CONCEPT NOTE PROPOSAL FOR SINGLE COUNTRY

PART I: PROJECT INFORMATION

Title of Project:	Smallholder Climate Resilience Project
Country:	MALAWI
Thematic Focal Area:	AGRICULTURE & RURAL DEVELOPMENT
Type of Implementing Entity:	Multilateral Implementing Entity
Implementing Entity:	IFAD
Executing Entities:	Ministry of Agriculture
Amount of Financing Requested:	10 million (in U.S Dollars Equivalent)

Project Formulation Grant Request (available to NIEs only): Yes ☐☐ No ☐ ☒

Amount of Requested financing for PFG: (in U.S Dollars Equivalent)

Letter of Endorsement (LOE) signed: Yes ☒ ☐ No ☐ ☐

NOTE: LOEs should be signed by the Designated Authority (DA). The signatory DA must be on file with the Adaptation Fund. To find the DA currently on file check this page: https://www.adaptation-fund.org/apply-funding/designated-authorities

Stage of Submission:
☐☐ This concept has been submitted before
☐☒ This is the first submission ever of the concept proposal
In case of a resubmission, please indicate the last submission date:

Click or tap to enter a date.

Please note that concept note documents should not exceed 50 pages, including annexes.

Project background and context:

1. **Country background:** Malawi is a landlocked country in south-eastern Africa, bordered by Zambia to the west, Mozambique to the southeast and Tanzania to the northeast. The country has a total area of 118,484 km^2, of which 79.4% is land and 21.6% is water. Malawi terrain is characterized by an elongated plateau, resulting in rolling plains, hills, and mountains. This terrain creates micro-climates, principally due to the variation in rainfall across locations, with the overarching climate described as sub-tropical and influenced by the Inter Tropical Convergence Zone (ITCZ) and El Niño Southern Oscillation (ENSO)[1] and highly dependent on rainfed agriculture.

2. **Economic context:** Malawi is ranked among the least developed countries globally based on the Human Development Index (HDI) comparative analysis across countries. Malawi's HDI value for 2019 was 0.483 rated as 174 out of 189 countries and territories (UNDP, 2020)[2]. With a total population of nearly 20 million[3], Malawi has Gross Domestic Product (GDP) per capita of $6454. The agriculture sector is a key contributor to the Malawian economy. The sector employs around 85% of the workforce, contributes 40% of GDP and 80% of its export earnings[5]. Crop production alone is estimated to account for 74% of all rural incomes6. Notwithstanding its economic importance, the sector faces several barriers to fulfil its potential, particularly from the induced phenomenon of climate change and variability.

3. **Social context**: Over 70% of the population lives below the international poverty line of $1.90/day, driven by abject poverty and recurrent climate related shocks[7]. The higher poverty levels entail limited livelihood opportunities with over 80% of people's livelihoods reliant on natural resources, which are climate sensitive sectors[8]. According to an IPC analysis, approximately 5.4 million people face moderate to severe chronic food insecurity, while an additional estimated 4.4 million, face mild food insecurity[9]. Gender inequalities impact on women's poverty due to low participation in economic activities and limited access to productive resources. The youth (age 15-35), who are most of the population, lack basic opportunities to enable them to develop to their full potential.

4. **Environment degradation**: Malawi's natural resource base provides opportunities to reduce rural poverty. However, Malawi faces one of the highest and widespread natural resources and land degradation due to deforestation and inappropriate land management and overgrazing. The annual soil loss from cropland is at 29 tons/ha and responsible for up to 0.5% per annum crop yield reduction [Government of Malawi (GoM) 2019][10]. In the last 10 years' land degradation has resulted in a 15% decrease in arable land[11]. With an estimated 96% of the total population using fuelwood for cooking in the form of firewood and charcoal, deforestation is high and a significant driver of biodiversity and ecosystem services loss.

5. **Increased climate change risks and impacts**: In addition to these challenges Malawi is impacted by climate change. The World Bank (2018)[12] has described Malawi as particularly prone and

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[1] *McSweeney C, New M, and Lizcano G (2010). Climate Change Country Profiles. http://www.un-gsp.org/sites/default/files/documents/malawi.oxford.report.pdf.*
[2] *UNDP (2020). Overview of Malawi Human Development Report.*
[3] *World Bank (2022) Open Data.. https://data.worldbank.org/indicator/SP.POP.TOTL?locations=MW*
[4] *Ibid*
[5] *IFAD (2022). Republic of Malawi, Country Strategic Opportunities Programme (2023 – 2030). https://www.ifad.org/en/-/malawi-country-strategic-opportunities-programme*
[6] *Chirwa EW, Kumwenda I, Jumbe C, Chilunda P, Minde I (2008). Agricultural Growth and Poverty Reduction in Malawi. Past Performance and Recent Trends. https://pdf.usaid.gov/pdf_docs/PNADS611.pdf*
[7] *FAO (2022). Malawi Chronic Food Insecurity Situation 2022 – 2026. https://www.ipcinfo.org/ipc-country-analysis/details-map/fr/c/1155612/?iso3=MWI#:~:text=AcuteMalnutrition&text=Chronic%20food%20insecurity%20in%20Malawi,reliance%20on%20weak%20livelihood%20strategies.*
[8] *National Statistical Office (2020). The Firth Integrated Household Survey. Zomba, Malawi. http://www.nsomalawi.mw/index.php?option=com_content&view=article&id=230&Itemid=111.*
[9] *FAO (2022). Malawi: Chronic Food Insecurity Situation 2022 – 2026. https://www.ipcinfo.org/ipc-country-analysis/details-map/fr/c/1155612/?iso3=MWI#:~:text=AcuteMalnutrition&text=Chronic%20food%20insecurity%20in%20Malawi,reliance%20on%20weak%20livelihood%20strategies*
[10] *GoM (2019). Synthesizing Agricultural Research Findings in Malawi. Final Report. Department of Agricultural Research Services. Lilongwe, Malawi.*
[11] *Ibid*
[12] *World Bank (2018). Climate Change Management Portal for Development Practitioners and Policy Makers. https://climateknowledgeportal.worldbank.org/country/malawi/extremes*

exposed to adverse climate hazards including dry spells, seasonal droughts, intense rainfall, ravine and flash floods. Since January 2022, three cyclones (cyclone Ana in January 2022, cyclone Gombe in March 2022, cyclone Freddy in March 2023) have hit Malawi with devastating impacts. For instance with cyclone Anna destroyed more than 220,000 farmers' fields in nearly 179,000 hectares of crop fields.

6. **Brief description of the intervention to address the challenges**: Overall, the Smallholder Climate Resilient Project (SCRP) is designed based on emerging needs, current economic, social, environmental barriers, climatic risks, previous lessons, best practices and knowledge to address the identified barriers. The SCRP aims to address some of the strategic causes of climate vulnerability that have hitherto hampered the growth of the Malawian agriculture sector including but not limited to: i) land degradation resulting to low soil fertility, ii) limited access to climate smart technologies and improved farm inputs, which leads to low productivity, iii) limited generation and access to climate change information for informed decision making iv) high post-harvest losses in the face of climate change and limited value addition affecting marketability of farm produce, v) limited access to inclusive financial resources and economic empowerment for women and youth to engage in climate change responsive micro-enterprises that deprive employment for youth and women, and vi) weak institutional capacity in agriculture extension and disaster risk management.

7. **Alignment with country policies and strategies:** From broad interventions outlined above, SCRP is aligned to the national developmental strategies and plans. For instance, Malawi Vision 2063[13], which aims to transform the country into a wealthy and self-reliant industrialized upper-middle-income country by the year 2063. Pillar I of the Vision 2063 seeks to improve agricultural productivity and commercialization by combating the high environmental degradation; reducing the adverse impacts of climatic conditions; addressing low adoption of climate smart agricultural technologies, low access to farm inputs, low mechanization, poor land management practices, poor access to finance, weak linkages to markets and limited irrigation among most of the farmers.

8. SCRP is in consonance with the National Agricultural Policy[14] (GoM 2016) which aims to achieve sustainable agricultural transformation, by expanding incomes for farm households, improving food and nutrition security, and increasing agricultural exports. In addition, SCRP's promotion of climate change adaptation approaches will contribute to the objectives of the National Climate Change Management Policy (GoM 2016)[15], the updated National Determined Contributions (2022)[16] and the National Resilience Plan (2017)[17], which together outline adaptation, mitigation, capacity building for climate change programming and Disaster Risk Management. SCRP is also well aligned and contributes to the four pillars of the National Resilience Strategy (GoM 2017) through building: a) resilient agriculture; b) disaster risk management; c) adaptive capacity development; and d) micro catchment protection and management.

Climate risks, vulnerabilities, trends and impacts in the project areas.

9. This section highlights the major climate hazards observed, critical factors of climate vulnerabilities in Malawi, the presents observed and projected climate trends and the analysis possible climate impacts particularly on crop productivity which is major livelihoods for the at least 80% of the Malawian population. The highlights on observed hazards, vulnerabilities, and impacts, create a basis for adaptation to the next sections.

10. **Major climatic hazards in Malawi:** Malawi is particularly prone to adverse climate hazards that include dry spells, droughts, intense rainfall, floods, strong winds and cyclones. Droughts, floods and cyclones, the most severe of the observed hazards, have increased in frequency and magnitude over the past twenty years, with dire consequences on food and water security and livelihoods of the most

[13] *National Planning Commission (2020). Vision 2063.* https://npc.mw/wp-content/uploads/2021/02/MW2063-VISION-FINAL.pdf
[14] *Ministry of Agriculture (2016). National Agriculture Policy.* https://faolex.fao.org/docs/pdf/mlw141073.pdf
[15] *Ministry of Natural Resources, Energy and Mining (2016). National climate change Management Policy.* https://www.ccpm.scot/assets/000/000/079/NCCM-Policy-Final-06-11-2016_original.pdf?1542206333
[16] *Ministry of Natural Resources, Energy and Environment (2021). National Determined Contribution.* https://unfccc.int/sites/default/files/NDC/2022-06/Malawi%20Updated%20NDC%20July%202021%20submitted.pdf
[17] *Department of Disaster Management Affairs (2018). National Resilience Strategy.* https://faolex.fao.org/docs/pdf/mlw190927.pdf

rural communities.

11. **Figure 1** below highlights how most common disasters have increased in the three (3) decades in Malawi. Climate related disasters affected over a million people in Malawi in 2019 and 2022, the highest since 1980s. In 2023, the Cyclone Freddy affected more than 2.3 million people.

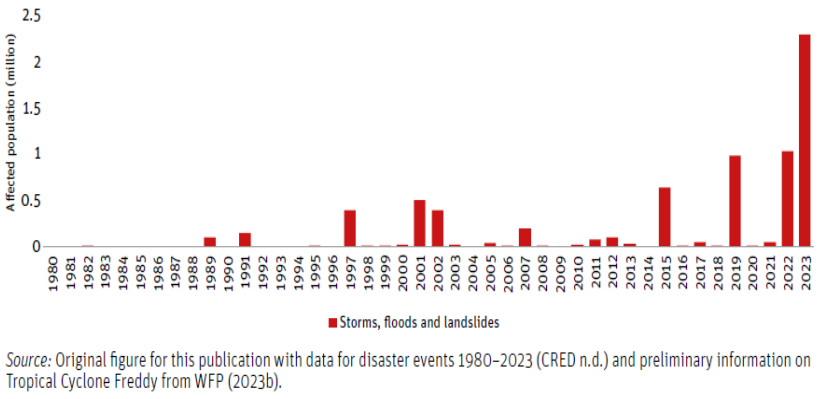


Fig 1: Disaster events associated with severe rainfall events in Malawi (Sourced from NRS 2017).[18]

12. Climate change vulnerability factors: Malawian rural communities are highly vulnerable to climate change. Factors exacerbating climate change vulnerability include increased exposure, high sensitivity, low adaptive capacity, gender disparities, high degradation of natural resources, limited access to finance climate resilient investments, are described in Table 1 below.

Table 1: Vulnerability to climate change

ID	Vulnerability factors	Description
1	**Increased exposure**	Malawi has become particularly prone and exposed to adverse climate hazards including dry spells, seasonal droughts, intense rainfall, ravine and flash floods[19]. In January 2015, Malawi received extreme precipitation[20] of four times higher than average and caused severe flooding in 15 of the 28 districts, which adversely affected more than 1.3 million people.[21] In the last two years, three cyclones (cyclone Ana in January 2022, cyclone Gombe in March 2022, cyclone Freddy in March 2023) have hit Malawi with devastating impacts. SCRP will enhance climate generation to guide farmer decision making, assess and recommend specific agroecological based adaptations options and enhance community preparedness to reduce climate economic impacts on food security, livelihoods and national economy.
2	**High sensitivity**	Malawi's high population density, high poverty levels with a huge proportion of population relying on climate sensitive sectors such as agriculture, leads to high sensitivity to climate change. Malawi is one of the most densely populated countries in Sub-Saharan Africa, with population density of 203 people per km^2. The current population of 20.9 million (GOM 2020) is expected to double by 2060[22], which will exert further pressure on land resources, leading to worsened widespread degradation and deforestation, in absence of proper actions. The fact that over 80% of people in Malawi depend on rain-fed agriculture and natural resources which are climate sensitive sectors[23], makes the Malawi economy overly sensitive to

[18] *Ibid*
[19] *World Bank (2018). Climate Change Management Portal for Development Practitioners and Policy Makers. https://climateknowledgeportal.worldbank.org/country/malawi/extremes*
[20] *Department of Disaster Management Affairs (2015). Post Disaster Needs Assessment Report..*
[21] *World Bank (2018). Climate Change Management Portal for Development Practitioners and Policy Makers. https://climateknowledgeportal.worldbank.org/country/malawi/extremes.*
[22] *National Statistics Report (2020). The Firth Integrated Household Survey. Zomba, Malawi. http://www.nsomalawi.mw/index.php?option=com_content&view=article&id=230&Itemid=111.*
[23] *National Statistical Office (2020). The Firth Integrated Household Survey. Zomba, Malawi. http://www.nsomalawi.mw/index.php?option=com_content&view=article&id=230&Itemid=111.*

		climatic hazards. For instance, due to floods in 2024, there was a significant fall GDP (GoM 2015)[24]. SCRP will contribute to reducing climate sensitivity through irrigation and diversification from predominantly maize crop-based livelihood to crop livestock integration and micro catchments conservation to reduce land degradation and soil erosion that affect crop production, among others.
3	**Low adaptive capacity**	Malawi smallholder farmers' climate adaptive capacity is low, due to limited climate change knowledge, lack of access to finance to adopt climate resilient technologies, high poverty levels, low women and youth participation and empowerment in economic activities. SCRP will contribute to improve climate adaptive capacity through capacity building, enhancing adoption of available CSA technologies, promotion of inclusive climate resilience financing
4	**Gender disparities**	The female headed households are reported to more likely to be poorer (57% for female-headed and 43 % of their male-headed households)[25]. Women poverty is directly related to low participation in economic activities, low access to productive assets (land and capital) and higher illiteracy rates. Laws guaranteeing inheritance and land ownership rights to women are often overridden by social norms and customs. Even though women provide 70% of the labour force in the agricultural sector, they still earn less than their male counterparts. The youth (age 15-35), who are the majority of population (57%)[26], lack basic opportunities to enable them to develop to their full potential. SCRP will ensure active participation and empowerment of women and youth (50% women and 30% youth) in its interventions
5	**Degradation of natural resources**	Malawi faces one of the highest and widespread natural resources and land degradation, largely caused by deforestation and inappropriate land management practices resulting in increased soil erosion. The annual soil loss from cropland is estimated at 29 tons/ha and responsible for up to 0.5% per annum crop yield reduction (GoM 2019)[27]. In the last 10 years land degradation has resulted in a 15% decrease in arable land[28]. With an estimated 96 percent of the total population using fuelwood for cooking, deforestation is estimated to be responsible for 33,000 hectares of land cover loss annually[29] and a main driver of ecosystem and biodiversity loss. The SCRP will promote sustainable land management and micro catchments conservation, as an adaptation option, which have direct effect on agricultural productivity.
6	**Limited adoption of climate smart technologies and investments in climate resilient infrastructure**	Malawi has limited public, private funding as well as limited access by smallholders' farmers to financial services, which impact on climate smart technologies and investments in climate resilient infrastructure. For instance, less than 8% of arable land is under irrigation and the over reliance on rain-fed agriculture increases the vulnerability of small-scale poor farmers, and farmers experience huge post-harvest loses (25%) due to of proper storage and value addition The SCRP promote gender responsive climate financing to increase irrigation for enable farmers produce double crops while averting drought impacts, reduce postharvest losses and enhance value addition along the value chains
8	**Limited climate information to support decision making**	While many previous initiatives have been undertaken to improve generation, access and use of climate information, there are still huge gaps for effectiveness of the available information. For instance, the forecast information covers large periods and not narrowed to a specific area or value chain, message alert being too short for effective preparedness. SCRP will enhance climate information generation and advisories formulation, improve dissemination capacity through digitalization and build capacity of district and local communities. SCRP will also undertake assessment to provide policy guidance on improving use of climate change information and services in agriculture, disaster risk management, including crop insurance under smallholder farmers.

[24] *Department of Disaster Management Affairs (2015). Post Disaster Needs Assessment Report. Lilongwe, Malawi.*
[25] *National Statistics Office (2020). The Firth Integrated Household Survey. Zomba, Malawi. http://www.nsomalawi.mw/index.php?option=com_content&view=article&id=230&Itemid=111.*
[26] *UNDP (2020). Human development Index.*
[27] *GoM (2019). Synthesizing Agricultural Research Findings in Malawi. Final Report. Department of Agricultural Research Services. Lilongwe, Malawi.*
[28] *GoM (2019). Synthesizing Agricultural Research Findings in Malawi. Final Report. Department of Agricultural Research Services. Lilongwe, Malawi*
[29] *GoM (2019). Synthesizing Agricultural Research Findings in Malawi. Final Report. Department of Agricultural Research Services. Lilongwe, Malawi.*

13. **Observed and projected climate trends: Temperature changes:** As highlighted in Fig 1 below, Malawi's observed mean temperature increased by 1.25ºC between 1951 -1980 (21.50 ºC) and 1991- 2020 (22.25 ºC) (**Fig 1 - a**). The observed average monthly temperature changes for the same period also increased by between 0.5 ºC- 1.0 ºC for most months except for October and November (**Fig 1-b**).

