

Logical Framework

Title: Building social and ecological resilience in the Lake Chilwa basin under climate change

Narrative	OVI (incl. gender, HIV)	MoV	Assumptions
<p>Goal:</p> <p>To improve and sustain livelihoods of the 1.4 million people in the Lake Chilwa basin.</p>			
<p>Purpose:</p> <p>To develop and implement a basin-wide climate change adaptation strategy that builds resilience of people, institutions and natural resources .</p>			
<p>Output 1:</p> <p>Increased capacity of local and district institutions to plan, implement and monitor integrated climate change adaptations.</p>			
<p>Activity 1.1: Assess capacity of local and district institutions for effective NRM.</p>	<p>By end of Dec 2009, institutions working in the basin identified, characterized and their organizational capacity assessed.</p>	<p>Project reports</p> <p>Institutional profile documents by stakeholders</p>	<p>Stakeholders provide reliable data on institutions</p>
<p>Activity 1.2: Implement capacity development programme based on participatory needs assessment.</p>	<p>By end of Year 1, three training programmes for local and district NRM groups (VNRMCs, Water user assoc, etc.) developed and delivered.</p>	<p>Report</p>	<p>Willingness of groups to participate</p>
<p>Activity 1.3: Form new VNRMCs in hotspots.</p>	<p>By end of year 2, 15 new VNRMCs formed, registered and functioning.</p>	<p>District Assembly report</p> <p>VNRMC constitutions</p>	<p>Willingness of community to participate.</p>

Activity 1.4: Support and evaluate effectiveness of initiatives to harmonize policy across sectors (including NAPA).	Two most critical inter-sectoral policy conflicts resolved in all three district level plans.	Policy briefs and guidelines for integrated management	Willingness of agencies to cooperate
Activity 1.5: Support capacity of training institution to integrate climate change issues.	By end of year 1, curriculum materials developed and integrated in Chancellor College courses. Technical training unit established at Chancellor College. Support training and research for 5 masters students and 2 Ph.D.s	Curriculum materials Unit in operation	Support at CC for curriculum
Activity 1.6: Set up and implement a system to monitor and evaluate effectiveness of capacity building.	By end of Year 1, baseline on existing institutions established. Annual evaluations completed.	Baseline survey Evaluation report	Institutions provide information
Output 2: Integrated management plan for Lake Chilwa basin hotspots developed and implemented.			
Activity 2.1: Identify hot-spots of socio-ecological vulnerability using agreed criteria.	One workshop convened for participatory selection of hotspots. Maximum of 10 hotspots identified for management response.	Workshop Report	Stakeholders agree on criteria
Activity 2.2: Conduct stakeholder analysis to identify constituency for developing management plans.	By end of year 1, stakeholders identified and categorized By end of Year 2, stakeholders engaged in management planning	Report	Willingness of stakeholder to participate

<p>Activity 2.3: Convene basin-scale fora for knowledge exchange and improved planning (incl. historical knowledge, climate change data, market information, lessons learnt learned...).</p>	<p>Bi-annual basin-scale stakeholder meetings held.</p> <p>By end of Year 1, weather forecasts and climate change mitigation and adaptation information delivered by community radio and mobile phone.</p>	<p>Minutes of meetings</p> <p>Broadcast transcripts</p>	<p>Willingness of stakeholder to participate</p>
<p>Activity 2.4: For each hot-spot, mobilize village and area development committees to develop integrated management plans.</p>	<p>By end of Year 2, plans approved by District Assembly for each hotspot.</p> <p>By end of Year 2; land use plans revised to include measures to increase resilience to climate change.</p> <p>By end of year 2, at least 10 management plans formulated and implemented for hotspots.</p>	<p>District work Plans</p> <p>Village and area land use plans</p>	<p>Decentralization process is sustained.</p> <p>Committees are willing to participate</p>
<p>Activity 2.5: For each hot-spot, implement integrated management building on existing land use plans (connected to 2.2 above).</p>	<p>By beginning of Year 3, roles and responsibilities for management implementation agreed among stakeholders.</p> <p>By mid-year 3, implementation well under way and integrated work programmes fully operational</p> <p>Management progress reviewed annually adaptations made to implementation plans.</p> <p>Maximize cross-scale learning by facilitating exchange visits among hotspots.</p>	<p>District work Plans</p> <p>District Assembly Reports</p> <p>Reports to District assembly</p>	<p>Decentralization process is sustained</p>
<p>Activity 2.6: Assist stakeholder groups to secure long-term funding using existing (District Assembly) and new (REDD,</p>	<p>Analysis of options for benefit sharing completed and disseminated</p>	<p>Report</p>	

