Njira Project Site –
Simbota Watershed Management, Manga Village (Balaka)

Background

In 2014, PCI began implementing a $30 million dollar, five-year Food for Peace project designed to improve food security through agriculture, agribusiness, health, nutrition, and disaster preparedness for vulnerable families in Balaka and Machinga districts.

Under Purpose 1 - Increased food and income - Njira promotes a number of practices including: conservation agriculture, permaculture gardens, irrigation, watershed management, post-harvest technology, agribusiness, livestock management, and Women Empowered /Village Savings and Loans.

The project also has a strong health and nutrition component (Purpose 2) as well disaster risk management (Purpose 3).

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The field visit site is located in Balaka District, which has one of the highest poverty levels in the country. Subsistence agriculture is the primary livelihood in the district with few cash crops grown. The average rainfall in the area is 600 mm. Simbota, like much of the surrounding areas, has faced large-scale deforestation, land degradation, reduced ground water recharge, and permanent drying of river beds.

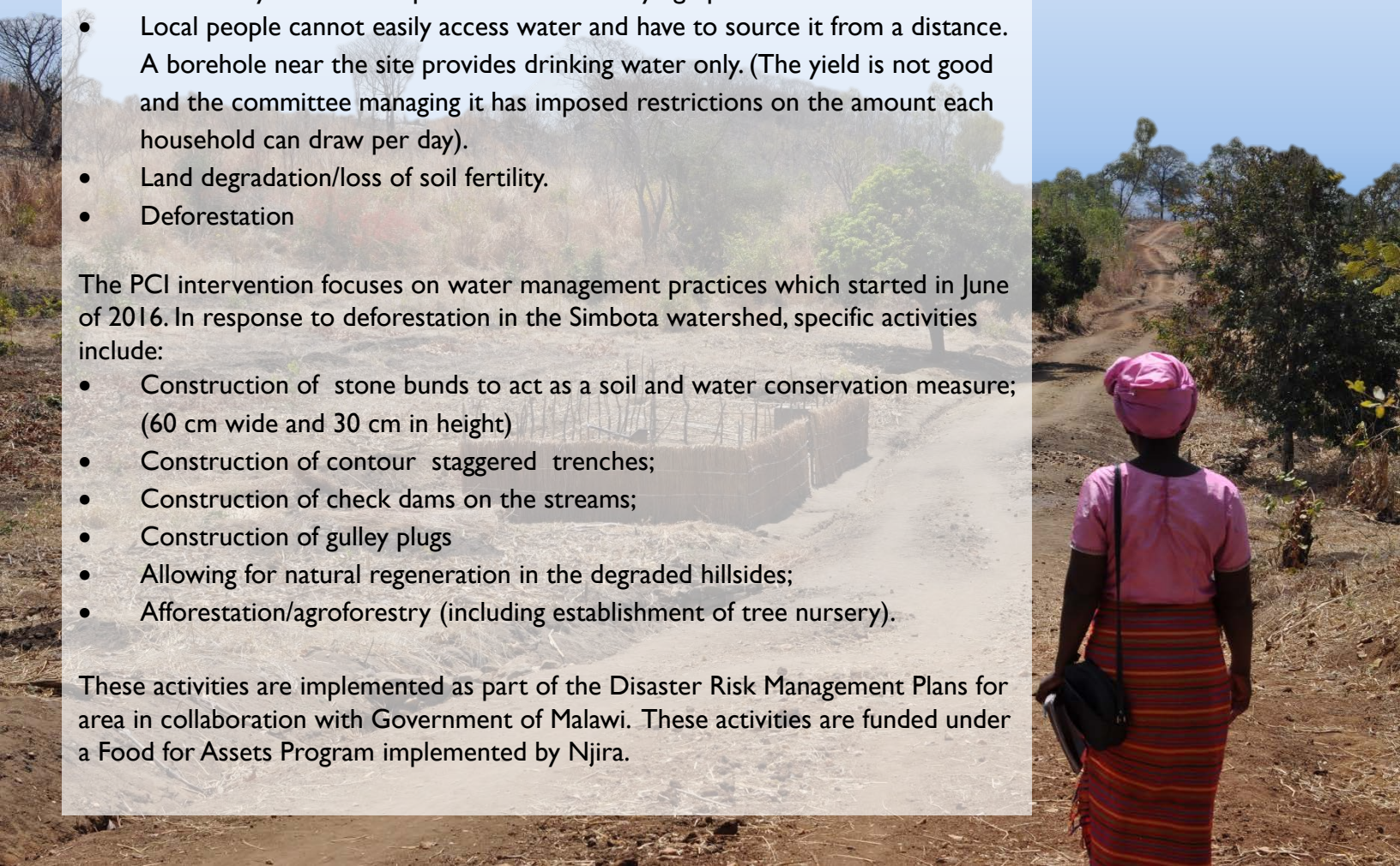
The challenges the Simbota watershed face include:

- River Mkandabwako has not flowed for about 15 years.
- Food insecurity: previously the local community cultivated in the river valleys using water from the river, which enhanced food security. Irrigated farming in these valleys is now not possible since the drying up of the river.
- Local people cannot easily access water and have to source it from a distance. A borehole near the site provides drinking water only. (The yield is not good and the committee managing it has imposed restrictions on the amount each household can draw per day).
- Land degradation/loss of soil fertility.
- Deforestation

The PCI intervention focuses on water management practices which started in June of 2016. In response to deforestation in the Simbota watershed, specific activities include:

- Construction of stone bunds to act as a soil and water conservation measure; (60 cm wide and 30 cm in height)
- Construction of contour staggered trenches;
- Construction of check dams on the streams;
- Construction of gulley plugs
- Allowing for natural regeneration in the degraded hillsides;
- Afforestation/agroforestry (including establishment of tree nursery).