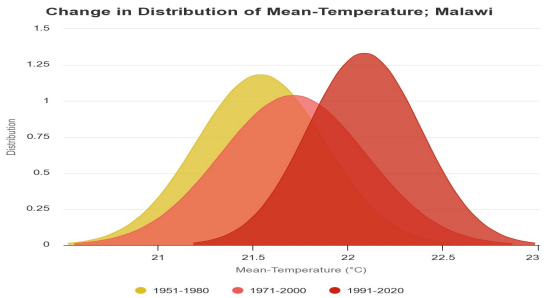


Fig 1-a: Changes in mean temperature over years.
Source: World Bank (2018)[30]

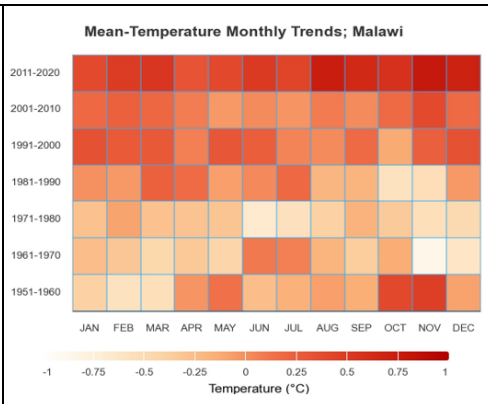
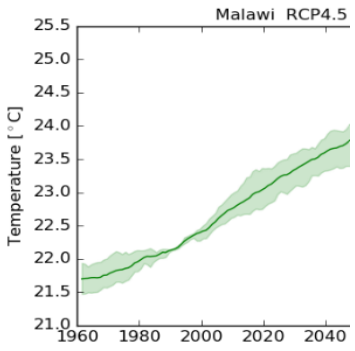
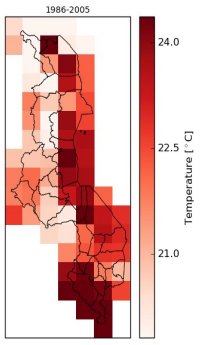


Fig 1-b: Increase in mean monthly over years.
Source: World Bank (2018)[31]

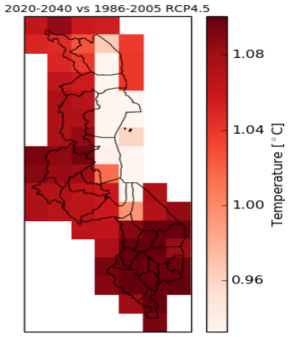
14. The projected mean temperatures are also expected to increase from 21.75ºC in 1960s to 23.5 ºC by 2040 (F**ig 2 - a**). The projected (2020-2040) temperature increases vary across the country from 0.96 to 1.08 ºC (F**ig 2- c**). For the selected SCRP districts, temperatures are expected to increase by 1.08 ºC in Balaka, and around 1.04 ºC in Lilongwe, Dowa and Mzimba (F**ig 2-c).** However, the highest temperatures will still be observed in southern and lakeshore districts (F**ig 2-b and Fig 2-c**).



(Fig 2-a):
Mean temperature changes annual aggregates (2020- 2040)



(Fig 2- b):
Reference temperature (1986-2005)



(Fig 2-c):
Future projected province changes
(2020-2040)

Source: Climate Analytics: https://regioclim.climateanalytics.org/choices[32]

[30] *World Bank (2018). Climate Change Management Portal for Development Practitioners and Policy Makers.* *https://climateknowledgeportal.worldbank.org/country/malawi/extremes*.
[31] *Ibid.*
[32] *Climate Analytics: https://regioclim.climateanalytics.org/choices*

15. **Change in extreme temperatures:** Extreme average hot temperatures are noted to have increased from around 30.0ºC - 32.0ºC in 1960s to 31.2 ºC - 33.5 ºC 2040s (F**ig 3 - a**). The projected (2030-2040) highest extreme temperatures are expected in the northern region at 1.08 ºCo (F**ig 3 -c**). However, the highest extreme temperatures will still be expected in the southern region (F**ig 3-b plus Fig 3-c**). Increases in temperatures affect crop physiology productivity as well as increased evapotranspiration reducing water availability for crop use.

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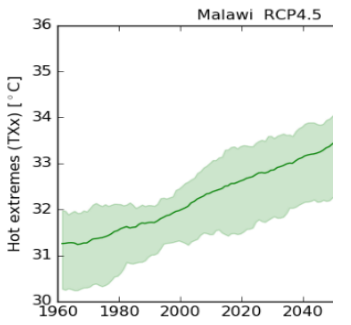
<td> 
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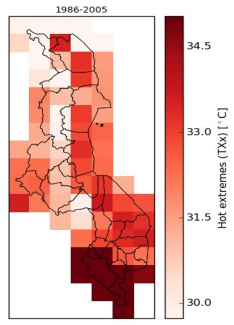
<td> 
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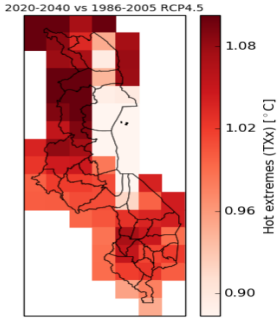
<td> 
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<td>(Fig 3- a):
Annual average extreme temperature change (2020-2040)</td>
<td>(Fig 3 b):
Reference extreme temperature (1986- 2005)</td>
<td>(Fig 3 - c):
Projected extreme temperature changes (2020- 2040)</td>
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<td colspan="3">Source: Climate Analytics: https://regioclim.climateanalytics.org/choices [33]</td>
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16. **Changes in precipitation:** Observed mean precipitation levels remained the same at nearly 1875 mm per year between 1951-1980 and 1991 - 2020 (Fig 4 - a). This agrees with many studies that precipitation in Malawi varies but change is uncertain. However, there are noticeable changes in monthly precipitation between the different decades (Fig 4-b).

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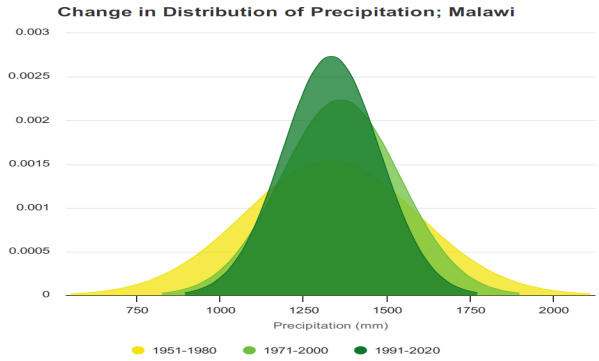
<td> 
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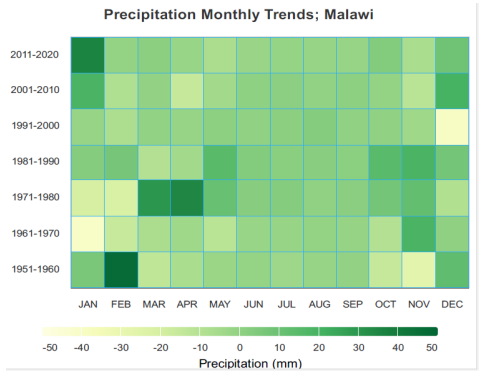
<td> 
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<td>Fig 4-a: Changes in annual observed precipitation.
Source: World Bank (2018)[34]</td>
<td>Fig 4-b: Changes in monthly observed precipitation.
Source: World Bank (2018)[35]</td>
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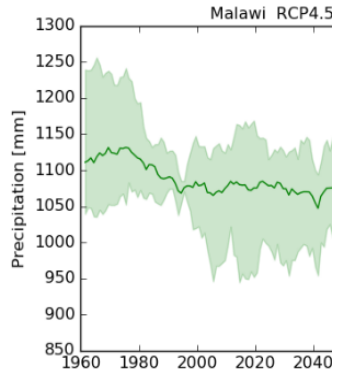
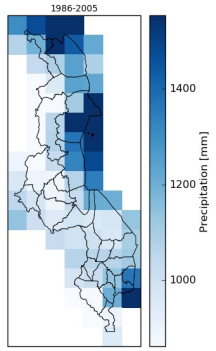
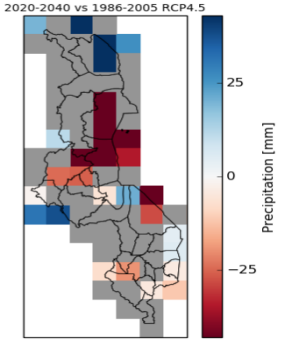
17. The projected mean precipitation levels also show a slight decrease from 1100m mm per year in 1960s to 1040mm in 2040s (**Fig 5 - a**) with huge uncertainties. When projected to (2030- 2050) the highest precipitation increases (50mm) and decreases (-50mm) are noted across the country compared to the reference year of 1986-2005 (**Fig 5 -c**). A slight decrease in precipitation is expected

[33] *Ibid*

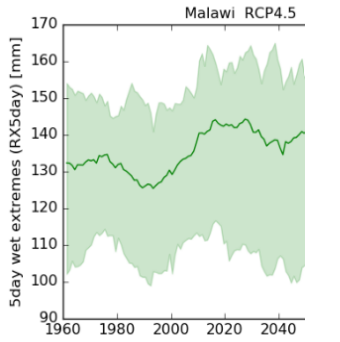
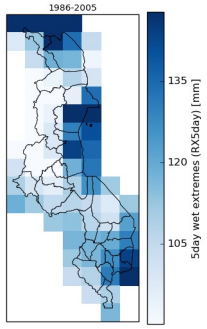
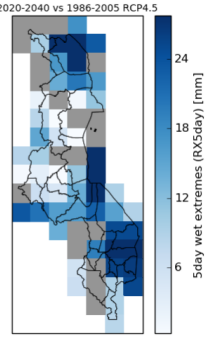
[34] *World Bank (2018). Climate Change Management Portal for Development Practitioners and Policy Makers. https://climateknowledgeportal.worldbank.org/country/malawi/extremes.*

[35] *Ibid*

in Dowa and Balaka, where Mzimba and Lilongwe remain the same.

		
(Fig 5 -a): Annual mean precipitation changes (2020 – 2040)	**(Fig 5- b)**: Reference mean precipitation levels (1986- 2005)	**(Fig 5- c):** Projected mean precipitation changes (2020-2040)
Source: Climate Analytics: https://regioclim.climateanalytics.org/choices [36]		

18. **Changes in extreme precipitation:** Unlike mean precipitation changes, there are changes in extreme mean precipitation. At national level there is general increase on extreme precipitation from 132mm (1960s) to 140 mm (2040s) with huge uncertainties (F**ig 6-a**). All districts show increase in extreme precipitation, Balaka (24mm), Lilongwe (12mm), Dowa (12mm) and Mzimba (4mm) respectively (F**ig 6-c**). Overall extreme precipitation is observed in the very north and south-eastern regions of Malawi (F**ig 6-c**). Even though there are slight changes in average precipitation and extreme precipitation, much of the rainfall changes could be variability in start and end dates which also greatly influence the crop productivity.

		
(Fig 6- a): Extreme precipitation changes (1960- 2040)	**(Fig 6- b):** Reference extreme precipitation (1986-2005)	**(Fig 6 - c):** Projected extreme precipitation changes (2020-2040).
Source: Climate Analytics: https://regioclim.climateanalytics.org/choices [37]		

19. **Socio economic impact of observed and projected climate trends in the project areas:** The impact of climate change has been significant and has continuously affected every segment of society. From 1979 to 2008, more than 2,600 people are reported to have died due to natural disasters, and nearly 21.7 million people have cumulatively been adversely affected[38]. In 2015, the country had

[36] *Climate Analytics: https://regioclim.climateanalytics.org/choices*

[37] *Climate Analytics: https://regioclim.climateanalytics.org/choices*

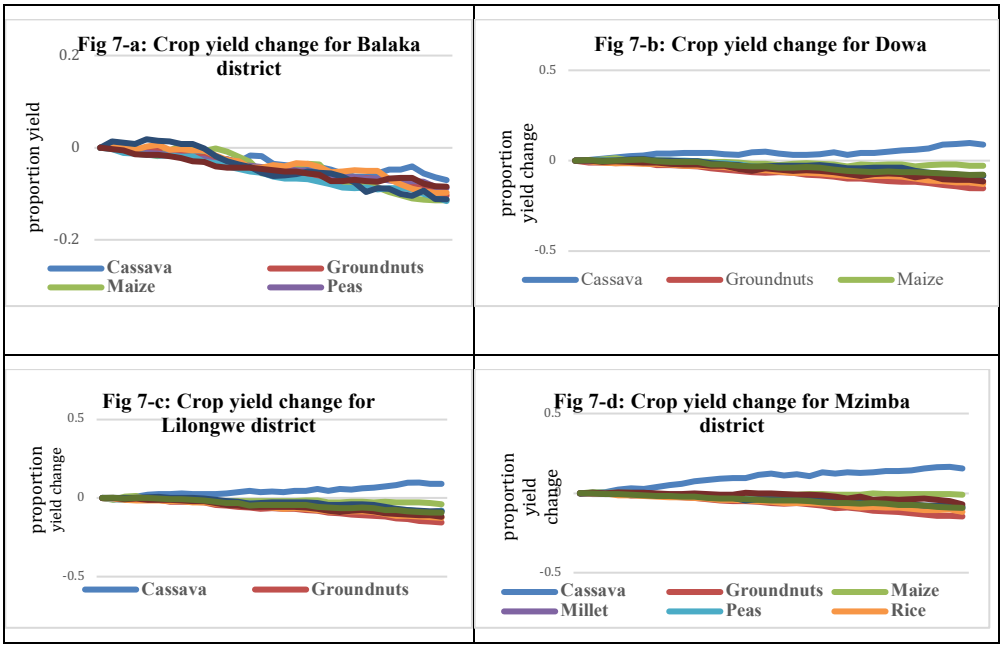
[38] *Department of Disaster Management Affairs (2015). Post Disaster Needs Assessment Report. Lilongwe, Malawi.*

its worst floods in 50 years[39]. The frequent disasters have resulted in large costs for repairs and rebuilding, diverting scarce resources from other development needs. The 2015 floods resulted in over 280 deaths, 638,000 people affected in one form or the other, physical damages and economic losses valued at $335 million[40].

20. The 2019 floods resulted in 60 deaths, with 975,000 people affected, physical damages and economic losses of $220 million[41],[42] . The effects of Tropical Cyclone Idai, in 2019, placed Malawi in the top five countries worldwide most affected by extreme weather events, according to the Global Climate Risk Index[43].

21. The post disaster needs assessment conducted in April 2023, estimated that cyclone Freddy alone affected over 2.3 million people and over 545,000 households were reported to have lost their crops and livestock, 1.6 million were declared severely food insecure, over 650,000 people displaced and over 600 deaths (WFP 2023)[44]. The agriculture sector suffers the greatest losses because of climate change impacts in Malawi. Most smallholder farmers are resource poor with very limited capacity to contain shocks arising from climate change. Economic modelling assessment estimated that the direct overall costs due to climate change impacts were equivalent to 5% of the country's GDP each year (GoM 2015)[45]. Cyclone Freedy in 2023, is estimated to reduce maize production at the national level by 20 – 30% below average, which is likely to exacerbate food insecurity in the affected areas.

22. **Climate impact on crop yield**: Considering that the majority of Malawi is agro based, climate change is expected to have a huge impact on crop productivity. This would have a huge impact on the agricultural sector and the national economy. **Fig. 7** shows potential climate impact on crop yield in 2050 based on 2020 as baseline. For all crops apart from cassava in Lilongwe, Dowa and Mzimba show decrease in yield. Yield reduction ranges between 6% to 15% for all the selected districts (**Fig 7-a:d**). The highest crop yield change for Balaka is under maize (12%) while groundnuts have highest yield loss for Lilongwe, Dowa and Mzimba with around 15-16% respectively.



[39] *Department of Disaster Management Affairs (2019). Post Disaster Needs Assessment Report. Lilongwe, Malawi.*
[40] *Department of Disaster Management Affairs (2015). Post Disaster Needs Assessment Report. Lilongwe, Malawi.*
[41] *Department of Disaster Management Affairs (2019). Post Disaster Needs Assessment Report. Lilongwe, Malawi.*
[42] *Department of Disaster Management Affairs (2015). Post Disaster Needs Assessment Report. Lilongwe, Malawi.*
[43] *Eckstein, Kunzel and Schafer (2021). Global Climate Risk. Who Suffers Most from Extreme Weather Event? Weather Related Loss from 2000-2019. German Watch. https://germanwatch.org/sites/default/files/20-2-01e%20Global%20Climate%20Risk%20Index%202020_15.pdf*
[44] *WFP (2023). Cyclone Fredy Response Update. https://reliefweb.int/report/malawi/wfp-malawi-cyclone-freddy-response-update-6-april-2023-0800-cat.*
[45] *Department of Disaster Management Affairs (2015). Post Disaster Needs Assessment Report. Lilongwe, Malawi.*

Source: Crop Impact Assessment (CARD 2018)[46]	

23. Having a clear understanding of the most frequent observed and projected climatic hazards (drought, dry spells, floods and cyclones), and the factors that exacerbate vulnerability, (limited access to climate resilient technologies, existential gender disparities, environmental degradation, and the observed and expected impacts on the vulnerable livelihoods (reduced yields and economic loses), require effective adaptation measures to reduce the impacts.

24. As outlined in detail in the in PART II, the SCRP will enhance adaptive capacities to reduce vulnerabilities and climate change impacts. The proposed interventions includes a) enhancing farmer adaptive and climate resilience for improved crop and livestock productivity, micro catchment and ecosystem conservation through i) increased capacity of communities and institutions; ii) access to climate resilient technologies and improved farm inputs, iii) restoration of micro catchments and ecological functioning of watersheds; iv) unveiling availability of inclusive and gender responsive financing mechanism through the Farmer Challenge Fund (FCF) for the communities to invest in sustainable crop management practices, diversification of livelihoods and climate resilient infrastructure including irrigation infrastructure, storage and transportation facilities, ; iv) value addition equipment; and) build and community institutional adaptive capacity in disaster risk reduction.

Project area description, targeting strategy and project aim.

25. **Project areas:** The SCRP will be implemented in some of the most vulnerable districts and areas of Balaka, Lilongwe Rural, Dowa and Mzimba districts (**Fig 8**). These districts have been selected based on specific criteria including poverty rates and chronic food insecurity.

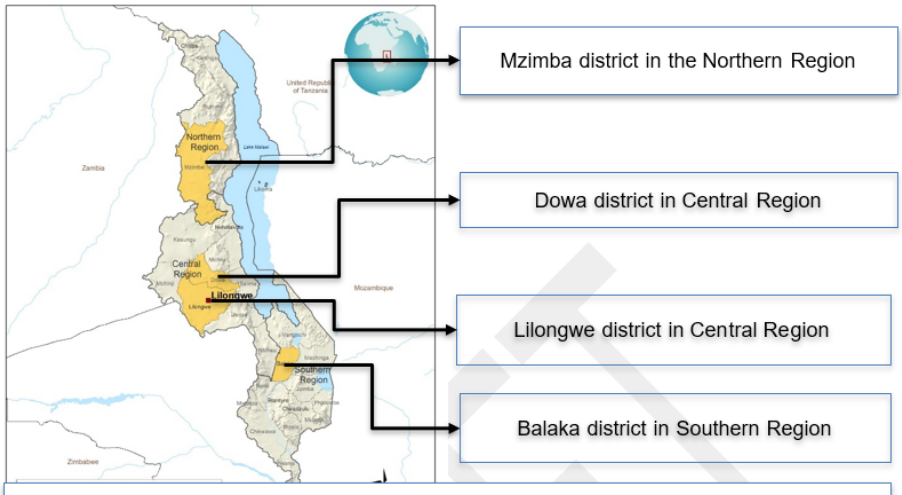


Fig 8. SCRP proposed project areas.

