Malawi Open NAP

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Malawi National Adaptation Plan

Introduction

The NAP is the main vehicle for adaptation planning for the country, and encompasses activities at all relevant scales and levels, from the regional (multi-country level) to the national, sectoral, sub-national and local levels, including for specific municipalities. All recent adaptation strategies and plans will thus be included in the NAP as a master plan for adaptation, indicating what is ongoing and what remains to be addressed. [S/T reporting]

As a country with limited resources, most adaptation projects will be funded through international sources, with very little dependence on national budgets, at least to begin with. During implementation, activities will need to be well aligned and integrated with sectoral activities funded by government. [Link to GCF Country Programme]

There are many reporting channels under the UNFCCC and the Paris agreement that require information on adaptation (priorities, key vulnerabilities, adaptation actions, capacity gaps and needs, etc). The work under the process of formulating and implementing the NAP will provide the central basis for adaptation assessment and prioritization, and will inform all necessary reporting on adaptation, in particular, the update of the NDCs by 2020, and future national communications/transparency reports. [NAP informing Draft NDC in 2020]

The NAP road map for Malawi includes all activities that contribute to adaptation planning and the NAP in particular since the advent of the NAP decisions in 2010/11, and this is designed to be the guiding rail for all adaptation activities for the country and is the basis for support being received by all those in a position to do so. The recently funded NAP formulation proposal under the GCF Readiness Support is naturally a major form of financial support and will be used to continue the work of analysis, assessment, implementation and further planning. Support from others continues to be very critical for the success of adaptation efforts for the country. [Road Map]

The office of the UNFCCC Focal Point, housed in the Environmental Affairs Department, is the current custodian of work on the NAP and will continue to work with all relevant ministries, organizations and actors as necessary, maintaining and running the continuing process of adaptation monitoring, assessment and planning, the support the periodic production of NAPs. [National mandate, CC policy/law, Data Policy, coherence with other MEAs]

The NAP is a living document and will continue to be updated as the need arises, with a view to producing a formal updated version every 5 years. By the same vein, all intermediate outputs (stocktaking report, road map, assessment reports, framework document, monitoring and evaluation plans, climate investment strategy, etc) will remain living documents and will be updated as new information and new insights arise. [Wiki collection of documents for easy update, later morph into a DIVA – dynamic impacts, vuln and adaptation system]

The NAP follows the UNFCCC technical guidelines for the NAP process, and the collection of supplements to these guidelines as developed by different organizations and available on NAP Central.

Applies the NAP-SDG iFrame to manage multiple entry points and coherence with various frameworks being addressed including the SDGs, Sendai Framework, New Urban Agenda, Africa 2063, and relevant national strategies.

There are several major assessments conducted in the last 5 years, and the approach taken is not to promote yet another vulnerability and risk assessment, rather to build on available information and identify any obvious gaps if any. The concept of risk is adapted, following good examples from countries and organizations that have developed recent guidelines, including New Zealand, and OECD.

The traditional approach of arriving at projects as the main outcome of these assessments is improved upon by identifying appropriate methods and metrics that in fact support a risk-based approach.

Building on the unfunded PPCR/SPCR

There are several ongoing projects and programmes that address adaptation to climate change in Malawi, as well as main development objectives. The NAP will build on these projects and scale up efforts as appropriate.

One approach to make progress on the NAP would be to build on the PPCR/SPCR that was produced in November 2017, but for which CIF/PPCR funding dried up and is now left to find alternative funding sources. The PPCR/SPCR focused on three important sectors of agriculture, fisheries and water resources, and presents five priority programmes to implement proposed adaptation activities. The process of developing the SPCR are similar to that of the NAP and follow good practice in ensuring full participation of stakeholders, gender responsiveness, and builds on national development priorities.

Approach

The formulation of the NAP follows the guiding principles and technical guidelines as outlined in UNFCCC COP decision 5/CP.17. It embraces the country-driven, country-owned and iterative approach. The latest technical guidance from the NAP Technical Working Group is followed, based on the NAP-SDG iFrame toolkit.

