receive resilience support either through a combination of watershed management, insurance, saving, credit, and climate services, which will be leveraged both in terms of expertise and resources for this project.
- As part of the national validation process, the concept note and project proposal ought to be presented to the National technical committee and project setting committee.
- Duration of the project may not be long enough to realize long term changes. In this context, it was noted that the project should be conceived as an initial phase, which could be followed up by subsequent initiatives to further expand on the outcomes that can be achieved in five years.

Next Steps

The technical task force will be formed and convened to review and take on board the feedback gathered through the National Consultation Workshop. The terms of reference of the group, work plan, and constitution will be defined, including mechanisms to communicate with broader stakeholders. As needed, bilateral meetings will be sought to seek further guidance from specific entities. Lastly, as there was general endorsement of the project, the MIE, EI, and NDA will commence work as per the work plan presented, aiming to submit the concept note by August 2018. National validation processes will be observed throughout the process.

Workshop Materials

Video

Workshop Participants

Name	Organization
Mr. Peter Simbani	Department of Economic Planning and Development
Mr. Harry Mwamlima	Department of Economic Planning and Development – Poverty Reduction & Social Protection
Mr. Hermes Mauwa	Ministry of Agriculture, Irrigation and Water Development
Mr. Samuel Khosa	
Mr. Jolamu Nkhokwe	Department of Climate Change and Meteorological Services
Mr. Adams Chavula	
Mr. Charles Vanya	
Dr. Grace Kumchulesi	International Food Policy Research Institute (IFPRI)
Mr. George Phiri	Food and Agriculture Organization
Mr. Andrew Spezowka	United Nations Development Programme
Mr. Benoit Thiry	United Nations World Food Programme
Mr. Hussein Madih	
Mr. Duncan Ndhovu	
Ms. Daniela Cuellar	
Ms. Shirin Merola	
Mr. Daniel Osgood	University of Columbia - IRI
Mr. Remi Cousin	
Ms. Bristol Powell	
Ms. Yohana Tesfamariam Tekeste	
Mr. Martin Magomero	Reserve Bank of Malawi
Mr. Alfred Kambwiri	Civil Society Agriculture Network
Mr. Evans Njewa	Environmental Affairs Department
Mr. Owens Chipite	Department of Disaster Management Affairs

Joint Scoping Mission on Integration

February 5 – 9, 2018 | Zomba & Balaka

1. Introduction

With the objective of assessing partners' and participants' capacity to promote the integration among Climate Resilience and Smallholder Market Access Support activities, the mission team visited the districts Balaka and Zomba. This was intended to inform the development of different models for integration. Accordingly, the report presents the entry points for undertaking these activities, while also making recommendations on the possible way forward and next steps.

2. Zomba Participants

Climate Resilience activities to leverage are currently in Traditional Authority (TA) Ngwelero, across the Group Village Headmen (GVH) of Namalima, Ngwelero, Taulo, Dimusa, Namakhuwa, and Chimbalanga. Smallholder Market Access Support (SAMS) activities instead have entry points through the identified Farmer Organizations (FOs) Mwandama and Namangale in TA Mulumbe and Chikowi, respectively. The mission team met with representatives of both initiatives. This section highlights their existing agricultural practices, constraints, engagement with WFP operations, and requests for additional support. For Climate Resilience participants, most have been on Food Assistance for Assets (FFA) activities since 2015, receiving Climate Services (CS) shortly after in 2016. Insurance and savings came in during the 2017/18 season. The FOs have been under Smallholder Market Access Support activities since 2009 and 2013 for Mwandama and Namangale, respectively. In this context, they have made a lot of progress in some areas, while leaving room for improvements in other areas, especially after the multiple shock years experienced in 2015, 2016, and now with prolonged dry spells in 2017/18.

Ngwelereo Farmers

Most are smallholder farmers working on 1 acre or less to grow primarily maize for household consumption. They practice rain-fed agriculture making their production particularly susceptible to weather related shocks. Production is also limited by a lack of access to inputs, including seeds, fertilizer, and pesticides. Farmer Input Subsidy Programme (FISP) coupons are present in the areas, but their impact is marginal as the coupons are few and then shared among many. This has resulted in a low input-low output system that can barely sustain the growing population. The continued presence of the Fall Army Worm (FAW) is also a key constraint for which households have limited ways to cope with the impacts. Thus, already stained harvests (due to dry spells) are suffering even more, extending the period for which people go hungry (referring to the lean season).