payment for ecosystem services) mechanisms.	Proposals for funding to sustain management implementation for each hotspot submitted.	Proposals	
Activity 2.7: Establish community radio at Chancellor College to disseminate information on climate change and the environment to Basin community.	Radio licensed and functioning.	Station reports Broadcast transcripts	No risk associated with this.
Activity 2.8: Develop indicators of improved management across the landscape through participatory processes.	By end of Year 2, workshop to develop indicators held in each hotspot	Workshop reports and revised plans	Willingness of stakeholders to participate.
Output 3: Vulnerability of Basin households reduced through improved and diversified livelihoods and natural resource management			
Activity 3.1: Conduct livelihood analysis to understand the adaptive capacity of people and enterprises in the basin level.	By end of Year 1, knowledge of livelihood characteristics, coping strategies and adaptive capacity. By end of year 2, a historical analysis of trends in livelihood characteristics (Kalk, NSO, Danida, Ladder) within the basin	Baseline survey report of hotspots and non hotspots Planning documents on tactical adaptation strategies by stakeholders	Households willing to give information
Activity 3.2: Analyze climate change, environmental and socioeconomic change perceptions by different community members (men, women, and youth) and identify their adaptation constraints.	By mid-year-1, focus group discussions held with groups of men, women and youth in the 10 hotspots.	Report on perceptions of climate change and constraints to adopting adaptive strategies	Focus groups give information
Activity 3.3: Develop basin-scale maps of vulnerability to climate change shocks	By end of Year 1, stakeholders use vulnerability maps for planning and targeting	Reports	Maps for appropriate scale available.

using secondary data.	adaptation strategies	Public domain GIS	
Activity 3.4: Strengthen small-scale producers' and small-scale traders' access to markets.	<p>By end of year 1, value-chain analyses of key commodities (e.g. charcoal, timber, rice and fish) completed</p> <p>By end of Year 1, recommendations for improving market chains presented to producers and their development partners</p> <p>By end of year 4, at least 3 producer/grower associations formed.</p> <p>By end of year 4, proportion of value of trade in key commodities captured by small-scale producers and traders increased by 20%.</p> <p>By end of year 2, at least 6 marketing/trading deals made and legally signed.</p>	<p>Report</p> <p>Report</p> <p>Report</p>	Willingness of traders to participate.
Activity 3.5: Exchange visits to learn about innovations, best practices, benefits of collective action (e.g. to Chia Lagoon; DAPP Conservation Farming Project; Nkuwazi Forest).	By end of Year 3, stakeholders adopt new innovations and producers organized	Reports	Stakeholders in learning sites collaborate with programme
Activity 3.6: Identify and promote new income generating activities (mushroom farming, beekeeping, soya bean production, PES, etc).	By end of year 4, 75% of hotspot households and enterprises piloting new IGA's.	Reports	Priorities and intervention sites agreed with stakeholders and local partners.
Activity 3.7: Train extension personnel and lead farmers in adaptive strategies targeted through participatory process.	By end of year 2, all District extension officers trained and 10 lead farmers in each hotspot (100 total).	Training reports	Willingness to participate in training
Activity 3.8: Establish demonstration plots	By end of year 2, 10 demonstration plots	Reports	Willingness of community to