Key Risks and Vulnerabilities

Baseline period 1961 to 1990 and trends to the present

Observations since 1960

- Temperature increases of approximately 0.9°C, with the most rapid increase in summer months (Dec–Feb), between 1960 and 2006.
- Increase in the number of days (+30 days) and nights (+41 days) considered "hot."
- Highly variable year-to-year rainfall totals with no statistically significant trends.
- Increased length of dry spells during the rainy season.
- Increased intensity, frequency and magnitude of floods and droughts.

Projected climate for the next 20, 50, 100 years

- Higher average temperatures of 1–3°C by 2050, with largest increases in early summer months.
- Increase in the number of days and nights considered "hot" by 2060.
- Overall increases or decreases in rainfall difficult to project.
- Later onset/earlier cessation of rainy season.
- Increase in average monthly rainfall from Dec-Jan and a decrease from Feb-April.
- Increases in the proportion of rainfall during extreme events of up to 19 percent annually by 2090.

Source: For the summary, USAID 2017. Climate change risk profile Malawi.Fact Sheet.

Key climate hazards

- Prolonged Drought/dry spells
- Global and regional drought spells
- Torrential rainfall/Change (increase) in frequency and intensity of heavy rainfall events
- Local storm events
- Global and regional storm events
- Lightning
- Hot spells/temperature extremes
- Shifting (rainfall/growing) seasons
- Increase in temperatures
- Non-normal annual weather
- Pests and diseases outbreaks associated with climate events
- Disruption of national, regional and global food supply chains
- Wildfire

Key Risks

Priority Adaptations

Goals, objectives and expected outcomes of adaptation

Taking a medium- to long-term approach and avoiding maladaptation

- 1. National climate change adaptation programme: umbrella programme
- 2. Projects and programmes to address key risks for the country
- Climate Resilient Integrated Watershed Management (Total: US\$ 84 million, PPCR/SPCR)
- Building Climate Change Resilience in Selected Agricultural Value Chains in Malawi (Total: US\$ 26 million, PPCR/SPCR)
- Sustainable Fisheries Sector and Fisheries Value Chain in Malawi through Improved Climate Resilient Lake Ecosystem Conservation and Management (Total: US\$ 18.2 million, PPCR/SPCR)
- Strengthening Climate Resilience of Smallholder Farmers in Malawi (Total: US\$ 13.5 million, PPCR/SPCR- FAO)
- Operationalising Malawi's Climate Services Centre (Total: US\$ 17.3 million, PPCR/SPCR)
- Forest landscape restoration programme
- Lake Malawi Ecosystem
- Lake Chilwa Ecosystem and Value Chains
- National physical development planning under climate change
- Building a resilient national food security
- 3. Essential cross-cutting projects/programmes Creating an effective adaptation process and system (mainstreaming/integration, policies, governance, etc.)
- Climate information services and early warnings systems, systematic observations
- Active monitoring of key systems: crop production, water resources, ecosystems, etc
- M&E system individual projects and in aggregate for the country
- Capacity development for implementation of adaptation and support to the process including data and information management, etc

Implementation Strategy

Alignment with the GCF country programme The priorities in the NAP will form the 5-year country programme for engagement with the GCF as follows: Year 1 Year 2 Year 3 Year 4 Year 5