Given the dry spells experienced and the impact of the FAW, this season has been particularly challenging, despite last year being a bumper harvest. Most have run out of stocks by the time they planted in November, with the first rains. However, as the next rains only occurred again late in December and late January, those who planted early have dry crops on their fields. Those who planted later, still have some green crops in their fields. With that and rainfall again in early February, many have sought to replant their crops. Some have replanted up to three times, with each rainfall. Alternative crops are now being grown as it becomes later in the season and the rains become increasingly spread out, such as sun flowers and sweet potatoes. By March and April, they hope to harvest their maize, most expect only one bag of 50 kg. This is a poor harvest comparable to 1991 (based on farmer feedback).

Land and soil conservation practices promoted by WFP have been widely adopted to overcome the dry spells. This includes compost making, swales, trenches, box ridges, the planting of trees and permanent coverage. For the FAW, they have been applying pesticides (though these are limited and not applicable to everyone), fish soup, diluted detergent, and manually killing the worms. Regarding the lack of inputs, they have been sharing coupons and applying organic inputs, as noted above, in addition they have been re-buying and re-planting seeds through agro-dealers.

Support from WFP that has been notable during this period includes the backyard gardens, water and soil conservation practices promoted, VSL groups helping them invest in their production. The use of cash as a transfer modality was also welcomed as it offered households a means to meet their needs in a more flexible manner. Participants are hopeful that the insurance will be able to assist against the dry spells. Nutrition and WASH support also noted as important in helping households improve their health. Men and women used to do more work off their land to meet their needs, like travel to Mozambique or engage in transactional sex, but this is not the case anymore. This has had a positive impact in the wellbeing of households, less fragmentation, cases of Sexually Transmitted Diseases (STDs), and helps promote their livelihoods.

Additional support sought for enhanced access to inputs, credit, as well as better climate and market information. There is also room to further assist on the FAW situation. While households are thankful for the extension of the FFA period as they have faced the dry spells, they hope that the break is foregone and that transfers are sustained. In some cases, some even argued that the transfer levels had to be increased and more people included in the program to assist with the greater need.

Namangale FO

The mission team discovered that around 80 percent of the representatives of FO Namangale were also Climate Resilience participants. Accordingly, they practiced similar types of agriculture, faced similar challenges, and adopted many of the same coping mechanisms (as those in Ngwelero). They depend on rain-fed, smallholder agriculture, with a lack of access to inputs, which has been markedly affected by dry spells and FAW. However, these households did not have access to saving, insurance, or climate services. They were also different from those in TA Ngwelero because they receive food transfers, rather than cash.

This meant that they experienced similar, or even heightened levels of vulnerability, with less mechanisms to cope with the shocks.

As an FO, those in Namangale, kept a good grain bank with 405 bags of 50 kg in their store. They had secured certification and had even sold to WFP in the past. Production levels are good despite the challenges. It was noted that in a good year each household could realize 40 bags of 50 kg. In the past, they could even manage 15 bags, when their production was strained. The low levels they expect from this year are unique to the severe situation. While constrained, there is evident potential to engage the FO in market access activities.

Challenges of the FO and its operations were noted. These included a decrease in membership since many were unable to meet the conditions set by the cooperative. Those that dropped out of the cooperative were also expecting additional support from FAO, as the grain bank was originally opened and supported by the agency, but that did not materialize. Besides decreasing membership, they have experienced a decrease in buyers. Oftentimes they end up selling to vendors for low prices (compared to WFP prices). They sell a bag of 50 kg for 6,000 MK. When they fail to find a buyer, they will often borrow to each other, expecting compensation upon the harvest season, which is a good safety net, but can compromise the health of the bank.

In this context, the FO members welcomed a greater integration across the programs. They welcomed saving, credit, insurance, climate services, and market information. In addition, they would like better business training and support to better manage the cooperative. On VSL, some were involved in community ran groups, but they said these operated poorly and hence participation in these groups was low. On credit, few had access to these, while those that did noted that they used it for business development. Credit seems to be expensive and not fitting (little inputs provided) with their needs, keeping their uptake low. While only one farmer had heard about insurance, when this was explained further, many saw the benefit of this mechanism and looked favorably to its introduction. On climate services, many noted receiving SMS, participating in listening groups, and being given information during community meetings. However, there was no structure, and thus, the impacts of the intervention seemed to be diluted. Lastly, they specifically requested a borehole to cope with issues related to lack of access to water. They noted having only one borehole at present.