[46] *IFAD (2019). Climate Adaptation in Rural Development Assessment Tool. Available at: https://www.ifad.org/en/web/knowledge/-/publication/climate-adaptation-in-rural-development-card-assessment-tool.*

26. **Targeting strategy:** The SCRP targeting strategy is in two-fold. Firstly, the projects districts and areas are identified, followed by farmers' groups with specific groups characteristics. While the targeting criteria will be further elaborated during the full proposal development, the following paragraphs highlight some of the district and beneficiaries targeting requirements.

27. **Targeting district:** The district targeting criteria is agreed by Ministry of Agriculture and IFAD, which include district poverty levels, climate risks and vulnerability, food and nutrition insecurity levels, and potential to complement existing programmes. The selected districts for SCRP interventions are Mzimba, Balaka, Lilongwe and Dowa which have high poverty rates ranging between 40% (e.g., Mzimba) to well over 60% (in Balaka, Lilongwe and Dowa).

28. The rural poverty in these districts is even higher, especially among the most vulnerable groups, such as women and youth. In addition, there is a very high co-relationship between poverty rates and food insecurity incidences with Lilongwe being worse-off, with over one and half million people categorized as being chronically food insecure. All the participating districts are also badly affected by the vagaries of the ever-changing climate conditions which impinge on their agricultural productivity. The final choice of villages in these districts will be based on (i) potential for sustainable agricultural practices to make an impact on productivity, food security and incomes; (ii) the level of poverty and food insecurity; (iii) the presence/absence of other projects working in similar areas. Analysis of district vulnerabilities guided the development criteria for targeting of districts as follows:

29. **Exposure:** The selected districts have medium to very high exposure to climate change risks as highlighted in the Table 2 below. Balaka in the southern region is highly exposed to recurrent droughts, rainfall variability (including short rainy seasons), high temperatures and strong winds. Lilongwe, Dowa and Mzimba are moderately exposed to droughts, rainfall variability, floods and strong winds.

Table 2: Description of exposure for selected districts.

Exposure factor	**Potential selected project implementation areas**			
	Balaka	Lilongwe	Dowa	Mzimba
Drought occurrence	Very high	Medium and some areas	Medium and in some areas	Medium in some areas
Rainfall variability	Very high variability	Medium	Medium	Medium
Floods occurrence	Medium	High in some areas	Medium and in some areas	Medium and in some parts
High temperatures	Very high	High in some parts	High in some parts	High in some parts
Strong winds	Very high	Medium	Medium	Medium
Data source: Malawi Hazards and Vulnerability Atlas - DoDMA (2016)				

30. **Sensitivity:** Table 3 highlights the sensitivity factors for the selected districts. Due to high poverty levels, population density, illiteracy levels and proportion engaged in agriculture sector, Balaka has highest sensitivity. Lilongwe and Dowa show high sensitivity due to high poverty levels and proportion of population in agriculture sector. Mzimba is mostly sensitive due to the high proportion of its population in the agriculture sector.

Table 3: Description of sensitivity for selected districts

Sensitivity factor	**Potential selected project implementation area**			
	Balaka	Lilongwe	Dowa	Mzimba
Poverty levels	Very high	Very high	Very high	Medium
Population density	Very high	Very high	Medium	Medium
Illiteracy levels	High	Medium	Low	Very low

Population in agriculture	High	High	High	High
Data source: Malawi Hazards and Vulnerability Atlas - DoDMA (2016)				

31. **Adaptive capacity:** Table 4 highlights the adaptive capacity factors for the selected districts. All selected districts have high land and soil degradation, except for Mzimba which is moderate. Compared to national averages, all selected districts have a low proportion of land under irrigation, making farmers extremely vulnerable to droughts occurrence. Access to inclusive financial resources and credits is extremely low in all districts, which presents a barrier to adopting and investing in climate resilient technologies. Apart from Balaka, all districts have low access to use of climate change information to guide decision making.

Table 4: Description of adaptive capacity for selected districts

Adaptive capacity factors	**Potential selected project implementation area**			
	Balaka	Lilongwe	Dowa	Mzimba
Literacy rate	Low	Medium	Medium	High
Time taken to access markets	Low	Low	Medium	High
Access to health services	Medium	High	Medium	Low
Land under irrigation	Low	Low	Low	Low
Natural resources degradation	High	High	High	Medium
Access to financial services	Low	Low	Low	Low
Access to and use of climate information	Medium	Low	Low	Low
Data source: Malawi Hazards and Vulnerability Atlas - DoDMA (2016)				

32. **Overall vulnerability analysis**: Fig 9 below highlights the integrated hazards exposure, sensitivity, lack of adaptive capacity and overall vulnerability of climate change for different regions in Malawi. Balaka is the most exposed district among the other selected districts. However, Dowa has the least adaptive capacity, possibly because not many communities have been supported or invested in climate resilience. The highest vulnerabilities exist among communities in Balaka and Dowa districts.

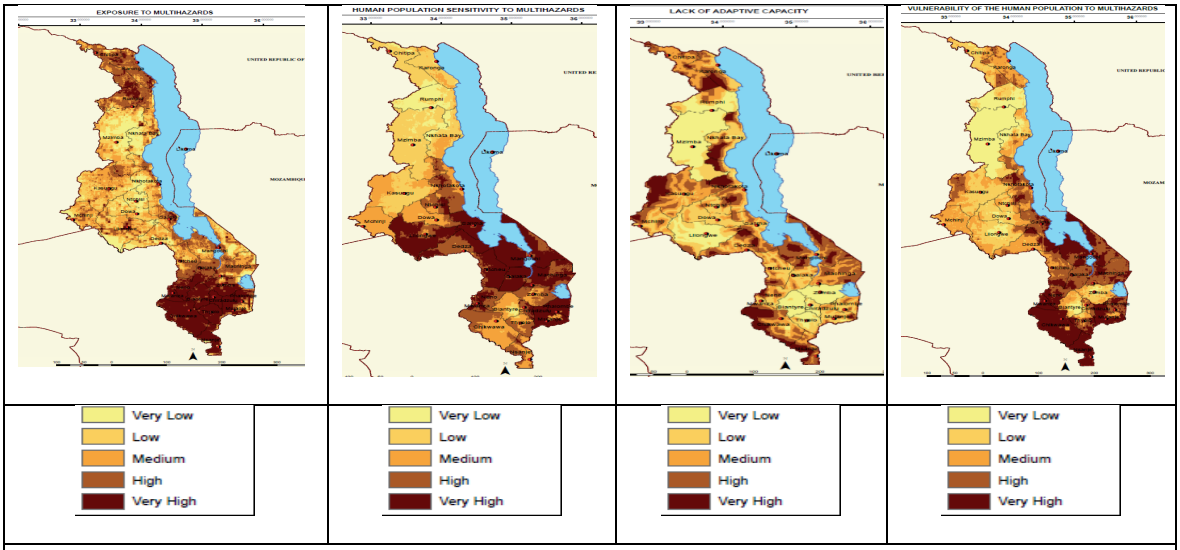


Fig 9: Malawi Hazards and Vulnerability Atlas - DoDMA (2016)

33. **Selecting beneficiaries:** When selecting beneficiaries in the target districts, SCRP will have mechanisms to ensure that the targeted poor men and women (particularly by purposively and

deliberatively targeting the youth and women as well people with living with disabilities) to participate and benefit from the planned interventions. Women will constitute 50% women, while youth will constitute 30% youth and 5% for PWDs and other vulnerable groups.

34. While the targeting criteria will further be elaborated at full proposal development, the criteria shall consider: a) rural food insecure households, and vulnerable to malnutrition youth, the elderly, persons with disabilities, persons living with HIV/AIDS and other vulnerable groups; b) moderate food insecure households which are involved in low-productivity subsistence crop and livestock farming, and in need of support to produce surplus to become market oriented and c) market-potential smallholder households, that are facing fewer productivity constraints, comprising economically active small and medium enterprises requiring support for strengthened production and have the ability to support poor smallholders in commercial agricultural production and provide employment to others.

35. **Women empowerment**: SCRP will enhance gender equality and women empowerment by creating equal opportunities for women and men to benefit from the project. Specifically the project will: (i) increase women economic empowerment by enabling access and control of productive assets and finances through the FCF, (ii) participation in natural resource management, (iii) climate adaptation and mitigation interventions in crop and livestock production; (iv) reduce workloads for women by introducing labour and time-saving technologies,(v) easy access to clean energy and water harvesting; (iii) increase women participation, representation and decision-making at household, community and farmer organization levels, (v) increase joint benefits sharing through the household (Gender Action Learning System- GALS) approach and contribute to gender policy engagement.

36. **Youth empowerment**: young females and males aged between 18-35 years will constitute not less than 30% of direct beneficiaries. The youths will be supported through (i) capacity and skills development to enhance their participation in agri-business in the targeted value chains (ii) increase access to productive assets and finances through the FCF by creating a quota and tailored conditions for youth beneficiaries and (iii) availability of jobs created through wage and self-employment across the selected value chains.

Food security and Nutrition: SCRP will improve access to food and dietary diversity of the beneficiary communities, particularly the most vulnerable women, children and adolescents by (i) assessing the value chains potential to increase nutrition benefits (ii) scaling up integrated homestead gardens through provision of garden kits with garden kits (iii) nutrition education aligned with the national Multi-Sector Nutrition Education and Communication Strategy II 2021-2025 to promote dietary diversity, (iv) enhance change perceptions of the richness of indigenous and local wild foods by including activities on participatory biodiversity activities to understand the availability of food, their key characteristics and potential for biodiversity while conserving traditional knowledge and food cultures (v) promoting post-harvest loss reduction, value addition and food processing in ways that maintain nutrition.

37. **Project aim**: The aim of SCRP is to build climate adaptive capacity and resilience of smallholder farmers and communities to increase food and nutrition security and enhance disaster risk management among the climate vulnerable rural men and women in Malawi, through enhanced knowledge capacities, inclusive climate resilient and gender responsive financing, promotion and adoption of climate smart agriculture technologies, landscape and micro catchment management and conservation, agriculture extension systems and disaster risk management approaches.

Project components and financing

Project Components	Expected outcome	Expected output	Amount
Component 1. Enhance smallholder farmers'	Outcome 1.0 Increased farmers' climate resilience in	Output 1.1 Climate resilient value chains and climate sensitive	2,000,000.00

knowledge capacities in climate resilience and sustainable productivity	agriculture, nutritional sensitive production systems and sustainable landscape management	market dynamics assessment conducted considering gender impacts. Output 1.2 Adaptive capacity for climate-smart, nutrition-sensitive production systems and gender transformative approaches enhanced. Output 1.3 Sustainable management of landscapes and restoration of degraded micro catchments enhanced emphasizing inclusive participation	
Component 2: Promoting commercialization of climate smart smallholder farming systems:	Outcome 2.0 Enhanced climate resilience and gender responsive financing.	Output 2.1 Farmers group established or strengthened to adapt to impacts of climate change with 50% participation of women. Output 2.2 Climate and gender responsive and sustainable financing through Farmer Challenge Fund (FCF) to address climate resilience provided	5,000,000
Component 3: Strengthened institutional capacity and knowledge management systems:	Outcome 3.0 Strengthened institutional capacity in knowledge management, agriculture extension and disaster risk management	Output 3.1 Capacity staff and institutions in climate related modern agricultural extension systems and disaster risk management enhanced with participation of both women, men and youth: Output 3.2 Knowledge management and M&E on climate change adaptation strengthened considering the specific requirements of women and youth.	1,416,977
Total Operational Cost			8,416,977.00
Project Execution cost (9.5%)			799,612.00
Total Project Cost			9,216,590.00
Project Cycle Management Fee charged by the Implementing Entity (if applicable) (8.5%)			783,410.00
Amount of Financing Requested			10,000,000.00

Projected Calendar:

Milestones	Expected Dates
Start of Project Implementation	January 2025
Mid-term Review (if planned)	August 2029
Project Closing	September 2032
Terminal Evaluation	January 2033

PART II: PROJECT JUSTIFICATION

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

38. **Project goal and objective**: SCRP goal is to enhance climate resilience, food and nutrition security among the climate vulnerable rural population of Malawi through increased adaptive capacity and sustainable agricultural practices. Whereas the development objective is to promote the adoption of climate resilient agricultural practices and sustainable resources management thereby increasing agricultural productivity while building resilience to climate change impacts.

39. The p**roject specific objectives** includes to: i) enhance adaptive capacity to adopt climate resilient and nutritional production systems among selected beneficiaries; ii) enhance restoration and management of degraded landscapes and micro catchments; iii) enhance climate proofing of value chains through climate and gender responsive and sustainable financing (Farmer Challenge Fund) and iv) strengthen institutional capacity (districts and local level institutions) in agriculture extension systems and disaster risk management.

40. The project consists of three main components which systematically input and build on each other to sustainably increasing climate resilience, productivity, and ultimately building smallholder farmers adaptive capacities, taking cognizant of the challenges and risks posed by climate change. The details of these components, including the outcomes, outputs and activities are formulated to address the most common climate risks and vulnerabilities identified in the background context and are presented below.

Component 1. Enhance smallholder farmers' knowledge capacities in climate resilience and sustainable productivity:

Outcome 1: Increased farmers' climate resilience in agriculture, nutritional sensitive production systems and sustainable landscape management:

41. To have effective adaption is it important that farmer adopt and engage in value chains that are climate resilient and or identify potential areas of investments that will enhance their preferred or selected value chain based on agreed criteria which include climate resilience. Secondly is it important that necessary farmers' adaptive capacities are built to attain climate resilience. Outcome 1 seeks to address the knowledge and capacity gaps that hinder farmers to properly adapt to climate change.

42. After confirming the potential value chains, farmer capacities and knowledge to address existential gaps in climate change adaptation will be improved learning in participatory research on already proved climate resilient technologies, through Farmer Field Schools, through on farm demonstrations hosted by lead farmers. Opportunities will be offered for women to lead farmer groups. This will give farmers opportunity to appreciate and decide on particular set of technologies to be further adopted to increase climate resilience based on learning results.

43. As on farm activities are strongly linked to landscape and catchments management status. This outcome SCRP will support restoration and conservation of highly degraded areas thereby reducing the flood impacts running and affecting crop production, reduction in sedimentation in water bodies, increased water recharge in catchments areas and biodiversity among others. The restoration activities will involve participation of women, men and youth.

44. Additionally, restorations of degraded land may have co-benefit opportunities for smallholder farmers. In July 2023, launched the Malawi Carbon Trade Initiative with aim of averting high deforestation and increasing the currently low forest cover. The Malawi Carbon Trade Initiative may present some opportunities to smallholder farmers, which are yet well assessed. The SCRP will therefore undertake an assessment and give recommendations on opportunities, implications and challenges for participation of smallholders' farmers. While SCRP, is not particularly focusing on mitigation activities, if opportunities for smallholder farmers are asserted, besides the projects advantages in increasing adaptive capacity, agricultural productivity and landscape resilience, farmers would be extra motivated from carbon credits payments to further increase adoption of CSA technologies and management of catchments through afforestation.

Output 1.1: Climate resilient value chains and climate sensitive market dynamics assessment conducted considering gender impacts.

45. To enhance climate resilience from production to market, SCRP undertake assessment to support farmers select value chains based on agreed criteria, which includes: i) value chain climate resilient ii) promote food security, iii) are market responsiveness; iii) positive gross markets and iv) promote gender inclusivity. The criteria will be further refined at the full proposal formulation. The potential and preliminary value chains included: i) groundnuts, ii) soybeans, iii) pigeon peas, iv) common beans, v) sunflower, vi) horticultural crops (tomato and onions) vii) goats, viii) poultry.

46. SCRP will also support farmers in undertaking assessment to identify specific adaptation options or investments needs within the value chains that would increase climate resilience. The adaptation options will be specific to agroecological zones and value chains and will consider farmer economic, social and technical feasibility and recommendations, thereby promoting options that are feasible to specific farmer needs, gender considerations and conditions which will in turn improve adoption rates and technology efficiency.

47. The Department of Agriculture Research has developed some potential climate smart technologies, which need to be well refined and demonstrated to farmers for adoption considering gender requirements and vulnerable groups. The SCRP will support DARS to demonstrate climate smart technologies to farmers through adaptive and participatory research in crops and livestock such as of early maturing, drought tolerant crop varieties and species, on farm assessment of new fertilizer protocols, integrated pest management, low-cost mechanization and labor-saving technologies and post-harvest management.

48. As stated, Malawian soils are heavily degraded in various degrees. However currently there is general or blanket recommendation and lack of specific guidance to farmers on how to apply fertilizers based on degree of degradation and soil status in their areas. To improve on specific nutrient requirement and application, the Department of Agricultural Research, based on recently approved agroecological-specific fertilizer recommendations and assessment will undertake farm demonstrations ensure transition from current fertilizer blanket recommendations to specific agro ecological needs taking into consideration the soil status, thereby improving farmer adaptive capacities.

49. This output addresses the information and knowledge gaps to guide farmer decision making selecting both value chains and adoption of climate smart technologies. The output, therefore, contributes directly to Adaptation Fund outcome on development and diffusion of innovative practices, tools, and technologies (AF Outcome 8).

Activity 1.1.1	Undertake analysis to support farmers select suitable informed value chains based on agreed criteria (value chain resilience, market responsiveness, food security, gender responsiveness etc.)

Activity 1.1.2	Undertake detailed analysis to identify targeted adaptation options to climate resilience of selected value chains based on farmer's needs, gender needs and conditions (economic, technical social, environmental feasibility)
Activity 1.1.3	Undertake adaptive and participatory research in crops and livestock such as of early maturing, drought resilient crop varieties and species, integrated pest management, low-cost mechanization and labor-saving technologies and post-harvest management.
Activity 1.1.4	Undertake farmer participatory research on new fertilizer protocols based on crop and agroecological chains to improve soil nutrition and productivity and consider gender requirements

Output 1.2: Adaptive capacity for climate-smart, nutrition-sensitive production systems and gender transformative approaches enhanced.

As stated, the low adoption of GAPS, impacts on climate change, land degradation, decline in soil fertility, smallholder farmers' productivity for instance in maize is around 1.5 tons per hectare, way below the potential yield of 5-8 tons per hectare, which contributes to food insecurities in Malawi. The annual soil loss from cropland is estimated at 29 tons/ha and responsible for up to 0.5% per annum crop yield reduction (GoM 2019)[47].food security, water body sedimentation and biodiversity.