References

Annexes

Database to support adaptation monitoring and planning

Database of projects under the FM entities

INDC Adaptation priorities from INDC (2015)

| Sectors | Intended policy-based actions |
|--------------|--|
| Agriculture | Increase irrigation at smallholder level; Increase land under irrigation through Greenbelt initiative from 20,000 to 40,0000 ha; Expanded programme of Greenbelt initiative from 40,000 ha to 100000 ha by 2030; Build adaptation capacity in climate resilient agronomic practices for smallholder farmers; Promote on-farm water conservation technologies; Support an expanded programme of constructing multipurpose dams for irrigation and aquaculture; Develop financial mechanisms to support crop insurance targeting smallholder farmers; Promote the growing of drought tolerant crop varieties; Implement conservation agriculture and agroforestry practices; Promote improved land use practices |
| Water | Implement integrated catchment conservation and management programme; Promote water harvesting technologies at all levels; support an expanded programme of constructing multipurpose dams to enhance water storage; Support the revision of water related policies and strategies (inc. water SWAP); Develop and enhance climate information and early warning systems |
| Human health | Build capacity to diagnose, prevent and control climate- sensitive diseases such as malaria, diarrhea and malnutrition; Enhance public awareness about water, sanitation and hygiene practices and enhance health surveillance; Support expanded programme for preventing and controlling climate-sensitive diseases; Construct more health centres in order to improve access to health facilities within a walking distance of 8 km; Support the establishment of centre of excellence for research and disease control targeting climate-sensitive diseases |
| Energy | Promote use of biomass briquettes as substitute for firewood and charcoal; Promote an energy mix that moves people away from use of biomass; Support an expanded programme of briquette production and use; Construct storage dams for hydropower generation; Promote solar PV and use of the energy efficient bulbs; Promote use of bio-fuels for lighting and cooking replacing fossil-based fuel |

| Sectors | Intended policy-based actions |
|--------------------------------|--|
| Forestry | Support research in drought tolerant and fast-growing tree species; Expand afforestation and forest regeneration programmes; Promote growing of drought to tolerant and fast-growing tree species; Wildlife; Provide watering points at strategic locations of national park/game reserve; Implement diseases control programmes; Support capacity building in a wildlife institution to lead in adaptation initiatives e.g. translocation and culling |
| Fisheries | Capacity building in aquaculture and cage culture fish farming practices; Adopt ecosystem services approach in the management of fisheries resources; Promote aquaculture and cage culture fish farming practices; Protect fish spawning/breeding sites; Maintain fingerlings for stocking lakes and rivers after severe drought episodes |
| Gender (and vulnerable groups) | Promote gender mainstreaming in policies, programmes and projects; Support capacity building programmes for vulnerable groups |
| Infrastructure | Construct infrastructure for flood control, transport etc; Develop and implement climate related building codes/standards; Revise existing building standards in line with climate change |
| Industry | Promote research in industrial technologies |

Burkina Faso table in exec summary

| ADAPTATION OBJECTIVES: Protect accelerated growth pillars | ADAPTATION MEASURES | TIME FRAME |
|---|---|-------------|
| Agriculture | Cultivate early varieties or drought- resistant crops | Short-term |
| | Apply water and soil conservation methods (stone barriers, small dikes, filtering dikes, terraces, half moons, agroforestry, dune fixing etc.) | Short-term |
| | Promote sustainable land management (SLM) | Medium term |
| | Improve access to climate information | Medium-term |
| | Introduce agricultural insurance | Long-term |
| Livestock farming | Fight bush fires in order to prevent destruction of dry-season grazing reserves | Short-term |
| | Adopt best animal husbandry and pastoral practices (pastoral hydraulics, pastoral resource management, pasture mowing and conservation, pasture crops, silage, animal mobility and transhumance etc.) | Short-term |