Mwandama FO

The FO is a full-fledged business enterprise and functioning union of cooperatives buying, aggregating, and selling crops, thereby, maintaining a healthy income stream, which they partially invest to further grow their capacity as a business and as individual farmers. They started as a farmer club in 2006, then in 2009 they sold to WFP, at which point they decided to grow themselves into a business. They became registered and transitioned away from being only a grain bank. While the focus on the traditional staple crops, like maize, pigeon peas, and soya beans, they also venture into more remunerative crops like groundnuts, tobacco, and even poultry farming. Mwandama offers storage services for farmers within and outside the cooperatives, offering also a warehouse receipt system. This includes transport support for the farmers. They have invested in offices, staff, a maize mill, tractors, fields for extra production, and a store, which they make use of and others can have access to at a fee. Mwandama has a revolving fund that supports VSL groups within and outside the cooperative.

Despite all the positive attributes of the FO they do experience constraints. They have noted that the fertility of the soil has been diminishing and they request assistance in making this better, especially as extension support in the area is limited. As the fertility diminishes, they have required additional inputs, especially fertilizers. Getting access to these at affordable prices has been a challenge. They also expressed that the fertilizers only go so far when there are weather-related shocks that undermine the growth of the crops. As such, climate change is a key concern for them. When you factor in all of this, the big investments and possible low returns, their gains are compromised, especially as it can often be hard to find a reliable buyer for their produce.

Assistance requested was in line with the constraints noted. They wanted greater technical skills to optimize their production and their business potential. This includes greater agricultural extension support, business management trainings, VSL support, as well as climate services and insurance. Notably, for the insurance, they showed a real willingness to pay for the premium of the insurance when the mechanism was explained to them. For inputs, it was unclear the type of support needed, as they work through the union to access input and they seem to have streams of credit coming in, including MEDF and One Acre Fund (with a preference for the former). However, they are clearly interested in getting better guidance on the best inputs to use, seeds, fertilizers, pesticides, etc.

Mwandama not only offers a platform to channel the integrated approach to that cooperative, but to extend cooperative support to others which WFP supports. This could be strategic for WFP to leverage. Mwandama has a membership of 770 farmers under five cooperatives and are looking to grow this further. They welcome cooperatives from across the district, even Machinga, which has recently led to the inclusion of farmers from Ngwelero. They charge an entry fee and a share fee which varies across the 8 sectors to which the new cooperatives are allocated. These range from 600 Malawi Kwacha (MK) to 1000 MK for the entry fee (between 0.85 and 1.35 USD) and 5,000 MK to 10,000 MK for the shares (between 6 and 13 USD). In addition, there are commitments to give 10 bags of 50 kg from their production. As WFP increases the productivity of its farmers making this sort of links will be critical for sustained improvements, even when WFP phases out.

3. Balaka Participants

Climate Resilience Participants

Households visited in Balaka were among the first to join the climate resilience initiative. They are the most advanced in terms of resilience and food security gains. This is evidenced by the monitoring data, but also through interaction had with them. The assets they have developed have been well established and consolidated across the years, their agricultural practices improved, and their knowledge of risk management approaches is advanced. This is where the integration across activities is most evident. These households have been fortunate this year to have planted early and had good rains, despite the dry spells experienced, so they have a better outlook at the end of the season. They have also diversified their production, focusing more on drought tolerant crops, which made them less vulnerable. FAW was the major concern, but they also had a number of strategies to try overcome this. They received pesticides from the government, bought their own, applied ash and other organic substances that seemed effective. However, the issue was that they did not have the right quantities.

Interventions by WFP most appreciated by participants included the land and water conservation practices, which were key this year, as well as the climate services and the insurance. Savings and backyard gardens were also noteworthy, as they function as a safety net for the household, strengthening production. They requested support to get connected to markets, learn more about marketing, get access to market information, and to strengthen the associations present in the area. In Mtumbwe, households were part of an association and had previously engaged with NASFAM. However, they did not have any sense of ownership and belonging to the FO, including a lack of understanding of how the structures work. They also noted that these were unreliable market outlet sources. In Zalengera, households had not been part of NASFAM or other associations, but under an initiative by United Purpose (NGO) they were being encouraged to do so. This was very promising based on the integration plans of WFP.

Discussions with the participants focused on production, since there was a big focus on market access and support. Most have 1 or 2 acres where they grow maize, pigeon peas, ground nuts, and sweet potatoes. In a good year, they noted harvesting 30 bags, 20 bags, and 100 bags of maize, pigeon peas, and groundnuts, respectively (50 kg bags). Such a harvest lasts about 9/10 months, since most is consumed and partially sold (farmers may also be underestimating to guarantee their participation in FFA). Harvest drops sharply in the case of bad years, specifically to 5 bags of maize and 2 of pigeon peas, with stocks lasting up to 5 months. The fact that many are realizing such high production levels and that they are beginning to get organized shows that they are transitioning to farming as a business. Therefore, the integration approach is very fitting. This is the district with the highest potential for Smallholder Market Access Support.

