

ENVIRONMENT

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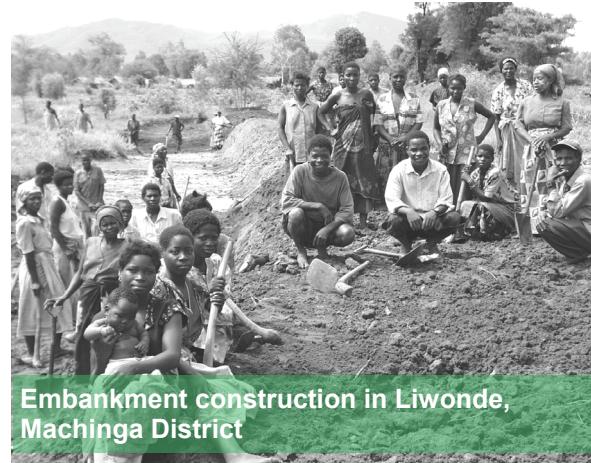
Climate Change as a Global Challenge

As the world's climate continues to change at expected rates unprecedented in recent human history, impacts and risks associated with these changes are as yet not fully known. Societal vulnerabilities may exacerbate ongoing social and economic challenges, particularly for those societies dependent on resources that are sensitive to changes in climate. Agriculture, fisheries and many other elements that constitute the livelihood of rural populations in developing countries are particularly at risk. Climate change and its impacts have the potential to undermine hard-won gains against hunger and poverty by exacerbating existing vulnerabilities or by creating new ones. Any strategy addressing ways of adapting to climate change must prioritize the food security needs of a growing population. Interventions that help build human resilience and adaptive capacity to climate change are crucial. Such interventions should focus on the poorest, most vulnerable communities and households and help them prepare for, respond to and recover when a climate-related shock occurs.

WFP is a frontline implementing agency that deals with complex humanitarian crises and has for decades fought hunger and destitution brought about by droughts; floods; degradation of natural resources; population pressure in fragile areas; weak physical, institutional and human capacity; and political conflict. Increasingly these crises may be caused or aggravated by climate change. Over the years, WFP has been called upon to assist several countries struggling to cope with the impacts of extreme weather events.

Promoting Environmental and Natural Resource Management Activities

WFP's long experience in dealing with humanitarian crises illustrates that logistical operations are the backbone of any kind of response, including those addressing shocks related to climate change. WFP builds capacity and protects livelihoods by promoting disaster risk-reduction activities that mitigate the impacts of climate hazards. Through food-for-assets (FFA) activities, people are able to preserve and establish community assets such as irrigation schemes, fish ponds and woodlots. The communities and individuals who participate in FFA activities are also able to increase their own food production and maximize food utilization. This is made possible through soil and water conservation and improving soil fertility practices by agroforestry, manure making, establishing tree seedling nurseries, levee construction, afforestation, contour bunds and planting vertiver grass on steep slopes.



**Embankment construction in Liwonde,
Machinga District**

WFP Disaster Preparedness and Response

WFP is helping to strengthen the preparedness and response capacity of households, communities, local institutions and national governments to deal with extreme weather events as they increase in frequency and intensity. The Programme has been supporting the Department of Disaster Management Affairs (DoDMA) by building the Department's capacity in monitoring and evaluation and information management systems.

WFP Comparative Advantage

WFP has several comparative advantages within the UN System which include early warning and vulnerability analysis and mapping; needs assessment; disaster risk reduction and mitigation; a global logistical apparatus and an extensive field network; and the implementation of a range of community-based hunger safety-net initiatives. Vulnerability and baseline information analysis of coping strategies is done by the Vulnerability Analysis and Mapping (VAM) Unit. VAM is also responsible for hazard/shock analysis and mapping which helps in predicting future disaster-prone areas. VAM identifies early warning indicators and compiles a history of different areas and their proneness to disasters and changes that have taken place in those areas over time with regard to climate.

WFP is a key partner for mainstreaming national, community and household-based adaptation and has the capacity to implement large-scale natural resource management and environmental conservation projects that contribute both to mitigation of, and adaptation to climate change.

WFP Environmentally Friendly Practices

Use of Fuel-Efficient Stoves

WFP also promotes the use of fuel-efficient stoves under the school feeding programme. The fuel stoves used by some communities require less firewood and produce less smoke which makes the cooking environment friendly for those preparing the food. The stove uses less firewood compared to the traditional three-brick arrangement in most communities. This initiative supports a reduction in the amount of firewood used for cooking, hence reducing environmental degradation. WFP is still exploring other improved fuel-saving technologies for the school feeding programme.



Paper Recycling — 2003 Initiative

WFP Country Office in Malawi embarked on a paper recycling project, initiated in 2003. Through the project WFP provided paper to the Wildlife Society of Malawi at the Nature Sanctuary in Lilongwe to make briquettes which are a source of fuel for cooking and other uses.

WFP in collaboration with Paper Making Education Trust (PAMET) uses WFP trash paper for their recycle programme. Photo albums and folders are just some of the products made from the initiative. Various products are used as a source of income for the organization.

Other Initiatives

Afforestation Activities

WFP food-based interventions contribute to building resilience and adaptive capacity of households and communities. Some of these involve tree planting, water control and land regeneration.

WFP Malawi plans to engage the Electricity Supply Commission of Malawi (ESCOM) in assisting with the afforestation activities along the Shire River catchment area. ESCOM has experienced problems in generating electricity due to silting as a result of wanton cutting down of trees along the Shire River. At the same time, communities in the Shire River catchment areas of Machinga, Balaka, Zomba and Neno districts have suffered the consequences of land degradation and probably low crop productivity and food shortages because of loss of soil fertility. WFP has the capacity to implement large-scale natural resource management and environmental conservation projects that contribute to reducing disaster risk and to climate change mitigation through the food-for-asset initiatives.

Promotion of Jatropha Curcas

Jatropha curcas is a native tropical American tree which serves multiple purposes and has the ability to survive throughout long periods of drought. In Malawi it has been used mainly for medicinal purposes. *Jatropha* helps to improve soil fertility but can also be used as a living fence around gardens and fields since it is not consumed by animals. The oil extracted from the seeds is a bio-diesel that can substitute the fossil fuel. The plant can also be used to produce soap and the oil extraction can be done by hand or with simple machines which can be operated at village level and locally manufactured in Malawi. The residues from processed seeds can be converted into charcoal or used as organic manure, replacing chemical fertilisers.

The use of the plant has great potential as a renewable energy source. In Malawi, WFP plans to promote the use of *Jatropha* through food-for-assets activities within the PRRO 10586 by helping to improve food security by creating sustainable income-generating activities, while also protecting the environment. An added advantage is that planting and caring for *Jatropha* is not very labour intensive and as such HIV/AIDS-affected and chronically-ill households could benefit in particular from its potential.

Partners

WFP implements FFA activities through cooperating NGO partners who provide technical support, essential tools and other materials.

Government: Department of Disaster Management Affairs (DoDMA), Department of Forestry and Ministry of Public Works.

NGOs: ADRA, COOPI/MALEZA, GOAL, Emmanuel International, World Vision International

Private Sector: ESCOM, National Bank of Malawi

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