50. While output 1.1 is focused on generation of information , technologies and guidance for farmers to select potential value chains and potential climate resilient technologies that are agroecological based, value chain based, gender considerations that consider farmers social economic, technical and environmental aspects, output 1.2 will seek to build actual farmers capacities which is currently low and upscale adoption of new or existing climate smart agriculture (CSA) technologies and Good Agricultural Practices (GAPs), through extension services such as farmer field schools (FFS), group trainings, and on-farm demonstrations ensuring participation of women, man and youth. Increased knowledge and adoption of CSA and GAPs will reduce potential impact of identified risks such as dry spells, droughts, intense rainfall, and floods. The other factor affecting soil productivity under smallholder farmers in Malawi is high soil acidity due to continuous cropping, use of inorganic fertilizers and land degradation. As an adaptation measure, SCRP will build on previous and ongoing initiatives to promote organic making use and utilization.

51. While undertaking all interventions, SCRP will ensure gender inclusivity to enhance gender empowerment and learning through the GALS approach, especially in target areas and communities with existential gender inclusive barriers or currently having less capacity to mainstream gender. Building on the success of the household (GALS) approach under SAPP, SCRP will GALS approach through GALS training The GALS will be integrated through the FFS, communities, farmer groups and households. The approach will empower women and men to improve gender relations, encourage households to harness their collective potential, negotiate gender equitable decision making, benefits sharing and balanced workloads, increasing women's voice. Some of the key issues that will be addressed include development of mindsets towards gender equitable attitudes, household, and group vision to achieve greater productivity, visibility of women and youth's meaningful engagement in value chains with potential. It is also noted in Malawi and as reiterated by UNICEF (May 2023), most poor rural households in the country face acute malnutrition, linked to poor food diversification, social altitudes. SCRP will provide training to improve nutritional aspects of the beneficiaries, particularly the elderly, expectants and under five.

52. The output address critical existing knowledge and capacity of smallholder farmers to adapt to climate change. and enhance gender equality. The output, therefore, contributes to equally contributes to the objectives of both the Malawi National Gender Policy (2015) and the Adaptation Fund Gender Policy (2017).

[47] *GoM (2019). Synthesizing Agricultural Research Findings in Malawi. Final Report. Department of Agricultural Research Services. Lilongwe, Malawi.*

Activity 1.2.1	Review existing manuals on GALS or Household Approach
Activity 1.2.2	Undertaken training in GALS, including on gender empowerment and decision making, household and group visioning
Activity 1.2.3	Develop or review of CSA farmer training manuals for selected VCs (crops and livestock)
Activity 1.2.3	Train farmers in CSA through FFS (such as promotion of soil fertility and integrated soils and water in-situ conservation practices, post-harvest management, water use efficiency, GALS)
Activity 1.2.4	Provide improved inputs to demonstrate on farm CSA technologies such as (drought, water lodging, disease, heat tolerant varieties or species), including early maturing verities,
Activity 1.2.5	Provide support and demonstrate community and or household water harvesting in drought prone areas
Activity 1.2.6	Develop capacity and promote use of organic fertilizers to reduce soil acidity and improve soil fertility considering participation of women, men and youth
Activity 1.2.7	Support climate sensitive nutritional education and nutrition-sensitive production for most vulnerable households, elderly, expectants, People Living with HIV and AIDS (PLWHAS) and under five children.

Output 1.3 Sustainable management of landscapes and restoration of degraded micro catchments enhanced emphasizing inclusive participation

As described in the background context, one of the factors that exacerbate small holder climate vulnerability is the huge land degradation in Malawi. However, Malawi faces one of the highest and widespread natural resources and land degradation due to deforestation and inappropriate land management and overgrazing. The annual soil loss from cropland is estimated at 29 tons/ha and responsible for up to 0.5% per annum crop yield reduction [Government of Malawi (GoM) 2019]. In the last 10 years' land degradation has resulted in a 15% decrease in arable land.

53. While **output 1.2** focusses on farmers' capacity building on CSA, GAPs, and GALS to enhance on-farm resilience, productivity and gender inclusivity, output 1.3 will focus on the sustainable landscape approach to resolve the interlinked challenges that exist between on farm and landscape activities. High levels of land degradation resulting into soil erosion, sedimentation of rivers and floods which wash away crops and, livestock, household assets and also result in loss of biodiversity exacerbates community's sensitivity to climate impacts. Output 1.3 will enhance landscape -based approach which includes integrated management of land, water and living resources that promotes conservation and sustainable use of natural resources that in turn increases climate adaptation of on farming activities.

54. While in general the project focusses exclusively on adaptation, output 1.3 will have both adaptation and mitigation co-benefits: (a) improved forest cover, thereby leading to (a) decreased soil erosion, (b) decreased water sedimentation, (c) enhanced carbon sinks (d) reduced impact of strong winds and floods (e) and improved ecosystem biodiversity conservation, among others. Additional interventions include reduced deforestation through community afforestation, production of livestock folder to reduce scarcity of livestock feed and promote natural vegetative regenerations due to overgrazing, provision of cleaner energy sources such as solar, efficient charcoal kilns and smart cooking stoves will be promoted considering gender needs. Interventions in clean energy access have multiple benefits such as reduced burden pressed on women and girls in accessing energy for household use, decrease health risk from using firewood and reduced deforestation as over 90% of population depends on wood energy source.

55. As the Malawi Carbon Trade Initiative has just been launched by the Government of Malawi (July 2023), SCRP will take the advantage to assess possible opportunities and come up with recommendations for participation of small-scale farmers. The assessment findings may guide and open opportunities for participation of smallholders' farmers in carbon markets, which may motivate farmers to adopt CSA technologies with mitigation co-benefits. Assertion of smallholder farmers' participation in Malawi Carbon Initiative has a triple -win scenarios as farmers will be motivated from adopting more CSA technologies and catch conservation through afforestation, additional payments from accrued credits and increase in forest cover currently less than 20% benefiting vulnerable groups, women, men and youth.

Activity 1.3.1	Promote flood control structures, such as contour bunds, check dams, swales, gully reclamation, drainage channels and vetiver planting
Activity 1.3.2	Develop training manuals and provide trainings which includes 50% participation of women on catchment conservations, including community forest management and support afforestation in highly degraded areas:
Activity 1.3.3	Facilitate development of micromanagement plans and restoration of highly degraded areas through inclusive community participation.
Activity 1.3.4	Build gender focused capacity and support fodder production and management or small-scale livestock
Activity 1.3.5	Undertake assessment and recommendation on feasibility and opportunities of small-scale farmers inclusive participation in Malawi Carbon Trade Initiative.
Activity 1.3.6	Promote adoption of cleaner energy sources such as solar and smart energy stocks

Component 2: Promote commercialization of climate smart smallholder farming systems:

Outcome 2.0 Enhanced climate resilience and gender responsive financing:

56. While **outcome 1** has focused on building knowledge capacities for climate resilience based on informed value chain assessment and selection, CSA, and GAP training, including on farm demonstrations and landscape management and conservation approaches. Outcome 2 has two interlinked outputs (farmer groups strengthened; and climate and gender responsive financing provided). which essentially seeks to establish and strengthen beneficiary groups and enhance climate resilience of the value chains from actual production (crops or livestock), post-harvest management and marketing, through a climate resilient and gender financing mechanism.

57. Firstly, for effective adaptation to take place, it is advantageous to have group and community approach and ensure that groups or communities' function effectively. The group approach also simply adaptive capacity building and ensures exchanges and discussion of knowledge. The groups approach, through economies of scale is also advantageous in easing access to services such as agricultural extensions and market negotiations. Additionally, improved farmer group capacities in governance and financial management will contribute to resolving financial access to smallholder farmers which is a major barrier to climate adaptation and contributes to farmer groups sustainability beyond the project period.

58. SCRP provide financial access to farmer groups through matching grants, which may be facilitated through partnerships with mainstream financial institutions, thereby strengthening farmer groups to access mainstream financing. 50% ($5 Million) of the project cost will be allocated to CFC as part of an operationalization tool to provide sustainable climate and gender responsive financing to address constraints that hinder adaptation and competitiveness of targeted value chains.

59. Outcome 3 directly contribute to Adaptation Fund (Outcome 6) on enhanced capacity to diversity and strengthened livelihoods and sources of income to vulnerable people in target areas.

Output 2.1 Farmers group established or strengthened to adapt to impacts of climate change with 50% participation of women.

Based on selected project area context, the project may form new farmer groups (including participation of women, man and youth) or adopt and strengthen existing and functional farmers facing similar challenges as outlined in the background context. To ensure gender inclusivity in the existing or new farmers groups, affirmation action to have at least 50% women members and 30 percent youth will be affected. Selected farmer groups will be supported based on selected value chain and market needs identified in output 1,1 under outcome 1. While farmer technical adaptive capacities are built under output 1.2, output 2.1 seeks to build farmer group capacities to function as a group in democratic way, and further horn agribusiness management related to their respective selected climate resilient value chains (crops or livestock). Besides the Farmer Challenge Fund (FCF) as described in output 2.2, the groups will also be strengthened to independently access loans through the existing financing institutions.

Activity 2.1.1	Identify or establish gender sensitive groups and conduct capacity building in group dynamics and democratic governance as basis for group success and sustainability
Activity 2.1.2	Conduct farmer group inclusive training in agri-business, financial management and improve their credibility for financial access
Activity 2.2.3	Conduct farmers group inclusive training in marketing aligned to buyer and market needs, including facilitating market linkages and contracts where feasible
Activity 2.1.2	Facilitate where feasible farmer market linkages and contracts benefiting women, men and youth
Activity 2.1.3	Train farmers as necessary in climate smart value chain (crops and livestock) value addition, quality control and safety, including aflatoxin management ensure 50% of women

Output 2.2 Climate and gender responsive and sustainable financing through Farmer Challenge Fund (FCF) to address climate resilience provided

60. The aim of the FCF is to facilitate financial access to farmer groups through matching grants, which may be facilitated through partnerships with mainstream financial institutions, thereby strengthening farmer groups to access mainstream financing. A total of 50% ($5 Million) of the project cost will be allocated to CFC as part of an operationalization tool to provide sustainable climate and gender responsive financing to address constraints that hinder adaptation and competitiveness of targeted value chains.

61. SCRP will build on lessons from Sustainable Agriculture Productivity Programme (SAPP) where a similar financial arrangement proved successful in enhancing smallholder farmer climate resilient investments, improving livelihoods of the vulnerable population, enhancing saving culture and building farmer group credibility in accessing loans from financing institutions. In the short and medium term FCF will address constraints and barriers that hinder small-scale farmer groups, and small and medium enterprises competitiveness in the selected value chains. FCF may also be used as a window for finance livelihood diversification in that farmers would choose to integrate crop with livestock farming and improves resilience in time of poor crop yield due to climate impacts. In the long run the FCF will contribute to the generation of lessons for sustainable financing which is currently limited to smallholder farmers in Malawi. The FCF will have matching grants through two funding windows.

62. **Production window**: The production window aims to enhance smallholder climate resilience and market-oriented production, which will be achieved through improved productivity, nutrition, food security and marketing capacities. The window will mostly finance producer groups that face constraints related to improving production and productivity due to climate change. Based on needs, farmer groups may request funding for: i) accessing improved climate resilient varieties and animal breeds, ii) gender sensitive equipment and assets for land preparation; iii) investments such as construction or rehabilitation of small-scale irrigation schemes, vi) agricultural diversification including poultry and goats to increase resilience. This window aims to address the challenge of limited access to CSA technology adoption, reduce climate sensitivity from rainfed to irrigation system and improve livelihood diversification from the dominant crop-based livelihoods, to crop and livestock integration.

63. **Post-harvest and value addition window**: Post harvest averages about 25-30% of grain related produce and sometimes up to 50% of horticultural production in Malawi. Capacity building in post-harvest management presents a huge adaptation option and its training will be offered to all selected beneficiaries under output 1.2.

64. However, the post-harvest and value addition financing window will target farmers that are already achieve high or potential yields on their own but lack means for commercialization, value addition. This window will enhance smallholder climate resilience value addition, post-harvest loss management and marketing. The post-harvest and value addition window will prioritize financing towards purchase of assets and equipment for i) climate resilient storage infrastructures; b) small scale transport facilities, iii) commodity processing and improve quality standards as part of market integration.

65. In accessing FCF and regardless of the funding window each farmer group will commit to activities of landscape and micro-catchment restoration in proximity to the community itself. The farmer groups will finance labour and management costs, while the project will cover technical costs on design of flood control structures, provision of preferred drought tolerant seedlings and related catchment area

management and conservation capacity training (refer to outcome1, output 1.3).

66. **Matching grant contributions**: Farmer groups under the Production Window will have lower matching grants contribution than those for Post-Harvest and Value Addition window, 10% and 20% respectively. Not to burden the vulnerable and resource restricted farmer groups the matching grants under production window may be paid in cash or in kind.

67. **Access to Farmer Challenge Fund**: As stated FCF is simply a matching grants facility where farmers will transparency and competitively through Call for proposals. Criteria for Fund Application and Access will be developed based on lessons from SAPP, TRADE, AgriCoM and other ongoing relevant initiatives. While the FCF Access and Application criteria will be further elaborated at Full Proposal Development, the fund access will include criteria such as: i) inclusivity (participation of women and youth), ii) promotion of climate resilient investments, iii) integration of natural resource management, iv) co-financing in kind or cash based on the funding window, iv) nutrition and food security; v) and sustainability. Agribusiness officers in the targeted districts will provide support to farmer groups to develop feasible and viable business proposals.

68. **Management of Farmer Challenge Fund**: The FCF will be managed by a competent Fund Manager, who will provide oversight on business plans submitted by groups, technical assistance to the groups to ensure the business plans are bankable and implementable, undertake performance monitoring of the group enterprises, promote best practices and knowledge management. The full TORs for the Fund Manager will be developed at proposal development. To ensure that acceptable bankable proposals there shall be two phase selection process. Preselection will be undertaken based on own farmer group EoI submissions, and the preselected farmers will be offered support by District Agribusiness Officer on how to refine and attain bankable project ideas, from which there shall be a final selection based on transparent process and agreed inclusive criteria. The selection criteria which will be further developed at formulation phase shall ensure that most resource restricted groups equally participate without being disadvantaged.

Activity 2.2.1	Based on lessons from SAPP and other related interventions, design modalities for FCF access and management, including the two phased selection process and criteria
Activity 2.2.2	Issue Expression of interest (EOI) for different FCF funding windows ensure all to women, men and youth
Activity 2.2.3	Preselect inclusive farmer groups based on EoI submitted applications
Activity 2.2.4	Support preselected farmers to formulate feasible fundable proposals based on predefined criteria ensure equal participation for all people despite of status in the community.
Activity 2.2.5	Undertake assessment of FCF performance and formulate recommendations on how to improve long term inclusive smallholder climate financing in Malawi

Component 3: **Strengthened institutional capacity and knowledge management systems:**

Outcome 3: Strengthened institutional capacity in knowledge management, agriculture extension and disaster risk management

69. To effectively implement and deliver effective climate adaptation there is critical need for improved institutional and staff capacities in agricultural extension and management of climate related disasters. The Global Center on Adaptation (GCA) is liaising with IFAD and the Government of Malawi to assist in digitalization to improve agriculture extension and climate information services and make recommendation thereto for its effective implementation. SCRP will build on the opportunities from Global Centre on Adaptation (GCA) and the Government of Malawi initiatives to further strengthen key GoM staff and institutional capacities in and eventually pilot the modern agricultural extension services to adapt to climate change and disaster risk management in the selected district levels.

70. Noting the limited capacities in drought and flood forecasting and monitoring and generation of seasonal forecast and development of advisories, SCRP build the capacity of Department of

Climate Change and Meteorological Services officials in flood and drought forecasting and in collaboration with the Ministry of Agriculture through the Participatory Information Services for Climate Adaptation (PISCA) train agricultural staff and develop necessary advisories to enhance adaptation decision making by farmers.

71. Through the Project's M& E, field data would be collected and analyzed, and information generated will be useful not only in project decision making, but also disseminated through other fora to inform future designs of projects based on lessons learned.

72. Outcome 3 therefore addresses the low capacities in agricultural extension services and management of disasters of climate related disasters Malawi and also directly contributes to the Adaptation Fund (Component 2) on strengthened institutional capacity to reduce risks associated with climate induced socio economic and environmental loses This component has outputs which include:

Output 3.1 Capacity staff and institutions in climate related modern agricultural extension systems and disaster risk management enhanced with participation of both women, men and youth:

73. As outlined earlier vulnerable population face many impacts from climate change including limited capacities and information access to information for agricultural activities decision making and disaster risk management. The generation of climate change information such as drought and flood are sometimes not timely and specific in addition to having ineffective advisories to guide farmers and communities especially for women who vulnerable to the impacts of climate change. On DRR many districts and community lack proper planning with no disaster contingency plans in place or not reviewed for long time.

74. To address this, gap the project will in modernization of agricultural extension and climate change information services and related capacities at district and local community levels where extension agents and other public front line staff are located. SCRP will build on the initiatives being undertaken by the Global Center on Adaptation (GCA). GCA is an international organization working to accelerate action and support for adaptation and resilience and is collaborating with IFAD and the GoM to plans to assess, design and develop roadmap to improve agriculture extension services and dissemination of climate information through digitalization. The SCRP will build on GCA results and road to pilot the digital extension system on climate information in agriculture and disaster management in the SCRP targeted districts addressing gender inequality. SCRP will also build the capacity of Department of Climate Change and Meteorological Services in drought and flood forecasting and monitoring and generation of seasonal forecast and development of advisories to enhance adaptation decision making by farmers.

Activity 3.1.1	Undertake district and local community level capacity needs and knowledge gap assessment to improve DRM at district and community level ensure needs vulnerable members, including women considered
Activity 3.1.2	Train extension staff in digitized agricultural extension messaging ensuring 50% participation of women
Activity 3.1.3	Train research and extension staff in climate smart agriculture (CSA) consider requirements of women, men and youth.
Activity 3.1.4	Build capacity of agricultural staff in participatory integrated climate services for agriculture (PICSA) and advisories
Activity 3.1.5	Build capacity of district stakeholders and local communities to improve coordination disaster risk management, including where possible capacity to review, formulate or strengthen district or community disaster contingency plans
Activity 3.1.6	Roll out on pilot basis in the selected districts the design and recommendations from digitalization of the agro extension services and climate information services report considering needs of women.
Activity 3.1.7	Build capacity of DCCMS in flood and drought forecasting ensuring equal participation

Output 3.2: Knowledge management and M&E on climate change adaptation strengthened considering the specific requirements of women and youth

75. SCRP will enhance development of knowledge products and dissemination to facilitate effective implementation and outreach to targeted project beneficiaries and strengthen M&E to assess project impacts, lessons and future adaptation programming. Knowledge management and knowledge generation will be an integral part of the project and fully mainstreamed throughout the project components. The project will introduce several innovative approaches and technologies as pilots that will have the purpose to demonstrate technology and will be showcased. The training programmes and awareness raising activities will also be based on the lessons learned and best practices generated from previous projects. The project will also aim to develop guidelines on how to mainstream climate activities based on the lessons learned and best practices from the climate-resilient

76. The outputs will also seek to formulate policy briefs whose recommendations will improve the design of attractive and innovative smallholder farmer crop-based insurance accessible to vulnerable groups and women. Despite crop insurance having potential to improve adaptation, and widely recommended in many Malawi policies and strategies such as National Agriculture Policy, National Agriculture Investment Plan, National Climate Change Policy and National Climate Change Investment Plan, crop insurance products are rare, not well regulated and usually not accessible or attractive to smallholder farmers and vulnerable groups. SCRP will contribute to policy guidance through formulation of policy brief and technical paper on crop-based insurance under smallholder agriculture in Malawi.