4. Way Forward

The following models are proposed to take forward the integrated approach:

- **Model 1: Resilience and Productive Support**
    - This refers to districts where there is FFA only.
    - It entails promoting resilience through improved environmental and productive capacity through asset creation.
    - It offers the avenue to introduce some of the following strategies from climate resilience and market access support: climate services, post-harvest management skills and technologies, as well as village saving and loans, along with financial literacy and business skills.
    - The package of support is tailored for households with limited production and poor food and income security, who need support to develop viable livelihood strategies.
    - Possible districts for implementation: Chikwawa, Nsanje, Karonga, Dedza, and Machinga
- **Model 2: Resilience and Risk Management with Market Access Support**
    - This refers to districts/TAs where there are climate resilience activities with FFA.
    - In entails promoting market opportunities to households benefiting from resilience building activities, as their productivity increases.

- It offers the avenue to introduce the following:
    - Production support, including land and water conservation techniques.
    - Insurance for protecting the investments made in agriculture.
    - Saving for building buffers to idiosyncratic shocks and stores for productive investments.
    - Input loans tailored to the needs and capacities of participants through partner MFI.
    - Climate services that inform the adaption of livelihood practices according to the changing climate.
    - Promotion of FO formation/subscription through adapted trainings and market information.
- The package of support is tailored for households with stabilized food and income security, who need livelihood support, turning them from subsistence to surplus farmers.
- Possible districts for implementation: Balaka, Zomba, Blantyre, Mangochi, and Phalombe

- **Model 3: Market Access Support with Risk Management**
    - This refers to districts/TAs where there are smallholder market access support activities.
    - It entailed promoting risk management strategies in market access programs to help them better cope with shocks.
    - It offers the avenues to introduce the following activities in addition to SAMS activities:
        - Improved saving structures through promotion and support VSL
        - Insurance against shocks through the weather index insurance product
        - Input loans that are suitable to the farmer needs and capacities
        - Climate services to help adapt their practices to a changing climate.
        - Support on soil and water conservation
    - The package of support is tailored to households that are surplus producing, with good food and income security, engaged in FOs/cooperatives. This is intended to help them maintain their levels of wellbeing in the face of changing climate.
    - Possible districts for implementation: Zomba, Blantyre, Mangochi, and Phalombe.

Joint Scoping Mission on Integration

July 9-10, 2018 | Zomba

5. Introduction

In February 2018, a mission was conducted to assess the context for the integration of climate resilience and market access initiatives in Zomba. The assessment looked at partners' and participants' capacity to promote integration across activities, such as insurance, saving, credit, asset creation, and market access support. Entry points were identified for the integration, with a focus on Farmer Organizations (FOs) Namangale and Mwandama. This follow up mission was intended to revisit these FOs to refine plans for integration of the activities. The report provides insights into the discussions held and agreements reached for integration. There is a section of the report for each FO and the proposed way forward there.

6. FO Mwandama

Stemming from the mission in February the FO had shown great interest in the weather index insurance product as well as climate services. This comes from a realization that climate change is having a big impact on their productivity. It was also discussed in February that given the advanced nature of the FO, its activities, and membership, that the FO would be able to access the insurance through cash payment, rather than through labor, like in Traditional Authority (TA) Ngwelero. Therefore, a great focus of this follow up visit was to revisit their willingness to pay and based on this how the insurance could be extended to the farmers. The mission team wanted to revisit this especially in the context of the poor seasonal outcomes experienced.

The FO harvest was severely affected by dry spells and fall army worm (FAW) infestation. Many in the FO planted in December, meaning that the dry spells in January greatly affected their crops. The severity of the dry spells varied across locations, but generally all were affected. While the impacts of the dry spells were bound to the December-January period, the impacts of the FAW have been longer felt. Some cite still having issues to-date, as they are doing irrigation farming. As a result, when farmers could usually get 10 to 15 bags of maize (50 kg each), this year most have only harvested 1 to 2 bags. By failing to produce a surplus, the production has been exclusively used for own consumption. Most cited that the amount harvested could only last 1 to 2 months, and thus, what was harvested in April, has already been consumed. As an alternative, people are doing irrigation farming and adopting water harvesting techniques (many promoted by WFP and partners in the nearby areas) to make sure they are better prepared for the upcoming season. Some try to access hybrid seeds to also combat the challenges, but many cite lack of access given the high costs. Most recycle seeds, or try to get them through FISP. Overall, there is a marked shift in the state of the FO, with the last season affecting them greatly. It has become evidently clear that while they can achieve great gains one year, the next they could fall back to great levels of vulnerability, thereby, requiring climate risk management strategies and tailor made business assistance to revitalize the membership, and facilitate access to appropriate inputs.