These activities are implemented as part of the Disaster Risk Management Plans for area in collaboration with Government of Malawi. These activities are funded under a Food for Assets Program implemented by Njira.



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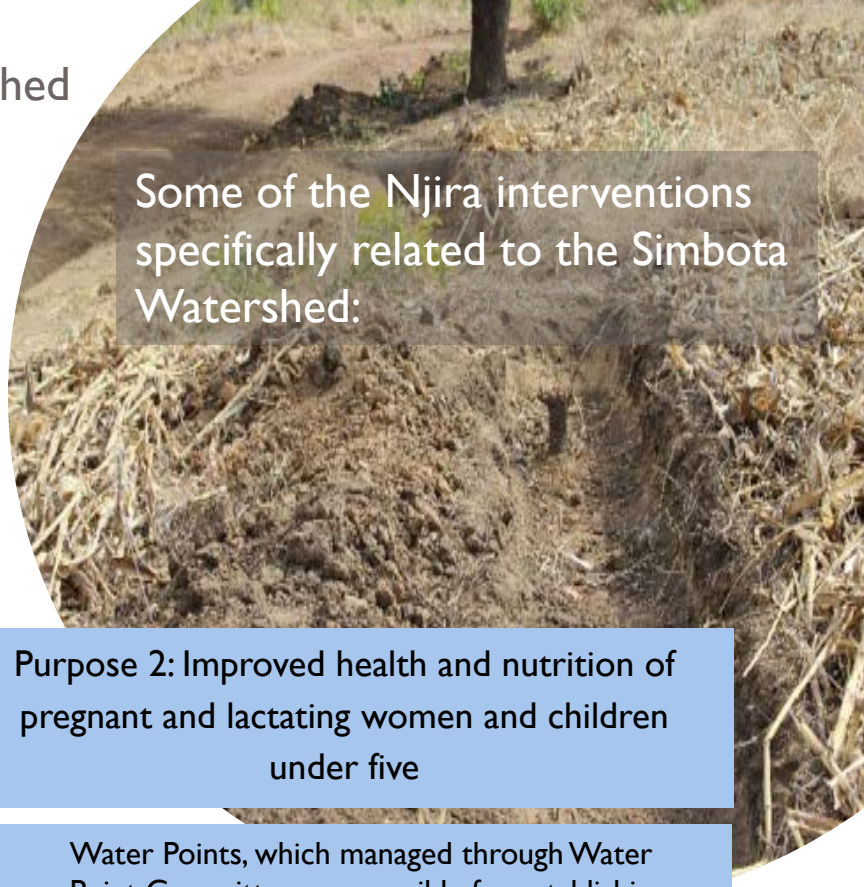

Some of the Njira interventions specifically related to the Simbota Watershed:

Purpose 1: Increased Food and Income

Conservation Agriculture (CA) in the form of minimum soil tillage, retention of crop residues and intercropping with cowpeas or pigeon peas, is the major thrust for Njira agriculture. Njira is promoting other drought tolerant staple foods such as orange flesh sweet potatoes, sorghum and pearl millet.

Most farmers at the Simbota watershed site have not tilled their land and have retained the residues from the previous crop as part of the Conservation Agriculture initiative, however, because the activity started so recently, some farmser still utilize traditional practices.

Agribusiness – Farmers are linked to buyers to facilitate collective marketing of crops and livestock as well as being taught to treat farming as business.

Post-harvest storage technology is being promoted by using metal silos and the use Purdue Improved Crop Storage (PICS) bags. The bags are sealed and prevent damage from stored grain pests and disease.

Purpose 2: Improved health and nutrition of pregnant and lactating women and children under five

Water Points, which managed through Water Point Committees responsible for establishing fencing around water points, management of the borehole, and construction of a vegetable gardens around water points to raise funds for borehole management. Njira provides training in all these aspects to ensure sustainable water points.

The water point at the site is unique in that there are watershed features above the waterpoint. Over the next few rainy seasons, the water harvesting features above the water point should increase the yield of water significantly.

Purpose 3: Improve capacity to prepare for, manage, and respond to shocks

P3 has taken the lead in developing the Simbota as well as other Watersheds Sites. This is because watershed restoration not only helps to recharge groundwater but it also helps to prevent shocks such as droughts and floods.

Community contingency plans include installation of rain gauges, river line gauges, and use cell phone technology, for disaster preparedness.

Infrastructural Development, including river bank stabilization and dike construction, as well as upgrading and rehabilitation of feeder roads is being carried out to increase community resilience.

Data collection for better disaster planning, will include field level weather data and the use of GIS maps, to give up to date maps of the Njira impact area. These maps will greatly assist disaster preparedness as well as all aspects of programming.