Activity 3.1.1	Produce progress reports as required outline success, challenges and lessons learnt and include gender disaggregated data
Activity 3.1.2	Develop communication strategy with gender considerations supported by the necessary materials
Activity 3.1.3	Develop, disseminate knowledge products and enhance outreach to all members of the community
Activity 3.1.4	Develop and disseminate communication materials for farmers,
Activity 3.1.5	Formulate policy brief and recommendation design attractive and innovative smallholder farmer crop-based insurance accessible to vulnerable groups and women

B. Describe how the project 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 will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

77. Economic benefits: The SCRP will be designed to contribute towards wealth creation and improve food and nutrition security among the rural population of Malawi. Through enhanced farm capacities in outcome 1, 2 and 3 and access to CSA technologies, improved farm inputs and access to better markets, knowledge on nutrition the selected beneficiaries will experience increased production and household income level. The SCRP based on previous similar initiatives such as SAPP expects to increase productivity by 20%, incomes by 25% and reduce food loss by 25%.

78. Increased access to climate information and institutional capacity in disaster risk management is further expected to reduce climate impacts and loss of both public and private assets. The project interventions outcome 1 and outcome 3 will result in provision of timely climate information and advisories in using digital technologies and the PICSA approach is expected to improve decision making and reduce the economic losses and social impacts from climate disasters as these will be mitigated against through the planned adaptation activities and preparedness. employment

79. Interventions under component 2 and output 2.1and output 2.2 on adoption of CSA and on restoration of landscape will reduce costs of agricultural production due to restored landscape, functional ecosystems, adoption, and the use of organic fertilizers (manure), soil fertility enhancing trees which will partially replace exorbitant inorganic fertilizers; and increased income (production) from double cropping in irrigation schemes, improved value addition and better access of markets.

80. Though not yet definite at this time, it is envisaged that the assessment and recommendation

for smallholder participation in Malawi Carbon Trade Initiative create extensive and new opportunities for small scale farmers adoption of climate mitigation activities as it may incentive farmers to adopt sustainable land management practices and enhancing forest cover and other ecosystem services.

81. **Social benefits and gender empowerment**: The project also seeks to promote gender equality in line with the National Gender Policy (2015)[48], Malawi Gender Act (2014), IFAD Gender and Women Empowerment Policy (2015) and the Adaptation Fund Gender Policy (2017) and Environment and Social Policy (2016). The project will contribute to reducing the current high level of gender inequality and unemployment levels among women, youth and people living with disabilities.

82. Affirmative targeting of participants for gender equality will lead to social economic empowerment for youth and women to engage in micro-enterprises and derive decent employment; Women and youth will be targeted to actively participate in the project, including holding leadership positions to influence decision making. Selected value chains shall be gender responsive. Knowledge and awareness for social inclusion shall be raised through Gender Action Learning System (GALS) approach for the beneficiary groups not yet conversant in the GALS approach. Through increased access to cleaner energy sources and promotion of water harvesting techniques, there will be reduced burdens placed on women and girls who are often responsible for collecting firewood.

83. As many targeted vulnerable groups face food insecurity and poverty, the project is expected to improve the income of the beneficiaries which in turn culminates into improved living standards which elevates social status of targeted beneficiaries. Therefore, the project will help in increased food production (20%), household income (25%) and increased alternative livelihood options and nutrition security due to diversification (livestock, crops). Additionally, the project will promote water harvesting in drought prone areas, thereby increasing water availability for both household and agricultural production use and reducing burden pressed on women and girls.

84. SCRP will ensure the communities take ownership of the climate change interventions and capacitate them to respond adequately and beyond the project timeframe to maintain success in social livelihoods. All landscape restoration activities will be participatory and will be adapted to the community needs and acceptable cultural practices.

85. **Environmental and ecosystems benefits**: While increasing agricultural productivity, the project will also enhance the resilience of agricultural farming systems through promotion GAPs and climate resilient practices from activities outlined in output 1.2 on adaptive research, output 1.3 on land restoration. Farmers will be capacitated and supported to adopt soil and water management practices, participatory restoration of micro catchments to reverse high levels of land degradation and enhance biodiversity and ecosystem services under output 1.3.

86. The project will also enhance access to clean energy sources, including solar panels, and efficient energy stoves, thereby reducing burden placed on women and girls in fetching firewood. This not only saves time and reduces physical strain but also decreases health risks associated with smoke and indoor air pollution. Cleaner energy access and afforestation activities will lead to better forest cover and reduced deforestation due to reduced demand in firewood. Other environmental and ecosystem co-benefits such as biodiversity as result of afforestation, reduced deforestation and natural regeneration and sustainable practices are also envisaged.

87. The successful design and participation of small-scale farmers in the Malawi Carbon Credit initiatives will motivate farmers in landscape restoration through the carbon accrued credits and payment. The process and procedure of Malawi Carbon Trade is yet evolving. The project envisages to seek out opportunities for its beneficiaries and relevant public institutions when the system of Malawi Carbon Trade is up and running.

88. Following the Government of Malawi and IFAD Social, Environment and Climate Assessment Procedures (SECAP) requirement, all sub-projects shall undergo environmental and social safeguards screening and formulation of specific Environmental and Social Management Plans (ESMPs) to ensure

[48] *Ministry of Gender, Women, Children and Social Welfare (2015).* https://www.fao.org/faolex/results/details/en/c/LEX-FAOC149139/

that negative impacts are mitigated and that positive impacts are enhanced. It is important to note that the SECAP requirement conforms to the 15 ESP Principles of the Adaptation Fund by ensuring the :a) compliance with the extant laws; b) promotes access to equity; c) protects the vulnerable and the marginalized; d) promotes human rights; e) guarantees equality and women empowerment; f) guarantees core labor rights; g) indigenous peoples rights; h) minimizes involuntary resettlement; i) protects natural habitats; j) conserves biodiversity; k) climate change; l) pollution prevention; m) public health consideration; n)physical and cultural heritage and Land and soil conservation . The project will undertake further awareness among all stakeholder and selected groups to promote women, youth and child rights. A comprehensive grievance redress mechanism shall be in place to ensure reporting and redress of complaints during project implementation.

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

89. Frequent climate related disasters result in large costs for repairs and rebuilding for both communities and the Government of Malawi, thereby diverting scarce resources from other development needs. For instance, the 2015 floods resulted in economic losses of $335 million apart from the death casualties and displacement of 638,000 people. Strengthening institutional capacity as outlined in output 3,1 and output 3.2 on disaster risk management is cost effective as it will contribute to averting loss and damage among the vulnerable communities. Additionally, the institutional and local community capacity will enhance project ownership and will ensure long term commitment by government institutions and beneficiary groups.

90. Additionally, in undertaking the project interventions, particularly the selection of value chains, the project will adopt the Multi-Criteria Analysis (MCA) to determine which most feasible options would be implemented. The approach takes into consideration several criteria including technical feasibility costs, benefits, potential to address climate change risks, accessibility of option to small-scale farmers, flexibility (i.e., avoids lock-in), mitigation co-benefits and transformative potential. This approach is considered sustainable in that it involves an extensive participatory process of the farming communities and other stakeholders.

91. Considering the high degradation levels of soils in Malawi, no meaningful agricultural activities are undertaken without use of inorganic fertilizers, apparently fertilizers have exorbitant costs that are not easily managed by smallholder farmers. Enhancing sustainable on-farm and landscape management through CSAs and GAPs will restore land productivity. The participation of vulnerable communities in the project will be cost effective as will improve household food security self-reliance, reduce dependency on humanitarian support and reduce import food bills for the Government.

In terms of economic benefits, the SCRP is projected to yield a baseline Economic Rate of Return of 23% with a positive Net Present Value of US$11.9 million (MWK 12.3 billion). All quantifiable benefits being discounted over a period of 20 years including 7 using 17% lending rate of Reserve Bank of Malawi (RMB) to commercial banks. For emphasis the economic rate of return measures the discount rate which equates the present value of its expected cash flows stream of project to its initial outlay. This concept is central to economic investment theory. The baseline ERR of 23% is higher than the discount rate used for economic analysis, which confirms the justification of the proposed project investment. The overall project benefits cost ratio is computed at 5.7.

92. The project is providing gender responsive climate financing, which is usually not available or easily accessed by small scale farmers due to high collateral requested by financing institutions. Further as the project will build farmers in groups an enhance capacity in business management and governance, The groups will be formalized and may easily access finance from lending institutions. Matching grants

93. Cost effectiveness of SCRP is further strengthened in many ways by building on lessons and knowledge products and upscaling of successes from previous and on-going related programmes such as Enhancing Resilience of Agro Ecological Systems Projects (ERASP); the SAPP, SAPP II, Malawi Carbon Trade Initiative, PRIDE and, FARMSE among others (refer part D Table 6). SCRP build on and improve the management and implementation of the matching grants arrangement under SAPP in the outlined Farmer Challenge Fund by linking host of the fund to one of existing financing institutions so

that farmers have capacity and experience in dealing with established financing institution. SCRP will adopt lessons, manuals developed under ERASP, PRIDE in ENRM for building capacity of local communities, formulation and implementation of catchment and management plans.

94. SCRP will conduct an analysis to identify opportunities and recommendations on how smallholders' farmer may participate, where possible in the Malawi Carbon Trade Initiatives. Besides increased resilience and improved productivity, the payments from accrued carbon credits would another strong motivating for farmers to increase adoption CSA technologies and catchment conservation. Additionally lessons under FARMSE, and piloting of insurance products and the Global Climate Adaptation design on digitalization of agricultural extension and climate information services will be used by SCRP to formulate policy briefs the will guide effective utilization of climate information for agricultural extensions services and disaster risk management in Malawi.

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

95. The Government of Malawi has put in place some policies and strategies to guide the development of the agriculture sector and resilience to climate change. The Vision 2063 has emphasized on agriculture transformation by shifting from low productivity and subsistence-oriented agriculture to a highly productive and commercialized agriculture system with manufacturing linkages. In seeking to improve agricultural productivity, the Vision 2063 has recognized the need for optimal utilization of land, improved and sustainable land management practices, including promotion of climate smart and resilient agriculture technologies.

96. In the agricultural sector the National Agricultural Policy (NAP) (GoM 2016)] defines the vision and provides a high-level framework for development of the agricultural sector in Malawi. The Policy intends to achieve sustainable agricultural transformation, expand incomes for farm households, improve food and nutrition security and increase agricultural exports by creating a conducive environment for development of the sector. In addition to production and productivity, the NAP also addresses sustainable management of agricultural resources, resilience to climate change.

97. To guide agricultural investments, the government further formulated the National Agriculture Investment Plan [NAIP) (GoM 2019), which has four broader program areas that include: policy and institutional coordination; resilient livelihoods and production systems; production and productivity growth; and markets and value chains (GoM 2019). Broadly, NAIP is crafted to contribute to the achievement of the NAP goal and the attainment of the Malabo Declaration. The main objectives of NAIP are a) broad based and resilient agricultural growth, improved well-being and livelihoods of Malawians, and improved food and nutrition security.

98. In addition to the Malawi Vision 2063, NAP and NAIP, the Malawi Government has also formulated the climate change related planning documents, which include the National Climate Change Management Policy (GoM 2016), the updated Nationally Determined Contribution [NDC (GoM 2022)] and the National Resilience Plan (GoM 2017). The Policy provides strategic direction for Malawi's priorities for climate change interventions and outlines an institutional framework for the application and implementation of adaptation, mitigation, technology transfer and capacity building.

99. The updated NDC outlines Malawi's climate change priorities for the period from 2020 - 2040 and has provided concrete strategies for addressing the causes of climate change and responding to the adverse effects and impacts in line with provisions established under the Paris Agreement. The updated NDC highlights both mitigation and adaptation commitments based on support. The NDC has prioritized ten strategic adaptation options with objectives to: (i) promote an enabling environment to facilitate Climate Change Adaptation (CCA) mainstreaming, (ii) improve capacity for data and information management and sharing, and access to technology and financing for adaptation, and (iii) plan and implement adaptation actions toward an increased resilience of the most vulnerable Malawians.

100. The National Resilience Strategy (GoM 2017) envisions a nation free of chronic vulnerability and food and nutrition insecurity, where sustainable economic development creates opportunities for everyone, and where people are resilient to economic and environmental shocks that affect their lives and livelihoods. The Strategy has four pillars which include: a) resilient agriculture; b) disaster risk management; c) human capacity development; and d) catchment protection and management. A brief overview of the main agricultural and climate change related policies and strategies are presented in the Table 5 below.

Table 5. Highlights of Malawi national agricultural and climate change policies and strategies.

ID	Name of policy and strategy	Alignment with SCRP interventions
1	Malawi Vision 2063 (GoM 2020)	Vision 2063 is the country's economic blueprint. The vision aims to enhance economic growth by among others enhancing agricultural productivity, commercialization, diversification, use of modern technologies, access to targeted agriculture insurance. The Vision also outlines how to ensure sustainable land management practices, soil and water conservation, agroforestry, CSA agriculture through irrigation and insurance and crop diversification beyond maize production including promotion of climate smart agriculture technologies. SCRP contributes to Vision 2063 as it will improve agricultural productivity, commercialization through use of climate resilient technologies such as soil and water conservation, agroforestry, CSA agriculture through irrigation (SCRP outcome 1), enhance sustainable land and micro catchments management (SCRP outcome 2).
2	National Agriculture Policy (GoM 2016)	The main policy document for the agricultural sector with eight Policy Priority Areas (PPAs) to achieve sustainable agricultural transformation, expanding incomes for farm households, improved food and nutrition security. NAP also highlights inclusive agriculture value chains through empowerment of women and youth to access productive assets and agriculture financing. Other activities highlighted under NAP include innovative extension, access to high quality inputs; irrigation, water catchment management; CA and soil nutrition. SCRP will contribute to NAP objectives of increased food and nutrition security and household incomes through capacity building and adoption of CSA (SCRP outcome 1) and sustainable financing climate resilience technologies (SCRP outcome 2) and innovative extension, access to high quality inputs
3	National Agriculture Investment Plan (2019)	SCRP is also well aligned to NAIP, which is a national framework to guide agricultural investments, has four broader programme areas that include: resilient livelihoods and production systems; production and productivity growth; and markets and value chains. Broadly crafted to contribute to the achievement of the NAP goal and the attainment of the Malabo Declaration (African Union Zero Hunger initiative by 2025). Actions under resilient agriculture pillar include Disaster risk reduction measures; pest and disease surveillance, livestock pass on schemes, agroforestry, conservation agriculture and nutrition related agriculture. resilient livelihoods and production systems; production and productivity growth; and markets and value chains.
4	National Climate Change Management Policy (2016)	The policy sets out long-term goal for climate change management, which is to reduce the socioeconomic impacts of adverse effects of climatic change. The medium-term outcome is improved community resilience to climate change through the development of sustainable livelihoods and reduced emissions of GHGs. The policy outcomes include reduced vulnerability to climate change impacts through improved, social, economic and ecological resilience; reduced greenhouse gas emissions; increased awareness of climate change impacts, adaptation and mitigation measures; research, technology development and transfer and systematic; observations enhanced and strengthened, and enhanced capacity to implement climate change related interventions to which SCRP is well aligned
5	National Climate Change Investment Plan (2013)	The Investment Plan highlights priority areas for climate change investments to avert climate related impacts. One of the priority areas is climate adaptation, whose actions include increase adaptive capacity of local communities through weather forecasting; afforestation, development of watersheds management plans; forest cover in degraded lands; reduce sedimentation from soil erosion; strengthen preparedness at all locals including communities.

		As stated SCRP will likewise promote priority areas for climate change investments to avert climate related impacts. by enhancing adaptive capacity of local community's weather forecasting; afforestation, watersheds management plans; increase forest cover in degraded lands; and strengthen preparedness at all locals including communities
6	Updated National Determined Contribution (2022).	NDC main objectives include: (I) promote an enabling environment to facilitate Climate Change Adaptation (CCA) mainstreaming, plan and implement adaptation actions toward an increased resilience of the most vulnerable Malawians. NDC outlines adaptation initiatives including strategic adaptation actions that include drought management through forecasting, use of early maturing and drought tolerant species, flood management through forecasting, integrated watershed management, natural generation; CSA activities including soil and water conservation, construction of irrigation schemes, water harvesting and access to improved seed through community seed banks. weather index insurance, value addition, and post-harvest management. Just like the NDC, the SCRP adaptation actions that include drought management through forecasting, use of early maturing and drought tolerant species, flood management through forecasting, integrated watershed management, afforestation, natural generation; CSA activities including soil and water conservation, construction of irrigation schemes, water harvesting and. weather index insurance, value addition, and post-harvest management;
7	National Resilience Strategy (2018).	The Strategy has seven pillar impacts which include: transformed agricultural sector into an engine for shared economic prosperity, food security and poverty reduction; scaled-up climate-resilient infrastructure, and enhanced climate-adaptation capacity of all stakeholders, through better access to climate information and early warning and drought mitigation through water harvesting and irrigation; climate smart and insurance products, farmer organization to access market s and value addition, resilient landscape through afforestation and micro watershed management; scaling up payment of carbon credits, clean energy access through solar; disaster preparedness through community based EWS and contingency plans. SCRP is responding to NRS pillars food security and poverty reduction; through scaled-up climate-resilient infrastructure, and enhanced climate-adaptation capacity of beneficiaries, SCRP will enhance better access to climate information and early warning and drought mitigation through water harvesting and irrigation; farmer organization to access markets and value addition, resilient landscape through afforestation and micro watershed management; SCR P will also make an assessment that will recommend as feasible the scale up payment of carbon credits for smallholder farmers
8	The Third National Communication Report to the UNFCCC (2021)	The 3rd National Communication has highlighted a number of adaptation activities such as drought tolerant and early maturing varieties; improving access to quality seeds; promoting irrigation; promote weather-based insurance; use of climate information and EWS; water harvesting and mechanization among others. The SCRP is directly contributing to climate change adaption priories as outlined in the 3rd National Communication. SCRP is supporting farmers resilience through same highlighted adaptation activities

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

101. The project aligns with the Adaptation Fund Standards and Policies vis-a-vis the Social and Environmental Policy[49] and the Gender Policy[50]. In this instance, the Project has taken into consideration the 15 ESP Principles as outlines in contained in the approved AF ESP of 2013 and as amended in 2016. The Project therefore emphasizes: a) compliance with the extant laws; b) promotes access to equity; c) protects the vulnerable and the marginalized; d) promotes human rights; e) guarantees equality and women empowerment; f) guarantees core labor rights; g) indigenous peoples rights; h) minimizes involuntary resettlement; i) protects natural habitats; j) conserves biodiversity; k) climate change; l) pollution prevention; m) public health consideration; n)physical and cultural heritage

[49] *Adaptation Fund Social and Environmental Policy (2013). https://www.adaptation-fund.org/wp-content/uploads/2015/09/Environmental-Social-Policy-approved-Nov2013.pdf*

[50] *Adaptation Fund Social and Environmental Policy (2016). https://www.adaptation-fund.org/wp-content/uploads/2016/09/AF-presentation-Gender_YL_DC-Rabat_Day2.pdf*

and Land and soil conservation. Furthermore, alignment will be ensured by adherence to the and the Malawi Government policies, including the environmental laws and regulations, particularly the Environmental Management Act (2017) and the National Environmental Action Plan. IFAD as an Implementing Entity shall strongly collaborate with the Malawi Government, particularly through the Malawi Environmental Protection Authority (MEPA) in strengthening compliance and alignment of IFAD procedures, Malawi country laws and Adaptation Fund procedures.