Despite the poor harvest, when asked if they were interested in marketing opportunities through WFP-supported procurement, the FO reacted positively. Should WFP be in the position to procure from them, like the previous year, they would be able to offer about 80 mt of maize and 60 mt of pigeon peas. The pigeon peas are a combination of this year's and last year's harvest, the latter accounting for about 2 mt. The FO would start to collect their harvest this week, meaning that they will be able to confirm the quantities they can provide shortly and be ready within the next month to sell to WFP, should WFP be ready for this.

Given the context, there is a great demand for weather index insurance and climate services among the FO members. Following the explanation of how the insurance worked in TA Ngwelero the past season, when asked who was interested in the insurance at a price of 13,510 MK (18 USD) per person (using last year's premium as a reference), 12 out of 17 members[57] said they were interested. When it was clarified that they could express their interest now and pay in October, all members present said they were interested and able

[57] 17 FO representatives present, including 8 women and 9 men.

to make the payment. The FO members asked to prioritize 4 Group Village Headmen (GVHs)[58] in TA Mulumbe for the insurance, specifically: Issa, Sigamo, Tambala, and Stima[59]. The FO agreed to use the Union structure, specifically its executive members, to organize the collection of the premium payment in October, as well as the payout handling process, as needed. In essence, it was agreed that the Union would be the aggregator and policy holder. Given the certification and capacities that the Union has, including its own revolving fund, there are no foreseeable objections to the Union being the policy holder. It is actually welcomed as a sustainable mechanism to also be considered for other FOs that could join the Union. The FO requested the inclusion of non-cooperative farmers in the identified GVHs to be included in the for-payment, insurance scheme. It was agreed that since the Union will be the policy holder, it is best for those to be insured through the Union should be members of the cooperatives. In this context, there is an opportunity to add more farmers to the FO and the Union through the insurance scheme. For those getting the insurance, their phone numbers will also be recorded to enroll them in climate services. In addition, by knowing their GVHs, WFP can support the link to extension officers who have been trained to deliver climate services. In addition, WFP can explore the distribution of radios in these locations, seeing as 500 new units have just been procured.

The following are questions that the FO members asked about the insurance, showing their deep reflection and consideration for the product (answers also noted):

- Is it like a car, must it be paid every year?
    - Yes, the premium is paid on a yearly basis for the season and type of protection being sought.
- How does the premium level change?
    - The premium changes primarily as the sums insured changes. The more you insure, the more it will cost. At present, WFP fixes the sums insured, thereby, fixing also the premium. Once households show their interest and capacity to pay for more, different sums insured and premium levels can be explored.
- How does the payout level vary?
    - The payout is made based on the severity of the impact experienced. The larger the shock, the larger the payout. In the context of WII, the more the rainfall levels deviate from the index the larger the payout.
- How are variations across GVHs managed?
    - Previously, a single GVH, and even a number of GVHs, were clustered under a pixel. The index would be defined per pixel, meaning that many indexes would be active with different terms across similar locations. As such, the initiative has moved towards zonal indexes to smoothen out differences across similar locations.
- If you don't get a payout, do you get your premium back?
    - No, the premium isn't returned if there is no payout. The insurance company pools these resources, so that when there is a large shock, they can make the payouts.
- What if someone really wants the insurance, but fails to pay the whole premium amount?
    - Unfortunately, WFP is not in the position to cover the costs for farmers. So, farmers are encouraged to find ways to pay for it on their own. In particular, farmers are sought to leverage the cooperative structure and resources to make sure they raise the finances for the premium. For example, farmers can save through the VSL groups, and accrue interests that way, that enable them to buy the insurance. It was stressed that without the payment, no insurance will be issued.

[58] The FO members are a total of 7,000 farmers across 8 cooperatives and 5 GVHs, including Issa, Nkhanda, Sigamo, Tambala, and Stima.
[59] WFP's Food Assistance for Assets (FFA) programme is present in 3 of the 4 prioritized GVHs, excluding Stima.

7. FO Namangale

In February, when the FO was visited, it was determined that given their high vulnerability and low productivity, the FO membership was not in a position to pay for the insurance with cash. As such, the for-work modality was deemed most appropriate. This is supported by the presence of FFA activities in the same TA, namely Chikowi. As such, the focus of this visit was to map out the FO membership against the FFA caseload, and thus, identify who could be supported through the for-work scheme. Once again, it was important to explore the options based on the poor seasonal outcomes realized last season, requiring some discussions on how people fared and coped with the shocks experienced.