| ADAPTATION OBJECTIVES: Protect accelerated growth pillars | ADAPTATION MEASURES | TIME FRAME |
|---|--|-------------|
| | Ensure stakeholders take account of climate variability in development project and programme planning by improving their skills | Long-term |
| | Preserve cattle breeding at serious risk from climate variability | Long-term |
| | Ensure farmers adopt animal production methods adapted to a hot climate | Long-term |
| Energy | Diversify energy sources (solar, wind, biogas) | Long-term |
| | Introduce water planning and management plans in Sudanian zone where climate forecasts predict a slight increase in rainfall | Long-term |
| | Promote energy-saving technologies in industry and construction | Long-term |
| | Promote the use of improved fireplaces to achieve a substantial reduction in consumption of wood and charcoal | Short-term |
| | Promote alternative energies such as butane and biogas | Medium-term |
| Infrastructure | Adhere strictly to dam and hydraulic structure, hydro - agricultural development and housing construction standards | Short-term |
| | Update dam and hydraulic structure, hydro-agricultural development and housing construction standards | Medium-term |
| | Decontaminate and drain flood zones | Medium-term |
| | Preserve water resources and improve access to sanitation | Medium-term |
| | Pass and enforce laws and regulations, where applicable, on (i) construction of hydraulic, road and settlement i nfrastructures; (ii) space occupancy in urban and rural environments, especially of flood zones; (iii) mining activities (gold prospecting); (iv) industrial activities | Long-term |
| | Relocate populations in submersible and floodable zones to appropriate zones | Short-term |
| | Promote ecological housing and towns with low energy consumption (for air-conditioning and lighting) | Long-term |

| ADAPTATION OBJECTIVES: Protect accelerated growth pillars | ADAPTATION MEASURES | TIME FRAME |
|---|--|-------------|
| Ensure sustainable food and nutrition security | Increase resilience of vulnerable communities and households to food and nutrition insecurity by improving their livelihood | Medium-term |
| | Achieve a structural and sustainable reduction in food and nutrition vulnerability of vulnerable communities and households | Long-term |
| | Improve social protection of vulnerable communities and households in order to secure their livelihood | Medium-term |
| | Capitalise on and share innovations and best practices to support food and nutrition security | Short-term |
| | Make increased use of non-timber forest products as food supplements | Medium-term |
| Preserve water resources and improve access to sanitation | Monitor water retention (dam dikes, water flow, valve functioning etc) | Medium-term |
| | Provide water storage: construct modern wells, high-flow boreholes, dams; develop ponds; divert water courses). | Long-term |
| | Combat silting of water bodies | Medium-term |
| | Develop integrated water resources management (IWRM) | Short-term |
| | Formulate water planning and management master plans | Medium-term |
| | Use appropriate technologies to reduce poor access for women to drinking water in the dry season | Medium-term |
| Protect persons and goods from extreme climate events and natural disasters | Take account of resilience in development projects and programmes | Short-term |
| | Formulate contingency plans at regional and local level and plans to support vulnerable populations | Long-term |
| | Provide sustainable financing for disaster and humanitarian crisis prevention and management by formulating and implementing an appropriate financing strategy | Long-term |
| | Improve women's skills by disseminating best climate change adaptation practices | Short-term |
| | Use social safety nets for vulnerable populations | Short-term |

| ADAPTATION OBJECTIVES: Protect accelerated growth pillars | ADAPTATION MEASURES | TIME FRAME |
|---|---|-------------|
| Protect and improve the functioning of natural ecosystems | Develop environmental education in both formal and non-formal education systems | Short-term |
| | Implement reforestation projects and programmes using local species | Medium-term |
| | Disseminate anti-erosion techniques | Long-term |
| | Rehabilitate and preserve wetlands | Short-term |
| | Develop environmental education in both formal and non-formal education systems | Short-term |
| Protect and improve public health | Meningitis: | |
| | Vaccine before first cases are reported | Short-term |
| | Organise reactive campaigns which target the entire population in epidemic zones | Medium-term |
| | Increase meningitis monitoring using the geographical information system | Medium-term |
| | Step up public awareness-raising and information campaigns | Medium-term |
| | Malaria: | |
| | Provide proper treatment in all cases of simple malaria using ACT | Short-term |
| | Provide intermittent preventive treatment of malaria using ITP for pregnant women and children and distribute long-lasting insecticidal nets (LLIN) in routine mass campaigns | Medium-term |
| | Combat malaria vectors (indoor spraying, behaviour change communication (BCC) at mass media and community relay level, treat breeding grounds) | Long-term |

References