of adaptive strategy technologies in each hotspot.	established and maintained.		establishment of plots.
Activity 3.9 Pilot solar dryers for women processors and traders.	<p>By middle of first year, one womans' group selected to test the dryers in each of the 11 landing sites around the Lake.</p> <p>By end of year 2, fish post-harvest losses reduced by 15% in participating land beaches resulting in a 30% increase in value of fish sold.</p> <p>Market survey conducted to assess the acceptability to solar dried fish to determine feasibility of out-scaling the innovation.</p>	<p>Report</p> <p>Survey</p>	Willingness of traders/processors to adopt.
Activity 3.10: Provide business development support (training; microfinance, links to markets and technical information).	<p>By end of Year 1, subcontractors engaged to provide business support.</p> <p>By end of Year 3, financially sustainable business support services established in selected hotspots.</p>	Monitoring Reports	Stakeholders are willing to participate in training courses.
Activity 3.11: Establish revolving fund to support adoption of fuel-saving technologies.	<p>By end of year 1, loans given to 500 households for purchase of improved technologies.</p> <p>By end of year 2, loans at least partially repaid</p>	<p>Receipts</p> <p>Reports</p>	NGO partner available to engage in revolving fund scheme
Activity 3.12: Facilitate communication of need for social services, resource access etc. to government and NGOs.	<p>By end of Year 2, government and NGOs are able to respond to demands for social services and resource access from communities in the basin.</p> <p>At least 5 demand-driven social services provided to hotspot communities.</p>	Reports	Government and NGOs continue to be responsive to community demands.

Activity 3.13: Implement participatory process to develop indicators for monitoring adaptive capacity at household and enterprise level.	By end of Year 3, household and project partners are using household level indicators to monitor their performance.	Monitoring reports	Households are willing to cooperate.
Output 4: Carbon sequestration throughout the Basin increased			
Activity 4.1: Through literature and policy review and expert consultation, identify potential funding mechanisms to support mitigation options.	By middle of Year 1, appropriate funding mechanisms selected.	Report/documentation	
Activity 4.2: Conduct participatory feasibility analysis of best bet options for climate change mitigation actions in the basin (e.g. REDD, Plan Vivo, conservation agriculture, other conservation and ecosystem service payment options).	By middle of Year 1, stakeholders have participated in awareness raising dialogue (meetings, radio programs). By end of year 1, survey completed. By end of Year 1, best bet options identified by and disseminated among stakeholders	Reports	Willingness of stakeholder to participate.
Activity 4.3. Conduct baseline vegetation survey to assess carbon stocks in hotspots.	By end of year 1, survey completed.	Report	No risk.
Activity 4.4. Pilot the implementation of preferred best bet mitigation options with strong livelihood benefits, on customary and private land.	By end of Year 3 mitigation strategies are validated and adapted for application in hotspots of peoples' vulnerability to climate-change. Existing carbon stocks in hotspots maintained. By end of Year 5, carbon storage increased by	Vulnerability mapping surveys, livelihood surveys, incremental carbon measurements Reports	

	50% on at least 20% of customary and private land in the catchment.		
Activity 4.5: Forest management needs addressed in critical habitats (steep slopes, river corridors) on public lands (e.g. forest reserves).	<p>By end of year 2, mitigation schemes implemented by relevant forestry authorities, co-management and NGO partners</p> <p>By end of project (year 5) Forest cover and tree biomass increased by >15% on 10 000 Ha of land with slope > 12 degrees and along 50 km of river corridors.</p> <p>By end of year 2, 50% of hotspots establish and manage forest areas.</p> <p>X number of hectares of river banks rehabilitated with tree cover.</p>	Forest surveys, Reports	Cooperation of stakeholders
Activity 4.6: Introduce and promote energy-efficient fuel-saving technologies for households and institutional use within the Basin.	<p>At least 4 fuel-saving technologies adopted.</p> <p>75% of women's groups using solar dryers and improved fish smoking kilns.</p>	Reports	Willingness of people to adopt.
Activity 4.7: Monitor and adapt mitigation strategies based on lessons learned and community demands.	By end of year 3, key constraints to implementation of mitigation measures identified and revised guidelines disseminated among stakeholders. M&E Surveys conducted annually	Reports	
Activity 4.8: Raise awareness in communities and institutions outside of the Basin on how their energy choices (charcoal, provision of electricity service) has an impact on natural resource management practices within the Basin and contributes to community vulnerability to climate change.	By end of Year 2, information on consumer energy choices and natural resource degradation in the basin disseminated through radio and other media.	Reports	