Adverse weather events and incidence of pests severely undermined production. Most planted in November and were affected by dry spells in January and February. The dry conditions were made worse by the application of fertilizers by some. When the rains came in February, minor hailstorms took place damaging further the stressed crops. Damage was also driven by a variety of pests, including FAW, but not only. Red ants and other pests affected the ground nuts and millet. In total, they planted 4 different crops, namely: maize, pigeon peas, millet, and soy beans. If the pests did not affect the crops, the dry conditions did. So, overall, they had poor production. Estimates are that they each got about 1 maize bag of 50 kgs, 1-2 bags of pigeon peas, full destruction of groundnuts, 2.5 bags of millet, and 4-8 kgs of soy beans[60]. Notably, the maize stock has already been depleted for own consumption and households are resorting to using dry maize from previous years. Another coping strategy is river bank production of vegetables which are sold to

[60] These crops, with the exception of ground nuts, are grown in the same plots, which range from 0.1, 0.2., 0.4, and 1 acre.

buy maize. Their capacities to sell the other crops are highly constrained, perhaps pigeon peas, millet, and maize[61] could be considered for purchase. Overall, their food security and livelihoods are stressed.

There is a strong interest in the insurance. Having explained the experience in TA Ngwelero, farmers were interested in working for the insurance. It was noted that working for the insurance is only possible if the farmers are part of the FFA. Then, it became apparent that out of 120 members[62], only 18 were in FFA. So, the for-work scheme would not be fitting for them. The cash payment option had to be explored. They suggested using dividends from the cooperative earnings to pay for the premium[63]. However, based on discussions on how much they get in dividends, it became clear that it would not be enough for the premium[64]. In addition, not all farmers get dividends, because they only receive such payments if they contributed to the capital funding, which not all do. Complementary capital sources are needed. Group savings through VSL[65] structures were explored as a complementary measure. The discussion also focused on minimizing the sums insured to reduce the premium costs. However, this was not well received by the farmers, since the payout amount would also be smaller. The farmers paid 10,000 MWK to join the FO and are confident that they can have 13,510 MWK to pay for the premium. The FO will make a list of all farmers interested in the insurance, and receiving climate services via SMS, and will submit for consideration. The FO stressed that in order to increase their capacities in the interim support is sought for VSL, credit access[66], business planning, and post-harvest loss management[67].

[61] if they manage to buy for a low price and sell for a better one
[62] The 120 members are across the TA of Chikowi in Kabithiwa, Kazembe, and Mchalamilo GVHs. The majority are in the former 2 GVHs, where there is some FFA.
[63] They buy maize or vegetables for low prices and sell them marked up for the premium.
[64] Last year they pooled 500,000 MWK and made 878,390 MWK in profit from which 64,000 MWK was subtracted for the purchase of a scale.
[65] The FO has 3 VSL groups. They noted that the VSL group capacity is low, with many taking out loans and not being able to repay them. They suggest that the issue is that the group doesn't have the knowledge and techniques to manage the VSL activities. Support to this effect is sought.
[66] Specifically, they sought input loans, starter packs for livestock, and seed capital for the FO.
[67] Through P4P, they got 40 PICs bags from GrainPro last year and can access through the market for 1,500 MKW each.

8. Conclusion

Both FOs despite of different capacities and sizes will pursue the cash payment option for accessing the insurance. They will also be added to the climate services component through the SMS, extension officer, and radio components. The caseload could be of over 5,000 farmers accessing the insurance through cash payment. To support this, the index must be designed, GPS coordinate locations collected, rain gauges installed, sensitization and registrations done, as well as plans for the collection of the payment. In addition, their capacities as FOs should be strengthened to support their capacity to pay for the insurance this year and in the future. This support is ought to be focused on business planning, which can be supported with VSL, credit, and post-harvest loss management activities. World Vision International is a good partner for the insurance component and VSL. They have also shown commitment to support the FOs, accordingly. AFAP has been identified for the business plan training. The partnership with NASFAM will also be leveraged, benefiting both Climate Resilience and Smallholder Market Access Support farmers. As such, the mission is confident that the support can be provided, as outlined above.

