February, 2009.

Fish to feed HIV affected families in Malawi

The project **"Fish to feed HIV affected families in Malawi"** implemented by WorldFish Center in collaboration with World Vision with funding through Global Giving in southern Malawi, helps HIV/AIDS affected and infected poor families including women and orphaned households to live a better life with nutritious food on the table and money in their pockets through appropriate adoption of Integrated Agriculture-Aquaculture (IAA) technologies. The basic principle of IAA is to grow fish in water bodies that are closely integrated into a household farm, and intentionally make use of the resource flows of all the diverse activities on a farm such as livestock, vegetable and crops. The major aim is to convert agricultural wastes and manure into high quality fish protein, use the nutrients generated in the pond as fertilizers for growing crops and to grow vegetables around the pond.

Over the past two years, the WorldFish Center, with the Global Giving Fund has made remarkable contribution to improving income and food security through the promotion of IAA in primary schools and HIV/AIDS affected and infected households. This report presents communities response to the problems faced by the elderly and updates on school fish ponds from our previous updates.

Communities work on sustainable supply of water to fish ponds

July to December is a dry season in Malawi. The season is characterized by drought which leads to reduced water flows in all streams. Exacerbated by vegetative destruction of water catchment areas through charcoal burning and firewood cutting, most rivers in Malawi run dry during this season. It is also a season when protein and vitamin intake is reduced because there isn't enough water to grow fish and vegetables.

The Chingale Integrated Aquaculture Farmers Association (CIAFA) a community association for the promotion and marketing of fish and crop products in Zomba, Malawi, facilitated construction of water canals from the Zomba plateau. Long canals, some as long as three kilometers crossed over valleys and gullies through innovative bamboo water bridges to where the water is needed.



Water bridges constructed across gullies and valleys by the communities.

A village natural resources management (VNRM) committee has now been established whose patron is Group Village Headman Jusu. The Village Headman said that villagers now are trying to make sure others don't cut down trees for charcoal on the mountains, which creates erosion and depletes the water source.

Fish ponds for the elderly

During the period July 2008 and January 2009, twenty-one (21) ponds were constructed and stocked with fish for the vulnerable aged women and orphans. Elderly women shoulder the brunt of caring for the orphaned children in the event of the death of active young mothers and fathers. The 25-49 years age group is mostly affected by HIV and AIDS in Malawi. About 10% of households in Malawi today are headed by young children below the age of 18 years and/or old people over the age of 65 years. The women's primary role of care giving also means that elder women have to spend time caring for their daughters, sons and grandchildren. This demographic change has resulted in leadership crises and declines in labour productivity which has also affected resource management. Five women have also formed a club and are growing one hectare of maize to feed orphans. This initiative will therefore improve household food security and income for the elderly especially women by providing labor to construct fish ponds and crop seed to grow crops more than once by irrigation using water from the ponds.



One of the elderly women benefiting from the initiative.



A club of widows and aged women growing maize to feed orphans in Chingale.

A young farmers club born in the school ponds

With funding from the Global Giving Fund and technical support from the WorldFish Center in collaboration with World Vision International, in Chingale Area Development Program (ADP), fish ponds were constructed in four schools to improve the nutritional status of food-insecure school children by integrating fish supplies from small-scale aquaculture production into on-going school feeding programs. The Project aims at (i) establishing school fish ponds and related management activities as part of an expanded school curriculum, and (ii) linking clusters of local small-scale fish farmers as suppliers to school feeding programs.

As the children are being nurtured to be leaders of tomorrow, some children at Ntanangala Primary School have challenged the odds of being future leaders. They have formed a fish farming club as part of the skills enhancement program.



Ishmael and Fanny

The pupils have formed a club called "Young Fish Growers Club". The Club is chaired by Ishmael Kanyangale, a standard 8 pupils with Fanny Shaibu 14 years (standard 8) as its secretary.

The school has 7 fish ponds in which they have stocked *Oreochromis shiranus* and *Tilapia rendalli*. They also have a school garden where they grow maize and vegetables.

Management and feeding of the fish is done by all pupils in the senior classes (standards 5-8). The executive members' responsibilities are to develop duty rosters for feeding and management of the fish and ensuring that assigned pupils have done their work.

Mr. Manyetsa, the patron of the club and agriculture teacher of the school says that the school ponds and gardens are used as demonstration plots during practical agriculture classes. The demonstrations have brought fun and interest in Agriculture. The pupils now can identify the two fish species (*O.shiranus* and *T. rendalli*) and their sexes. "We are building skills here and I will not be surprised if we get fish taxonomists and commercial fish farmers from this school in the nearest future. I would like to assure all subscribers through the Global Giving that their financial contribution is building capacity in the development of Malawi apart from mitigating the impacts of HIV and AID" narrates Mr. Manyetsa.



An agriculture class during demonstrations on how to stock fish

Overall pupils' absenteeism has reduced. The school also expect more children to register in the new school calendar especially those from poor and vulnerable households (e.g. the HIV and AIDS affected households) because all the villages around know that the school will start harvesting in the next school calendar and embark on a school feeding program.

Pupils from Samalani Primary School also grew vegetables on the perimeter of their ponds, taking advantage of the water that seeps into the surrounding soil to keep their plants thriving. Using water from the channel that supplies the ponds, they also grew about one hectare of maize crop. Pictures below show the maize field at Samalani Primary School.

The sale of baby fish (fingerlings) will also generate income for the school which will be used to buy other small school items e.g. sports equipments (football/netball), chalks and even minor repairs of latrines.



Pupils from Samalani school applying fertilizer to their irrigated maize field



Samalani maize field after basal dressing fertilizer was done.

Local leaders and school heads have expressed satisfaction on the remarkable contribution to food security and incomes especially on vulnerable households that were very helpless before this funding.

Please let us know what you think of this update by providing feedback on our comments section or directly writing to the address below.



For further information, CONTACT Dr Daniel Jamu, WorldFish Center – Malawi Office. MAIL, P.O Box 229, Zomba, Malawi. EMAIL <u>d.jamu@cgiar.org</u>, FAX (+265)01 536 274. PHONE (+265)01 536 298, (+265)01 536 313, **Website:** www.worldfishcenter.org