102. SCRP will adhere to the National Environmental regulations such the National Environmental Policy which provides a comprehensive policy framework on environmental planning for development programmes introducing environmental impact assessment for projects. The Environmental Management Act (EMA) (2017) and its previous versions aligns Malawi's environmental and natural resources management with global standards. The EMA makes Environmental Impact Assessments (EIAs) a statutory requirement and outlines the EIA process and guidelines and procedures for the EIA legislation. EMA lists projects that cannot be licensed and implemented until a satisfactory EIA study has been completed and approved.

103. Additionally, SCRP will follow the Malawi's National Guidelines on Integrated Catchment Management and Rural Infrastructure (2016), which outlines catchment management principles, role of stakeholder including the village-level communities. The SCRP will also contribute to the implementation of the National Environment Action Plan (NEAP) which is a framework mainstreaming environmental planning and management into the country's socio-economic development. NEAP focuses on deforestation, natural resources, including biodiversity loss and habitat degradation, soil depletion and erosion. As SCRP productive activities may involve use of pesticides especially under agricultural production, SCRP will also be guided by the Malawi Pesticide Act (2014), which prescribe types and procedures for manufacturing, importing, applications and mitigative options for pesticides.

104. The national regulations will further be reinforced by both and Malawi Government on conservation of biodiversity, resource efficiency and pollution prevention, cultural heritage, gender empowerment, labor and working conditions, community health and safety, physical and economic resettlement, and climate change adaptation among others. Likewise, the Government of Malawi's Environmental Management Act (2017)[51], gives guidance on mainstreaming social and environmental safeguards to mitigate perceived negative impacts. This proposed project has already undertaken an Environmental and Social Safeguards Screening with categorization of moderate/category B. A generic Environmental, Social and Climate Management Plan (ESCMP) with clear mitigative actions and specific stakeholder responsibilities will be formulated during full proposal development to avert the negative impacts that are reversible.

105. The implementation of the to be formulated specific ESMPs will guarantee improved social, environment, biodiversity and natural resources management- thus going beyond nor doing harm scenario. As regards climate change adaptation, the project has also proposed area specific adaptation options based on projected climate change impacts, adaptive capacity and vulnerability of targeted beneficiaries and their livelihoods. In contributing to climate change action, the project ensures that adaptation and mitigation objectives as outlined in the revised NDC (GoM 2021)[52], The National Climate Change Policy (GoM 2016) and Climate Change Investment Plan (GoM 2013)[53] and the Third National Communication are promoted.

106. The project also seeks to promote gender equality in line with the National Gender Policy (GoM 2015)[54], Malawi Gender Act (GoM 2014), IFAD Gender and Women Empowerment Policy (GoM 2015) and the Adaptation Fund Gender Policy (2017) and Environment and Social Policy (2016). The Programme places a strong emphasis on social inclusion. The project aims to contribute to gender transformation, thus going beyond active women and youth participation but also seeking women

[51] *Ministry of Natural Resources, Energy and Environment (2017).* https://www.fao.org/faolex/results/details/en/c/LEX-FAOC169354/
[52] *Ministry of Natural Resources, Energy and Environment (2021).* Updated NDC. https://unfccc.int/sites/default/files/NDC/2022-06/Malawi%20Updated%20NDC%20July%202021%20submitted.pdf
[53] *Ministry of Natural Resources, Energy and Environment (2013). National Climate Change Investment Plan.* https://climate-laws.org/document/national-climate-change-investment-plan-2013-2018_9645#:~:text=This%20plan%20identifies%20four%20key,and%20transfer%3B%20and%20capacity%20building.
[54] *Ministry of Gender, Women, Children and Social Welfare (2015).* https://www.fao.org/faolex/results/details/en/c/LEX-FAOC149139/

access to productive resources, women empowerment in leadership and decision-making processes. In this case the project will further undertake extensive stakeholder consultation to identify the causes of economic and power disparities, differentiated disproportional vulnerabilities and barriers among marginalized and vulnerable groups particularly women and youth. The project will target 60% women and 30% youth thereby providing means to production and equality.

107. To promote resource efficiency and reduce environmental degradation the project will improve soil and water conservation, irrigation water use efficiency, landscape restoration, chemical inputs will be replaced with eco-friendly inorganic fertilizers and pesticides, and where feasible the project will promote integrated pest management (IPM) and pesticides management plan. Such activities will be in line with the National Agricultural Policy (GoM 2016)[55], the National Irrigation Policy (GoM 2016), the Environmental Management Act (GoM 2017)[56]. Project priority is on sustainable management of productive resources (soil, land, and water) with activities supporting promotion of Good Agricultural Practices (GAP), energy saving technologies, soil fertility improvement and conservation agriculture.

108. The project through the Malawi Labour Act (GoM 2000)[57], Malawi Employment Act (2014)[58], and ILO labour regulations will ensure prevention of child labour and provide safe working conditions and less burden especially on women. In contributing to the National Energy Policy (GoM 2018)[59] and the National Water Policy (GoM 2005),[60]. The project will reduce the burden on women and girls in accessing clean water through provision of clean energy alternatives and water harvesting technologies. These initiatives will reduce related health risks from use of firewood polluted water and time invested by women and girls to fetch water. Overall, the project contributes to several Sustainable Development Goals of the Malawi Government.

109. To ensure transparent implementation of project interventions and considering community voices, a Grievance Redress Mechanism for beneficiaries will be developed to address all complaints in the implementation of the project during proposal development stage. A brief description of some national policies, regulations and laws and their respective alignment to the Adaptation Fund Environmental and Social Policy and the Gender Policy are presented under Annex C.

E. Describe if there is duplication of project with other funding sources, if any.

110. The SCRP activities have no duplication but upon several previous and ongoing interventions undertaken by the Government of Malawi and IFAD. The synergies and complementarity between the different initiatives are outlined in Table 6.

Table 6. Synergies between SCRP with previous and ongoing interventions

ID	Previous or on-going interventions	Objectives	Synergies
1	Enhancing the Resilience of Agro-ecological Systems Project (ERASP) by Ministry of Agriculture and IFAD (2016 -2023) $7,397,000	ERASP sought to promote interventions to reduce land degradation, loss of agro-biodiversity, enhance climate change adaptation and mitigation, improved credit and market access.	Both projects cover climate variability resilience and restoration of degraded landscape but in different areas. SCRP will adopt lessons, manuals developed under ERASP in ENRM building capacity of local communities, formulation and implementation of catchment and management plans
2	Sustainable Agriculture Productivity Programme (SAPP) by Ministry of Agriculture and IFAD	SAPP objective was to contribute to the reduction of poverty and improved food security among the rural	Both projects aim to increase climate resilience through adoption of CSA in different project areas. SCRP will improve agricultural practices and resilience of communities

[55] *Ministry of Agriculture (2016). National Agriculture Policy. https://cepa.rmportal.net/Library/government-publications/national-agriculture-policy-2016/view*
[56] *Ministry of Agriculture (2016). National Irrigation Policy. https://cepa.rmportal.net/Library/government-publications/national-irrigation-policy-2016/view*
[57] *Ministry of Labour (2000). Malawi Labour Act. https://invest.mitc.mw/images/downloads/Employment-and-Labour-Acts-of-Malawi.pdf*
[58] *Ministry of Labour (2021). Amended Malawi Employment Act- amended 2021. https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=112666&p_count=32&p_classification=01*
[59] *Ministry of Energy (2018). National Energy Policy. https://npc.mw/wp-content/uploads/2020/07/National-Energy-Policy-2018.pdf*
[60] *Ministry of Water development (2015). National Water Policy. https://faolex.fao.org/docs/pdf/mlw165858.pdf*

	(2016 -2022) $73,224,300	population through adoption of GAPs. SAPP achieved great success regarding agricultural extension capacities in selected districts, livelihood diversification through small livestock passes on programme and adoption of GAPs with financing from the Village Challenge Fund Initiative	based on SAPP lessons. SCRP will adopt and improve on the financing window through FCF. on a) creating a separate window for resource restricted smallholder farmers that still lack access to improved inputs for improved productivity; b) introduce a specific window for farmers that seek value and commercialization; b) host of the fund to one of existing financing situations so that farmers have capacity and experience in detailing with established financing institution.
4	Assessment on Digitalization of Agro extension services and climate information services by the Global Climate Adaptation (2024)	Aims to develop a roadmap, design and build capacity to improve agro extension and climate information services through digitalization	SCRP Full project design will build on recommendations of GCA and roll out the digitalized agro extension services and climate information on pilot basis.
5	Malawi Carbon Trade Initiative (Just launched and on-going) jointly managed by the Minister of Finance and Economic Affairs and the Minister of Natural Resources and Climate Change	To enhance forest cover, biodiversity, while maintaining supply of ecosystems services and create alternative incomes generation	SCRP will contribute to forest cover engage beneficiaries' communities in landscape restoration and assess opportunities where feasible to facilitate participation in the carbon trade initiative.
6	Programme for Rural Irrigation Development (PRIDE 2015 -2026) $ 125.88 Million by Ministry of Agriculture and IFAD	PRIDE aims to enhance rural Malawian communities' resilience to food insecurity and the adverse effects of climate change. PRIDE will develop climate-smart land and water management systems for small-scale farmers engaged in rainfed agriculture and cultivating on irrigated land.	Both PRIDE and SCRP aim to enhance community resilience however the interventions will be in different areas. Lessons from PRIDE will be used to guide and upscale SCRP initiatives in climate smart land and water initiatives under component 1 and 2.
7	Financial Access for Rural Markets, Smallholders and Enterprise Programme (FARMSE 2017 – 2028) US$ 102.73 million by Ministry of Agriculture and IFAD	FARMSE seeks to reduce poverty, improve livelihoods and enhance the resilience of rural households on a sustainable basis through improved financial access	Both projects aim to reduce poverty through enhanced access to climate financing in different areas. Lessons learnt under FARMSE, and piloting of insurance products will be used under SCRP component 3 to support formulation of policy brief designing of attractive and innovative crop-based insurance under smallholder farmers
8	Transforming Agriculture through Diversification and Entrepreneurship Programme (TRADE 2019- 2026) US$ 125.35 million by Ministry of Agriculture and IFAD	To *increase* value chain commercialisation and resilience of rural poor and smallholder producers	Both projects seek to improve value chains productivity and marketability among vulnerable communities. TRACE is successfully supporting smallholder farmers in agro-processing. Lessons under business management skills and agro processing will be useful for SCRP communities.
	Adapting to Climate Change Through Integrated Risk Management Strategies and Enhanced Market Opportunities for Resilient Food Security and Livelihoods WFP (2020-2024) USD $9,989,335	to enhance climate adaptation and food security of households through access to integrated climate risk management strategies and structured market opportunities	While there is significant synergy between the two projects, there are notable differences that suggest complementary rather than duplicative efforts. SCRP has a distinct emphasis on climate resilience and sustainable productivity, primarily focusing on the assessment of climate-resilient value chains and market dynamics. It also places a

			strong emphasis on institutional capacity building and knowledge management, particularly in modernizing agricultural extension systems and risk management. In contrast WFP implemented project focuses more into specific interventions like weather index microinsurance, soil and water conservation, and crop diversification. It uniquely focuses on building national capacities for weather index insurance and s, market access, and infrastructure for storage and aggregation.

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

111. One of the constraints the project is addressing is the limited knowledge and capacity to adopt climate resilience technologies to enhance production and limited capacity to plan and effectively manage climate related disasters. Therefore, the project is supporting a full-fledged knowledge management and institutional capacity building component. SCRP will support capacity building activities to facilitate effective implementation and outreach to targeted project beneficiaries.

112. The capacity building activities will include complementing the Project Management Unit (PMU) with additional staff where needed in areas of monitoring and evaluation, procurement, agribusiness, grants management, environment and climate change, gender, nutrition and social inclusion, and a dedicated knowledge management and communication officer. SCRP will also undertake capacity building of partners at the district level to strengthen project implementation. Knowledge gathered from previous SAPP and other projects (see Table 6) to better cope with climate change impacts related to pest and disease outbreak will be promoted.

113. A comprehensive Knowledge Management and communication strategy anchored on the existing M&E system, and consistent with the knowledge diffusion strategy that is being formulated under the Agriculture Sector Wide Approach – Support Programme (ASWAp-SP), will be prepared during the first year of project implementation. The Project will make budgetary provision to execute this function effectively, including national and international technical assistance. Knowledge harvesting, storage and processing resources will be made available to the people and organisations that need it and to ensure best use of knowledge generated by other initiatives in Malawi and the region.

114. Electronic databases accessible through the project website, will constitute the primary tool. Such databases are already available under the Ministry of Agriculture Irrigation and Water Development (MoAIWD) Technical Secretariat, with an experienced management team. SCRP will complement in financing additional hardware and software, to better maintain and disseminate data, and library services for document acquisition and storage at various workstations.

115. Additionally, the project will employ a “value chain” approach to knowledge management, incorporating action learning approaches, training at various levels, establishment of communities of practice and systematic documentation and knowledge dissemination processes. Some of these elements are present in MoAIWD, but require better coordination, particularly the flow of information and knowledge sharing in the extension system. After information is captured, there will be value addition through interpretation and analysis, drawing on information from other sources, and adapting it for use by a range of partners. Instruments to be deployed will be specified in the knowledge management and communication strategy.

G. 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 and Gender Policy of the Adaptation Fund.

116. The SCRP design adopted a highly consultative process with stakeholders, farming communities who were involved in identifying the problems, needs related to resilience to climate change, sites for project implementation and the Government of Malawi, including the District Councils under the Ministry of Local Government, technical officers under the Ministry of Agriculture and the Ministry responsible for environment and natural resources management. Consultations were made between 12 -21 June 2023. The essence of the consultations was to elicit ideas from a wide range of stakeholders including vulnerable groups and gender considerations such that activities to be implemented will be inclusive and embracing across the various strata of the society and beneficiaries.

117. Face to face key informant interviews and discussions were held with several government departments (Department of Planning, Department of Crop Production, Department of Livestock, Department of Irrigation, Department of Agricultural Research under the Ministry of Agriculture). Additionally further discussions were held with the Ministry of Finance; the Department of Disaster Management Affairs and the Department of Meteorology and Climate Change; and the Environmental Affairs Department; relevant NGO and private sector such as the Total Land Care and the Red Cross Society, the local banks, and the seed producers. Discussions with most stakeholders particularly DoDMA and Red Cross outlined the differentiated impacts that women and girls face from climate change impacts and need for gender responsive value chains and participation of women.

118. The district and local level discussions were also held face to face with District Council representatives in Balaka and Blantyre. Discussions focused on observed climate impacts faced in the districts, vulnerabilities, and feasible adaptation options for the districts. Further specific mixed gender groups and women only groups (potential or those that previously received support from other intervention) at community level were held. Previous supported groups emphasized usefulness of the GALS approach and had increased representation of women in decision making. However, the discussions still showed that most women had limited access to credits, and access to productive assets.

119. The stakeholders' engagement assisted in itemizing activities towards building leadership and governance structures; management plans that define the roles and responsibilities of various stakeholders; support community efforts towards agricultural development including planting and replanting as well as improving disaster risk management and gender sensitive climate change adapted technologies as well as pilot risk mitigation measures such as weather asset insurance schemes. The Stakeholders' engagement elicited useful information on the activities for consideration that would benefit a wide range of stakeholders' particularly the vulnerable groups of women and youth. A careful and deliberate integration of their views informed the entire concept development and selection of project activities. A list of stakeholders consulted, and views is attached in the annex B.

120. More elaborate consultations will be done at full proposal stage including a robust gender analysis in addition to Annex C to ensure needs for all stakeholders are included in the project. Particular attention will be given to vulnerable groups. Male and female beneficiaries will be interviewed separately and in mixed groups. A gender specialist will guide the timing and location of consultation meetings to ensure inclusive participation and ensure the gender targets in meetings is achieved.

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

121. The agriculture sector remains a key contributor to Malawi's economy, employing around 85% of the workforce, contributing 40% of GDP and 80% of export earnings. However, the sector still faces several challenges, including climate change. These challenges, considering the resource limitations faced by the vulnerable are expected to be financed from public and other multilateral funding agencies, such as the Adaptation fund.

122. The beneficiaries of the project are among the most vulnerable communities to climate change impacts. As these communities face strategic constraints to climate resilience, notably, i) land degradation and low soil fertility, ii) limited access to improved technologies and farm inputs, iii) limited access to markets and value addition opportunities, iv) limited access to productive resources and economic empowerment for youth and women to engage in micro-enterprises and derive employment;

v) limited generation and access to climate change information for informed decision making; and, vi) limited institutional capacity in disaster risk management, their livelihoods and survival are tied to effective climate change adaptation and is imperative to seeking financial support from multilateral financing institutions.

123. Selected communities face huge environmental problems that impact on the fragile ecosystem and landscape. Land degradation is Malawi is rapid and urgent efforts are required to address it. The Adaptation Fund financing would be timely to rehabilitate catchment and protect the ecosystem, land and water resources upon which most community livelihoods depend. This would lead to an increase of agricultural productivity, in addition to improvement of ecosystem services and reduction in environmental degradation.

124. Issues seeking redress in this project include sustainable agricultural practices, integrated landscape and innovative climate change and gender responsive financing. In the course of the project, it is expected that new innovative solutions, lessons and best practices will be found or refined for further upscale in future interventions. If no action is taken, there is considerable threat, as climate change risks and their intensities will increase thereby further negatively affecting the most vulnerable communities.