MINUTES FROM THE NATIONAL VALIDATION WORKSHOP ON THE ADAPTATION FUND AUGUST 1, 2018, IN LILONGWE'S BICC

Introduction

The National Validation Workshop on the Adaptation Fund held on August 1, 2018, in Lilongwe, was convened by the Acting Chief Director for Economic Planning and Development, Mr. Peter Simbani, as the National Designated Authority to the Adaptation Fund (AF), in conjunction with the WFP Resident Representative, Mr. Benoit Thiry. The purpose of workshop was to present the project concept note for feedback and endorsement prior to submission to the AF Board on August 6th, 2018. The minutes note the feedback from stakeholders that led to the validation of the project concept note.

Feedback from Stakeholders

The feedback from the participating stakeholders is summarized below. Overall, national stakeholders welcomed the project concept note. Notable positive feedback was received on the participatory approach that was followed, the detail and depth achieved in the project concept note, and the suitability to the national context and priorities.

- The focus on three districts is welcomed to focus the activities and consolidate the impact and learnings from the project, before scaling it up.
- Across a number of policies, including the Malawi National Social Support Programme (MNSSP II) and the National Resilience Strategy (NRS), there is a focus on integrated watershed management. This has led significant efforts on the implementation of this approach across a number of districts. This is particularly an approach being mainstreamed across district councils. As such, the project is recommended to align to this in its design and implementation.
- The irrigation component of the water and soil conservation activities under Component 2 should be focused on community structures and assets, especially if priority is going to be given to the integrated watershed management approach. This is in recognition of work by other on irrigation infrastructure.
- When proceeding with planning, the project team should be mindful that as water access is enhanced for production, undoubtedly households will also want support to access water resources for consumption. So, a strategy should be developed for this with a focus on minimizing risks of using unsafe water for drinking or cooking purposes.
- Diversification away from maize is welcomed and this should come out more strongly. Though there is a recognition that maize in diets will likely need to be complemented, rather than eliminated.
- Collaboration with the Insurance Association of Malawi and the Reserve Bank was commended. In addition, the project team is encouraged to work with the Treasury in the Ministry of Finance going forward with the possible project proposal and implementation.
- The challenges currently faced by the government to collect commodity prices were noted and it was stressed that the project should seek to strengthen these efforts, rather than duplicate these.
- The integrated approach to water and soil management is welcomed. In addition, the recommendation was made to explore ways that this can be leveraged to support livelihood diversification. The example of fish ponds was presented, which was a viable water harvesting practice and offered an alternative income to its beneficiaries.

- It was stressed that district level plans need to be strengthened and prioritized to support district level coordination and coherence. This project was encouraged to adopt this approach and to work closely with district staff.
- Building on the above, it was noted that as part of adaptation that is truly transformative there is a need to work also with communities to do long term planning. As such, the project team was invited to reflect on how its participatory planning approaches help achieve this aim. Also, the project team was encouraged to align this community planning approach to the district plan.
- Graduation pathways as part of pillar 3 on resilience under the MNSSP II is a key priority. This sort of thinking within the project concept could be emphasized, especially in relation to the transitioning of farmers from subsistence to surplus-producing farmers.
- The project coordination structure and processes needs to be further fleshed out, especially as the project transitions form concept and potentially to a fully fledge proposal.

The comments received were very constructive. As the feedback was mainly positive and aiming to further enhance the project concept note, there was a general agreement that the project concept note could be endorsed in the context of the meeting, accordingly, the participants supported the validation of the project concept, under the understanding that the comments provided would be taken on board by the project team.

Next Steps

The feedback received will be taken on board by the Task Force. This means that it will be incorporated into the project concept note to the extent possible and applicable. Where this is not fitting, the recommendation may be further fleshed out in the context of the possible project proposal development phase. This latter approach applies more to the specific details of project activities, as further consultation at the district and community levels will be needed to further validate these recommendations. The comments that are to be incorporated will be included in the concept note. Submission to the AF Board will be done by August 6, 2018.

Workshop Participants

Name	Organization
Mr. Peter Simbani	Department of Economic Planning and Development
Mr. Harry Mwamlima Ms. Bessie Msusa Mr. Victor Mbamba	Department of Economic Planning and Development – Poverty Reduction & Social Protection
Mr. Alex Namaona Mr. Gilbert Kupunda	Ministry of Agriculture, Irrigation and Water Development
Mr. Ben Twinomugisha	United Nations Development Programme
Mr. Benoit Thiry	United Nations World Food Programme
Mr. Hussein Madih	
Ms. Daniela Cuellar	
Ms. Miki Fujiwara	
Mr. Martin Magomero	Reserve Bank of Malawi
Ms. Tryness Mankhwazi Ms. Hannah Siame	Environmental Affairs Department
Mr. Dalitso Chikoti	Department of Disaster Management Affairs
Mr. Godwin Nyirongo	Ministry of Industry, Trade, and Tourism
Mr. Zalimba Makawa	NICO General Insurance, Representing Insurance Association of Malawi