125. Malawi has submitted the updated NDC (GoM 2021) and highlighted the adaptation, mitigation and technological needs to fulfill its commitment under the Paris Agreement. To fully implement the mitigation and adaptation contributions highlighted in the updated NDC, Malawi requires support in the form of finance, capacity building and technology transfer. The estimated cost for adaptation measures only is about 4.5 billion USD, which requires contribution from multilateral funding agencies.

Comprehensive presentation of Scenario Without Intervention and Justification for Adaptation Cost by components:

Component & Outcome/Output	Scenario Without Intervention	Justification for Adaptation Cost
Component 1: Increased smallholder productivity and climate resilience		
Outcome 1.0: Increased farmers' climate resilience in agriculture, nutritional sensitive production systems and sustainable landscape management	Without support, smallholder farmers continue to face climate change risks, poor market linkages and degraded landscapes, leading to reduced productivity and resilience.	Investment ensures sustainable agricultural practices, improved livelihoods and enhanced ecosystem health, offsetting long-term environmental and economic costs
Output 1.1 Climate resilient value chains and climate sensitive market dynamics assessment conducted considering gender impacts. .	Lack of climate resilient value chains leads to continued exposure to climate risks and market volatility, affecting farmers' incomes and food security. ▪ Stakeholder mapping, needs assessments and workshops delivered, ensuring an adequate gender balance and representation of vulnerable groups to determine regional priorities and appropriate actions	Funding for assessments and development of resilient value chains ensures sustainable agriculture, benefiting farmers economically and environmentally.
Output 1.2 Adaptive capacity for climate-smart, nutrition-sensitive production systems and gender transformative approaches enhanced	Low adaptive capacity results in continued use of unsustainable agricultural practices, affecting crop yield and quality. ▪ Awareness raised through the production of leaflets, posters, radio, TV and internet campaigns	Enhancing adaptive capacity through training and technology transfer leads to better crop yields and sustainable practices, justifying the cost with long-term benefits.
Output 1.3 Sustainable management of landscapes and restoration of degraded micro catchments enhanced emphasizing inclusive participation	Continued land degradation exacerbates soil erosion, flood impact, and loss of biodiversity, affecting agricultural productivity. ▪ Gender-sensitive training programmes designed, trainers of trainers and male and female beneficiaries trained	Restoration of landscapes and micro-catchments prevents further degradation, enhances ecosystem services, and supports agricultural sustainability.
Component 2: Promoting commercialization of climate smart smallholder farming systems		

Outcome 2.0: Enhanced climate resilience and gender responsive financing	Without intervention, smallholder farmers remain vulnerable to climate change impacts and lack access to gender responsive financing, hindering growth.	Providing climate resilient financing and support for commercialization of farming systems empowers farmers, especially women, to adapt to climate change and improve their livelihoods.
Output 2.1 Farmers group established or strengthened to adapt to impacts of climate change with 50% participation of women.	Farmers continue to work in isolation, facing climate change impacts without support, resources, or knowledge to adapt. ▪ Famers group mobilised and trained on group dynamics for business.	Strengthening farmer groups provides a support network, shared resources, and knowledge, leading to better climate change adaptation and collective resilience.
Output 2.2 Climate and gender responsive and sustainable financing through Farmer Challenge Fund (FCF) to address climate resilience provided	Limited access to financing constrains farmers' ability to invest in climate resilient practices and technologies. ▪ Ensuring gender equity in accessing financing under the FCF ▪ Beneficiaries – women and men – identified and grant equivalent assets distributed for innovative climate resilience technologies	The Farmer Challenge Fund enables access to necessary financing, driving the adoption of climate resilient practices and technologies.
Component 3: Strengthened institutional capacity and knowledge management systems		
Outcome 3.0: Strengthened institutional capacity in knowledge management, agriculture extension and disaster risk management.	Without strengthening, institutions remain ill-equipped to manage climate change impacts, lacking capacity in knowledge dissemination and disaster risk management.	Investing in institutional capacity and knowledge management ensures effective climate change adaptation strategies, reducing long-term climate-related risks.
Output 3.1 Capacity staff and institutions in climate related modern agricultural extension systems and disaster risk management enhanced with participation of both women, men and youth:	Inadequate staff training and poor coordination lead to ineffective implementation and monitoring of climate change adaptation strategies.	Training staff and improving coordination enhances the efficiency and effectiveness of climate change adaptation strategies, offering long-term benefits.
Output 3.2 Knowledge management and M&E on climate change adaptation strengthened considering the specific requirements of women and youth	Lack of capacity in modern agricultural extension and disaster risk management leads to poor dissemination of climate information and ineffective risk management.	Building capacity in these areas ensures better preparedness and response to climate change impacts, safeguarding agricultural productivity and community well-being.

I. Describe how the sustainability of the project outcomes has been taken into account when designing the project.

126. Having assessed the impact and the potential of climate hazards, the project highlighted future climate change risks in selected regions and identified and recommended the key adaptation options to build resilience. A Targeted Adaptation Assessment will be conducted to provide guidance during project implementation and ensure that the investments made are cushioned against climate change impacts, hence enhancing financial feasibility and sustainability of the project results.

127. Secondly, capacity of both farmers and public institutions at district level and local community institutions, such as the Ministry of Agriculture, District Council under the Ministry of Local Government, Village Civil Protection Committees in climate change adaptation and disaster risk reduction will be enhanced. Rather than targeting individuals, as much as feasible capacity building initiative will involve

ToT, groups and committees for sustainability. Additionally, as the institutions are permanent, they will outlive the project duration and continue to be functional in future.

128. Of particular importance to sustainability of the project is the vital need to increase agricultural productivity to improve the effectiveness of the various investments and enable rainfed crops to be produced sustainably without high levels of subsidization. Three of the four main thrusts of SCRP will directly address the twin issues of productivity and government support levels, which underpin the move towards a more sustainable future for the sector: (i) a shift in emphasis from subsidized input supply to improved productivity; (ii) more effective and sustainable service delivery through community-based farmer-to farmer extension services; and (iii) institutional and management innovations improve the access to key agricultural inputs through commercial channels.

129. SCRP will place emphasis on active community participation in the implementation and management of project interventions. This approach will ensure that the communities are at the centre of the project, owning activities that are directly beneficial to them, and in the course increasing their knowledge and adaptive capacity to climate change. As a result, resilient climate activities will sustainable beyond the project's life. Additionally, project activities such as the restoration of landscapes, rehabilitation, and better management of small-scale community irrigation schemes, have long-term lifespan with continuous benefits, if well maintained.

130. Additionally, the selected value chains will have been developed to ensure financial feasibility and sustainability. Farmers will be trained in business management and growth. As farmers will work in groups, they will have larger volumes of production and increased bargaining for better markets. Farmer groups are also better off to access credits or loans from financing institutions that individuals.

131. The FCF will be transparent and competitive. Thereby offering support to groups that meet the sustainability criteria. Oversight of the FCF will be managed by the Fund Manager with support of the Ministry and Districts Councils. The replenishment of the CFC will be in phases where a particular farmers group has fulfilled certain activities, such as undertaking relevant value chains trainings and made own contributions. As an example, a farmer group on livestock will have been trained in livestock managements, allocated land for folder and constructed livestock facilities before livestock is delivered. Additionally, there will be delivery of services and goods and not cash to ensure that the support received in snot diverted.

132. The FCF while providing medium opportunities to selected farmers groups have multiple benefits for sustainability. Firstly, selected groups will have capacity in business management and may transition into a formal legal entities entity that may easily access loans from lending institutions. Secondly lessons will be developed and shared on how to improve climate resilient financing of small-scale farmers who are most vulnerable to climate change impacts.

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

133. A preliminary screening of the project was conducted to identify risks and mitigation measures and to determine the need for additional studies. The environment and social risk category of the project is rated as a Moderate risk (Category B) according to the Adaptation Fund's Environmental and Social Policy (PCN, section D), with the main risks including, resource efficiency and pollution prevention, labour and working conditions and, community health, safety and security.

134. Preliminary climate risk of the project was done and rated as substantial. The programme interventions aim to reduce the negative impacts of climate change and enhance the resilience of ecosystems and populations. A targeted climate risk assessment, outlining future impacts and adaptation options on selected value chains will be further developed (section J) which is in line with SECAP requirement for project with substantial climate risk to produce targeted adaptation assessment.

135. During the full proposal development stage, the Project Development Team (PDT) will confirm the risk categorization and develop an Environment, Social, Climate Management Plan (ESCMP), Stakeholder Engagement Plan (SEP) and a Grievance Redress Mechanism (GRM). Should the risk categorization change during the full proposal development, the PDT will develop additional studies and

documentations in accordance with Government of Malawi Guidelines and Adaptation Fund Social and Environmental Policy standards. As previously stated, all the sub-projects will undergo environmental and social safeguards screening and formulation of specific Environmental and Social Management Plans (ESMPs). The project will conduct gender-disaggregated data collection and a gender specialist will be recruited to ensure gender considerations in project design and implementation.

136. As outlined in the project interventions, the project will go beyond doing no harm, with activities including catchment and ecosystems conservations, enhance access to clean energy sources, including solar panels, and efficient energy stoves" (PCN, section B). Recommendation: At the full proposal formulation the project will assess the project greenhouse emission potential using the EX-ACT carbon tool.

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 National Environmental Acts (2014) and Adaptation Fund Social and Environmental Policy 15 principles.	X (low risk)	The project will ensure strict adherence to National Environmental Acts (2014) and Adaptation Fund Social and Environmental Policy 15 principles. Where required Environmental, Social and Climate Management Framework (ESMF) the full proposal development, whereas specific project interventions will have Environment, Social and Management Plans at the time of execution to ensure its implementation the project shall collaborate with the Environmental Affairs Department and other stakeholders.
Access and Equity The project will conform to Malawi Gender Equality Act 2023) and Social Welfare Policy (2028) and confirm to Adaptation Fund Gender Policy (2017)	X (low risk)	Some risk that may arise due to community dynamics with regards to participation of women and youth. However, the project will develop a targeting and social inclusion strategy at the full proposal formulation stage that ensures equitable access to project benefits in an inclusive manner among women (50%), youth (30%) and men through affirmative action at the full proposal develop. Selection of project interventions shall conform to all gender needs and participation.
Marginalized and Vulnerable Groups *Project will follow Malawi Gender Equality Act (2023) and Social Welfare Policy (2018)*	X (low risk)	The programme aims to target the vulnerable and resource restricted but physically able individuals forming groups in conformity with Social Welfare Policy (2018). As stated, a Social Inclusion Target Strategy will be developed to guide beneficiary. Further the project does not have any components that may bring disproportionate adverse effects on the marginalized and vulnerable groups in particular women and youth, people and HIV affected groups, but will ensures participation and equal access.
Human Rights *The Project will be conformity with Human Rights Charter and the Malawi Constitution*	X (no risk) The programme will respect international human rights charter and Malawi. It integrates overarching human rights principles to enhance climate change resilience, equal access to	No further studies or analysis needed

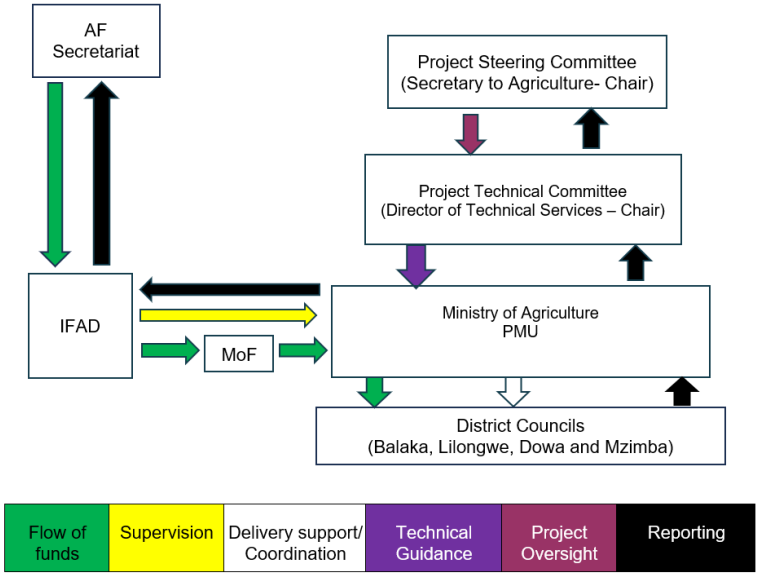
	productive resources and enhancement of Sustainable Development Goals	
Gender Equality and Women's Empowerment *Project will follow Malawi Gender Equality Act 2023) and Social Welfare Policy (2028) and confirm to Adaptation Fund Gender Policy (2017)*	X (moderate risk) Project incorporates gender sensitive decision-making process and women and Youth Empowerment. The project ensures that both men and women participate equally, equal sharing of benefits and that men and women do not suffer disproportionate effects for project development processes. Project also includes interventions such as clean energy access, water harvesting which burden women involvement in productive work	However, a detailed gender analysis will be conducted at the full proposal development to ensure that all gender aspects are further fully incorporated.
Core Labour Rights *Project will conform with the* Malawi Labour Act (GoM 2000)[61], Malawi Employment Act (2014)	X (low risk) Sometimes there is isolated incidences of child labour. However, project will comply with National Labour Act 2000) that ban child labour	The project will raise awareness on prevention of child labour.
Indigenous Peoples	X (no risk) Not applicable to the project and in the country	No further studies or analysis needed
Involuntary Resettlement	X (no risk) No involuntary resettlement is foreseen. The programme will collaborate with communities in their locations and on a voluntary basis. Therefore, no resettlements or even displacement to new locations is expected.	However, FPIC by individual group members shall be deduced by their agreement to join the groups freely or obtained through prior to project start up
Protection of Natural Habitats Environmental Management Act 2017 and the Malawi National Park and Wildlife Act amended 2017	X (no risk) Project has not involved protected areas or habitants. Additionally, the proposed project seeks to enhance landscape, ecosystem restoration and livelihood enhancement thereby bringing positive benefits to degraded ecosystems. Project shall be in conformity of stated laws.	No further studies or analysis needed
Conservation of Biological Diversity	X (no risk) There is minor risk to the conservation of biodiversity as no invasive plant or animal species will be promoted. On the other hand, deliberate efforts will be taken to ensure that interventions are compliant with all relevant	No further studies or analysis needed.

[61] *Ministry of Labour (2000). Malawi Labour Act.* https://invest.mitc.mw/images/downloads/Employment-and-Labour-Acts-of-Malawi.pdf

	national and international laws on conservation of biological diversity	
Climate Change	X (no risk) The programme interventions don't involve large scale agriculture, construction, large afforestation. Additionally, project has CSA adaptation options that actually reduce incidence of GHG emissions	However, the selected project areas have high risks of climate events in this case a detailed analysis of VCs adaptation options shall be undertaken
Pollution Prevention and Resource Efficiency Environmental Management Act 2017 and the Malawi Pesticide Act (2014)	X (low risk) There is possibility of minor but unlikely pollutions due to use of fertilizers and pesticides at limited scale. Generally, the Programme activities will not generate pollution and loss of resources. On the other hand, activities will contribute to sustainable land management, efficient water use, clean energy sources and prevention of soil and water pollution.	At proposal development project will develop an ESMF and including a pest management plan will be elaborated with the necessary mitigation measures and monitoring mechanism.
Public Health	X (no risk). Project seeks to promote food and nutrition security and household income which will include public health and livelihoods	No further studies or analysis required
Physical and Cultural Heritage	X (no risk) The programme will avoid areas with physical and cultural heritage for implementation of its activities. While the project will incorporate local knowledge and species in adopting modern technologies, the programme will not permit and does not envisage implementation of activities that will target specific physical assets in the project areas	No further studies or analysis required
Lands and Soil Conservation	X (no risk) The programme aims to improve vegetative cover, introduce soil and water conservation, landscape restoration, and improve community resilience through climate smart agriculture.	No further studies or analysis is needed

PART III: IMPLEMENTATION ARRANGEMENTS

FAD will be the implementing entity responsible for the fiduciary and supervision of the project while the Ministry of Agriculture will be the executing entity in partnership with District Councils and support of relevant stakeholders.



Roles and responsibilities

amme Steering mittee	The project will adopt the existing SAPP II Programme Steering Committee, which will provide for project oversight. The Ministry of Agriculture Permanent Secretary will be the Chairperson of the Project Steering Committee (PSC). Other members of the PSC include Principal Secretaries for Ministries of Trade and Industry, Local Government, Unity and Culture; Gender, Child Protection and Social Welfare; Youth and Sports; Natural Resources and Climate Change; Chief Executive Officers from Lilongwe University of Agriculture and Natural Resources (LUANAR); National Association of Smallholder Farmers in Malawi (NASFAM); Malawi Confederation of Chambers of Commerce and Industry (MCCCI); Farmers Union of Malawi (FUM), Malawi Bureau of Standards (MBS) and Civil Society Agriculture Network (CISANET).
Programme Technical Committee	The project will adopt the SAPP II Programme Technical Committee (PTC), which will provide technical support to both the PSC and the Programme Management Unit (PMU). The Director of Agricultural Planning Services will be the chair of the PTC. The members of the PTC will mirror the membership of the PSC and other technical Directors of the Ministry of Agriculture, including the Head of the National Agriculture Investment Programme (NAIP).
Ministry of Agriculture	The Ministry of Agriculture will host the PMU. The Ministry shall nominate a senior officer who will be a focal point to support, address or relay project issues requiring the redress by the Ministry. The ministry through its extension and research will directly support or undertake implementation of some of the SCRP activities. The Ministry will also provide technical guidance to the frontline extension officer in the district assemblies. The Ministry shall be responsible for reviewing and approving progress reports to IFAD.
IFAD	As per Adaptation Fund procedures IFAD will be the implementing entity responsible for the fiduciary and supervision of the project. IFAD shall ensure financial disbursement in timely manner, provide supervision and implementation support and reporting to the Adaptation Fund.

Project Management Unit	The SAPP II PMU established under the Ministry of Agriculture, will be responsible for day-to-day project implementation. The PMU led by a Programme Coordinator will deliver through an M&E Officer, Assistant M&E Officer, Knowledge Management Officer, Programme Accountant and Assistant Programme Accountant, Gender, Youth, Nutrition and Social Inclusion Officer, Grants Management Officer, Environment and Climate Officer, Procurement Officer, Assistant Procurement Officer, Agribusiness Officer, Administrative Officer/Assistant, Messenger and four Drivers. The PMU will work closely with the technical departments of MoA who will support programme implementation by providing technical expertise in the relevant technical areas of the programme including crop development and animal health & livestock development, agriculture extension & agribusiness, research, land resources conservation and natural resources management.
District Commissioners	In line with the decentralization efforts of the Government of Malawi, the district entities will play an important role in the implementation of the project. The Government Ministries are also represented in different ways at the district levels. At the district level the various government departments all report to the District Commissioner even though they still belong to the line ministries. The District Commissioner aids in the planning and implementation of all developmental activities at the district levels. Among other aspects they provide extension workers who provide technical assistance to farmers on the ground. District Commissioners will provide project implementation oversight through the office of the Director of Agriculture, Environment and Natural Resources, working closely with the Directors of Planning and Development.