Gender and HIV and AIDS Mainstreaming Strategy for R4 Southern Africa

Background

In 2014, the World Food Programme with support from the Swiss Development Cooperation (SDC) expanded the R4 Rural Resilience Initiative (R4) to southern Africa, specifically Malawi and Zambia. R4 is a strategic partnership at the global level between WFP and Oxfam America (OA) that enables vulnerable rural households to increase their food and income security in contexts of increasing climate risks. The Initiative is built on an innovative model that combines four risk management strategies: disaster risk reduction, micro insurance, access to credit, and savings. The R4 Southern Africa Programme, from 2014-2021, aims to contribute to the resilience building of rural populations in the region by enabling adaptation to climate risk of most vulnerable people through a community oriented, risk management focused, and market-based approach. In the period 2014-2017, the pilot phase, the Southern Africa Programme aimed to reach this overarching goal by testing the R4 model in Malawi and Zambia, collecting lessons for further scale up and evaluating implementation approaches for different contexts.

To support the roll out of the Programme a Gender and HIV and AIDS Mainstreaming Strategy was developed in 2015. The objective of this Gender and HIV and AIDS Mainstreaming Strategy for Southern Africa is to ensure that gender, HIV and AIDS considerations are integrated into the R4 Southern Africa program's planning and implementation through practical, strategic and operational recommendations, in a manner that is consistent with programme objectives

The Strategy aims to:

- Provide a better understanding of the country and local contexts and the implications gender, HIV, and AIDS challenges have in the communities where R4 works;
- Review the current design and implementation of R4 activities in Malawi and Zambia to identify key considerations to ensure the equal inclusion of both genders and those affected by HIV and AIDS into the program;
- Provide practical, strategic, and operational recommendations to mainstream gender and HIV and AIDS considerations into R4 activities for the inclusion of vulnerable groups; and
- Serve as the basis for learning and sharing of best practices that will inform similar initiatives in the region, as well as global R4 activities.

Rationale

In Southern Africa, agriculture plays a critical role in sustaining rural livelihoods and food security. With the majority of rural populations relying on rain-fed agriculture for subsistence, climate change is expected to continue having a severe impact in the region. The risk deriving from increasingly variable and unpredictable climate-related events will also place a bigger burden on existing challenges such as high poverty rates in rural areas, food insecurity, but also other challenges such as gender inequality, and HIV and AIDS.

In Malawi and Zambia, women in rural areas suffer from widespread inequality, in large part related to unequal access to and control over agriculture production resources such as land, credit, extension services, farm implements and inputs. Similarly, populations living with HIV and AIDS are disadvantaged due to their restricted labor capacity, which compromises their productivity and resources. R4 has a role to play in addressing these existing challenges, including gender inequality and HIV and AIDS. R4 activities seeking to strengthen and improve the livelihoods of farmers in light of a changing climate can be tailored to engage these vulnerable populations and respond to their specific needs.

Application

The strategy has been used to inform the roll out of R4 activities in Malawi. The strategy provides 3 entry points to mainstream gender, HIV and AIDS, which include:

1. Minimize the use of negative coping strategies that exacerbate the well-being of vulnerable women, men, girls and boys through the promotion of resilience-building.
2. Promote and facilitate the financial inclusion and economic empowerment to expand opportunities for vulnerable individuals.
3. Strengthen capacities and awareness in support of resilient lives and livelihoods for all.

Making use of these 3 entry points, a menu of activity options and strategies for mainstreaming gender, HIV, and AIDS was developed. This menu has two objectives: i) Highlight how the activities already planned under R4 contribute to gender equality and to the inclusion of vulnerable groups; and ii) Provide the R4 country teams with a menu of potential additional activities to choose from that enhance the gender, HIV, and AIDS mainstreaming into their program. As such, the menu includes activities that are implemented by each country in the context of R4, as well as potential activities that could be included later if operational and financial capacity allows.

Next Steps

The proposed project seeks to build on the Gender and HIV and AIDS Mainstreaming Strategy for R4 Southern Africa. This has proven to be an effective planning and programming tool. In addition, based on the in-country, participatory research methodology, the strategy offers great insights into the context in Malawi, which is still relevant. To build on this, under the potential project, the idea is to conduct complementary assessments and develop supplementary strategies for mainstreaming gender, HIV, and AIDS. This will be in line with the current context, the different scope of work, and objectives of the proposed project.

The full strategy can be accessed here