Demonstrate how the project aligns with the Results Framework of the Adaptation Fund

Impact: To contribute towards wealth creation, and improve food and nutrition security among the rural population of Malawi **Goal**: Increase resilience in agricultural productivity, farming systems and value chain commercialization from climate change impacts among smallholder rural men, women and youth in selected districts of Malawi by 2030				
Project Objective(s)[1]	**Project Objective Indicator(s)**	**Fund Outcome**	**Fund Outcome Indicator**	**Grant Amount (USD)**
1. Increased smallholder productivity and climate resilience	Number of extension agents trained on climate smart technologies. Gender disaggregated data Number of farmers adopting climate resilience technologies Increase in crop productivity among beneficiaries. Gender disaggregated data	Outcome 8: Support the development and diffusion of innovative adaptation practices, tools and technologies	Output 8.1. Number of innovative adaptation practices, tools and technologies accelerated, scaled-up and/or replicated	2,000,000
2. Promotion of climate resilience commercialization of smallholder farming systems:	Number of farmers trained in climate resilient commercialization techniques. Gender disaggregated data Number of beneficiaries reporting having access to new climate proofed post-harvest facilities. Gender disaggregated data	Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	Output 6.1 Percentage of households and communities having more secure (increased) access to livelihood assets. Output 6.2. Percentage of targeted population with sustained climate-resilient livelihoods	5,000,000
3. Strengthened institutional capacity and knowledge management systems:	Number of targeted population/groups participating in climate change adaptation and risk reduction awareness activities. Gender disaggregated data Number of staff trained to respond to and mitigate impacts of climate-related events Gender disaggregated data	Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	Output 2.1. Number of and type of targeted institutions with increased capacity to minimize exposure to climate variability risks	1,416,977

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

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

A. Record of endorsement on behalf of the government[2]

Mr. Nations Msowoya Director - Debt and Aid Ministry of Finance, Economic Planning and Development, Department of Economic Planning and Development	Date: 20 December 2023

B. Implementing Entity certification

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 of Angola and Namibia and subject to the approval by the Adaptation Fund Board, commit to implementing the 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 programme.	
Juan Carlos Mendoza Implementing Entity Coordinator Director, Environment, Climate, Gender and Social Inclusion Division International Fund for Agricultural Development	
Date: 22 December 2023	email: Juancarlos.mendoza@ifad.org
HQ Focal point Ms Janie Rioux Senior Technical Specialist (Climate Change) AF Coordinator ECG Division, IFAD	Email: j.rioux@ifad.org
Project Contact Person: Ms Paxina Chileshe, Regional Climate and Environment Specialist East and Southern Africa, ECG Division, IFAD Tel: +254 793 484 367	
Email: p.chileshe@ifad.org	
Ms Bernadette Mukonyora Country Director for Malawi	
Email: b.mukonyora@ifad.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.

Annex A. Letter of Endorsement

Telephone: 01 789 355
Telefax: 01 789 173
Telex: 44407
Email:finance@finance.gov.mw

MINISTRY OF FINANCE AND
ECONOMIC AFFAIRS
P.O. BOX 30049,
CAPITAL CITY,
LILONGWE 3.
MALAWI

Ref No.FIN/DAD/5/1/7/NC

20th December 2023

The Adaptation Fund
1818H Street, NW,
MSN 7N-700
Washington, DC 20433,
USA,

Dear Adaptation Fund Secretariat,

Subject: Endorsement for "Smallholder Climate Resilience Project (SCRP)"

In my capacity as designated authority for the Adaptation Fund in Malawi, I confirm that the above national grant proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Malawi.

Accordingly, I am pleased to endorse the above grant proposal with support from the Adaptation Fund. If approved, the project will be implemented by the International Fund for Agricultural Development (IFAD) and executed by the Ministry of Agriculture and Ministry of Finance and Economic Affairs.

Yours Sincerely,

Mr. Nations Msowoya
DIRECTOR

FOR: SECRETARY TO THE TREASURY

Annex B. Stakeholder consultations

Stakeholders	Issues discussed	Suggestions
Meeting with Technical Department under Ministry of Agriculture (Department of Agricultural Research Services; Department of Animal Health and Livestock; Department of Agricultural Planning; Department of Agricultural Extension Services; NAIP Secretariate; and Land Resources Conservation Department, SAPP PMU, TRADE PMU) 12 -14 June 2023	Discussed project components and focus intervention; project targeting criteria; potential target districts; emerging climate vulnerability, risks and impacts in Malawi, capacity needs and potential project interventions; country strategic plans and priorities; lessons from ongoing interventions (programmes and projects on climate resilience); possible synergies with other ongoing programmes, funding mechanisms, grants management); possible implementation arrangements;	Targeting criteria particularly for households and group selection to be refined at proposal stage. Project to follow existing implementation arrangement for SAPP, SAPPII under Ministry of Agriculture
Environmental Affairs Department (EAD) 13 June 2023	Environmental Assessment Procedures; guidelines on access to biological resources and the fair and equitable sharing of benefits arising from their use; threatened species records, location, migratory routes, threats, human-wildlife conflicts in areas of intervention and measures to prevent it; Community-Based Natural Resource Management (CBNRM) committees' activities in SAPII areas; Support rendered to ensure adherence of environmental procedures to development projects	EAD ready to support project interventions and ensure adherence to national laws; EAD staff will support monitoring and supervision of ESMPs as necessary; NEMA has been recently established to review, issues necessary approvals and inspect adherence as necessary.
Department of Agricultural Research Services (DARS) 14 June 2023	Technologies on climate resilient seeds and breeds (in particular those resilient to drought), adoption rates by farmers; agro zone suitability; yield assessment and challenges on uptake; Status on development of bio-fortified crops for nutrition and adoption rates by farmers; Post harvest and storage technologies; (technical, economic and social feasibility) + costs adoption rates and related challenges; Water use efficiency and irrigation technologies, uptake and maintenance, success, challenges; Assessment of CSA technologies promoted (technical, economic and social feasibility) and costs; Agro ecological zone based soil fertility assessment maps and recommendations; Pest and diseases outbreaks records, impacts, integrated pest technologies ; Use of ICT4D in providing services (extension, market prices, weather forecasts etc) to villages/household ; Evidence of pass on programme success (data analysis and results); Adaptive research results and challenges faced under SAPP	Need to include integrated pest management in the project as has been missed in previous interventions; special consideration when selecting small-scale livestock for pass on (breeding traits should be considered); inclusion of labour-saving technologies (not much support was rendered in previous interventions); Community seed banks require close monitoring to ensure seed purity; demonstrations on new fertiliser recommendations to ensure farmer awareness and adoption
Department of Disaster Management Affairs (DoDMA) 14 June 2023	Disaster Management and Coordination in Malawi (from national level to local communities); recently approved Disaster Management Act and its implication; existing committees, critical stakeholder and mandates; Disaster Maps (flood, droughts mapping); Land use plans; Disaster contingency plans (status. Level of planning and current issues); shelter maps; Local stakeholder capacity needs; information is currently communicated to farmers regarding climate, seasonal changes, projections, extreme events, channels used,	Need to disseminate new Disaster Act to stakeholder for increased awareness; Absence of Disaster Zoning and Maps affect stakeholder awareness; Support required to targeted districts and communities without Disaster Contingency Plans (formulation and capacity for implementation)

	outreach; response time; local critical stakeholders; financing disaster management in Malawi; Community organisations and linkages to district and national committees; coordination in disaster communication to potential would be affected targets; frequency in occurrence and impact of previous climate related disaster on national economy, livelihood particularly agriculture, people and assets.	
Land Resource Conservation Department (LRCD) 14 June 2023	Updated Land cover and land use maps; Land use plans; Updated forest cover maps; Soils Fertility Assessment; Watershed maps - catchment delineation, soil nutrient atlas, hotspots degraded areas at district level; deforestation rate and hotspots; training guide/training content on environmental management and on land resource management and gaps; current areas under conservation and plans to put future areas under conservation; current practices for soil restoration and challenges; assessments of soil, land restoration and climate smart activities	Manuals and training materials are available on SLM and Land restoration; LRCD at district and EPAs level will support identification of micro hotpot degraded areas when beneficiary groups are selected (already have list of potential areas);
Balaka District Council and District Agricultural Extension Coordination Committee 15 June 2023	Discussed climate related disasters, district vulnerabilities and impacts; ongoing district interventions to address climate resilience; success and challenges under SAPP; implementation of Farmer Challenge Fund; potential interventions to further build climate adaptive capacity and resilient in most vulnerable communities.	Need to upscale the Farmer Challenge Fund as farmers have used it to invest in their selected VCs, increased productivity, raised small-scale livestock ownership and moved out of poverty. Previous initiatives like SAPP achieved 30 outreach, however huge poverty levels to those not targeted; Need to enhance women empowerment through household planning approach; pass on programmes; irrigation and need for climate change information very high ranking on farmers needs
Meeting two potential beneficiary groups in Balaka district 15 June 2023	Farmer not previously targeted expressed limited knowledge on climate information and how to adapt to recent hazards particularly cyclones and droughts; dire need for water availability for agricultural production, rehabilitation or construction of irrigations schemes; requested support to access improved inputs to improve primary production for food security. Farmers previously targeted shared knowledge and improvement in productivity from adopting CSA technologies; livestock ownership immensely increased; previous farmers graduated from project support and still continuing with project intervention on their own; requested for support and capacity to establish cooperatives; value addition especially in oil seed value chains. Women farmers expressed increased burden in fetching water due to floods and firewood due to increased deforestation. Women participants appreciated GALS and Household Approach in improving participation in decision making.	Huge disparities in poverty levels between farmers who were targeted and those not targeted in climate resilience interventions. Farmers expressed great need for improved inputs and marketing opportunities
Blantyre District Council and District Agricultural Extension Coordination Committee 16 June 2023	Discussed climate related disasters, district vulnerabilities and impacts; ongoing district interventions to address climate resilience; success and challenges under SAPP; implementation of Farmer Challenge Fund; potential interventions to further build climate adaptive capacity and resilient in most vulnerable communities	Need to upscale the Farmer Challenge Fund as farmers have used it to invest in their selected VCs; Previous interventions particularly SAPP was successful in FCF approach in promoting farmer investment. pass on programmes; irrigation; climate

		change information, post-harvest especially on horticultural very high ranking on farmers needs
Meeting two potential beneficiary groups in Balaka district 16 June 2023	Farmers expressed challenges from huge land degradation and erosion, floods that destroy crops; had limited knowledge on climate information and how to adapt to recent hazards particularly cyclones and droughts; lost household assets and cyclones even damaged community irrigation structures; rehabilitation or construction of irrigations schemes was ranked high. Visited farmers could produce particularly crops without external support but faced challenges from pest and post-harvest losses; request for storage and transport facilities; support for market linkages and buyer contracts. Previously targeted farmers shared knowledge on CSA had increased livestock ownership targeted farmers reducing poverty levels. Request for capacity to create dairy and horticultural cooperatives	Huge disparities in poverty levels between farmers who were targeted and those not targeted in climate resilience interventions. Farmers expressed great need for improved inputs and marketing opportunities
Red Cross 19 June 2023	Disaster Response Management and coordination with District Councils and Village Civil Protection Committees; Effectiveness and challenges in current EWS; Areas of improvement particularly at community level; Recommendations for institutional capacity building on DRM; Feedback from the rural community on needs and barriers to disaster risk and response	Huge capacity needs for communities including behavioural change to disasters and EWS; improvements in packaging EWS and advisories, usually only covers time and area with less context; need to build EWS through participatory scenarios with communities;
Department of Climate Change and Meteorological Services (DCCMS) 20 June 2023	Type of climate information generated, disseminated to farmers including how regular and dissemination channels used; availability and accessibility of climate related data (observed and projected climate trends including precipitation, temperature and extreme events distribution); resolution of data (district, EPA level); Climate vulnerability maps; gaps to strengthen EWS and use of the information	Department issue regular seasonal forecast usually at regional level but specific community/EPA needs are possible; developed training materials on PISCA and capacity can be upscaled to target districts; climate vulnerability maps not available but required by stakeholders;
Department of Agricultural Extension Services (DAES) 20 June 2023	Current agricultural extension models in Malawi; Location of FSS and related capacities; Costings for FSS; Mainstreaming climate change information in agricultural extension services; current challenges	DAES has manual and training materials for Tot on FFS; Lead Farmer and Farmer FFS manuals covering different training areas.
Total Land Care (TLC) 21 June 2023	Land restoration interventions and lessons; Suitability of CSA technologies based on agro ecological zones; Value chain suitability based on agro ecological zones and market availability; adoption rates of CSA technologies by farmers; performance of different CSA technologies in different agro ecological zones; extension service models used and effectiveness	CSA promotion should be agro ecological based. Has some data on CSA performance and will be able to share later

Pictures from stakeholder meetings

		
Figure 1: Balaka District Beneficiary consultation	***Figure 2: Blantyre district council***	***Figure 3: Balaka Field visit***

		
Balaka Field Visit	**Balaka consultation with communities**	**Blantryre consiltations with stakeholders**

Annex C: Gender assessment

a) Key gender statistics

Around 59% of employed women and 44% of employed men work in agriculture in Malawi, which is the largest employment sector[62]. However, significant gender productivity gaps exist, with men's agricultural plots yielding 25% more than women's, due to unequal access to resources and participation in value chains. In Malawi, female wage workers earn approximately 64 cents for every dollar earned by men, highlighting a significant gender wage gap. The gender parity ratio in secondary education enrolment is 84%, and women face disadvantages in various areas of economic participation. Malawi ranks 111 out of 151 countries in the Economic Participation and Opportunity index, according to the 2021 World Economic Forum Gender Gap Report[63].

Malawi has one of the highest child marriage rates globally, with 46% of girls married before turning 18. This contributes to a cycle of early marriage, pregnancy, and a lack of formal education. Women, while contributing significantly to agricultural labour, rarely own the land they work on, leading to economic disadvantages compared to male counterparts. The HIV prevalence rate among young women is significantly higher than that of their male counterparts, and period poverty is a major issue due to the stigma surrounding menstruation and lack of access to menstrual products.[64]

b) Impacts of climate change of gender

In Malawi, climate change disproportionately affects women and girls, intensifying existing gender inequalities and exposing them to increased risks. Ranked fifth in the Global Climate Index 2021 for nations most affected by climate-related extreme weather, Malawi faces significant climate change impacts, including more erratic and extreme weather events like droughts and floods. These environmental challenges exacerbate food, water, and financial insecurity, particularly for those dependent on rain-fed agriculture, like the 65% of smallholder farmers who are women. This dependency makes them especially vulnerable to food insecurity and economic shocks.

Women, due to their social status, limited income, education, and resources, are more likely to live in poverty and have less decision-making power and access to finance. As a result, when harvest yields are reduced, women struggle to provide for their families, making them susceptible to sexual exploitation in various forms, such as transactional sex or trafficking. Additionally, gender roles in Malawi, like the responsibility of gathering water and firewood, often fall on women and girls. Environmental degradation leading to scarce resources forces them to travel further, using time that could be spent on income generation or education.

Malawi, women are often marginalized in agricultural productivity. Despite women's high participation in labour, they generally have lower access to farm labour, inferior access to improved agricultural inputs and technology, and lesser participation in cash crop/export crop value chains. The gender gap in agricultural productivity stems from women having unequal use of land inputs, which contributes to a substantial burden on the economy. This disparity is critical as agriculture is a major contributor to Malawi's GDP[65].

Women tend to have fewer rights to farmland. This unequal ownership of quality farmland has significant implications for the country's rates of hunger and malnutrition. Addressing this disparity is crucial since women play a vital role in agricultural consumption decisions and household food decisions[66].
Gender inequality in Malawi is also evident in the science, technology, and innovation (STI) sector. This inequality is rooted in inequitable laws, norms, and practices, which hinder women and girls' access to

[62] Malawi (MWI) - Demographics, Health & Infant Mortality - UNICEF DATA
[63] Unlocking Malawi's Economic Growth by Bridging the Widening Gender Gaps in the labour workforce (worldbank.org)
[64] Women's Rights in Malawi - The Borgen Project
[65] https://mwnation.com/malawi-gender-gap-widens-report/
[66] https://foodtank.com/news/2021/06/research-in-malawi-shows-how-access-impacts-female-farmers/

opportunities, resources, and power. Strengthening gender and inclusivity in STI in Malawi is seen as essential for addressing these disparity gaps[67].

c) The vulnerability and adaptive capacity

Women lack technical and financial support to formalise and scale up their livelihood activities. There is potential to transform the agricultural sector to implement programmes to achieve economic empowerment, while prompting more gender equitable norms and practices to advance gender equality. Modernization of agriculture through the incorporation of ICT and other modern energy saving technologies and tools to make agriculture attractive to the youth should be encouraged. This will reduce workloads for women as highlighted during consultations.

SRCP will facilitate access to productive assets, such as land preparation tools and technologies, as well as access to agricultural land and other factors of production for the youth, women and vulnerable groups who fail to access these resources due to culture, gender and or other socio-economic factors. Furthermore, GALS will empower women economically through improved access to and control of household productive assets and benefits, strengthening women's decision-making roles in the households and community and achieving a reduced workload and an equitable workload balance among women, men, girls, and boys as well as persons with disabilities.

The promotion, provision and dissemination of youth and gender tailored information and provision of agricultural support and extension for advanced training targeting out of school youth for increased agricultural production, agro-processing and marketing is recommended.

d) Considerations for design

To ensure gender considerations during implementation, a gender action plan will be developed during design which will include the following:

- Assessments during inception phase, and how to commence implementation of the gender monitoring framework for the project in line with AF Gender Policy.
- Recruitment of a Gender expert in the project management to ensure all activities and interventions comply with, Adaptation Fund and national government gender guidelines.
- A detailed gender monitoring framework for the project in line with AF Gender Policy with specific outlay of indicators and monitoring mechanisms. Monitoring and Evaluation, will ensure gender-disaggregated indicators.
- The project will undertake baseline. Mid-term and end term evaluation. Gender lessons learned will be assessed at MTR and end evaluation.
- Develop reporting framework on risk assessment for the programme indicators in addition to tracking compliance with ESMP and gender policy. Emphasis will be on ensuring outreach strategies that achieve active participation of women in committees, capacity building and policy discussions. Resource management capacities of women will be explored as an essential basis for designing responses to climate change and disaster risk reduction through the challenge Fund.

[67] https://idl-bnc-idrc.dspacedirect.org/items/18972bb6-99f5-460e-af2c-d8645bb0cd75