

According to the Health Surveillance Assistants from Chidalanda Hospital in Mngwangwa EPA the under five years' children data collected from 2019 to 2021 has shown an improvement of nutrition status in most challenging villages of Suntche, Chimbayo and Lombwa. This is a result of contributing factors including availability of vegetables and fresh maize from irrigation farming throughout the year. In rural communities the most challenging thing in educating children is provision of school fees and uniforms. However, irrigation farming is assisting farmers in generating reasonable household income which in turn supports school fees and uniforms.

Strategic Planning was completed in 2021 and Policy Production will take place 2022. This plan helped identify strategic activities which includes growth of the work that AWP does in Lilongwe to two Extension Planning Areas (EPAs) in Mchinji District.

Partnerships

Welt hunger Hilfe (WHH) - in the area of Traditional Authority Chauma in Dedza district, a windmill has been installed to support a community fish pond.

World Vision Malawi - have also entered into a partnership which will see the two organizations working together in installation of irrigation pumps for some agricultural schemes. At the moment there are two sites that have already been assessed in preparation for installation of the pumps.

World Relief Malawi - has not been active in the course of the year even though the partnership between the two organizations is still on going.

#	Name of farmer	District	Contact	Type	Year complete	Use
1	Werengani Ministry	Nkhotakota	deceased	Pressure	2020	Irrigation
3	Denis Milala	Mchinji	Benjamin	Pressure	2020	Irrigation
4	Bunda Campus	Lilongwe	Eng. Department	Pressure	2020	Research
5	TA. Chadza	Lilongwe	Eng. Department	Pressure	2021	Research
6	WHH	Dedza		Pressure	2021	Fish Pond
7	World Relief	Salima	TA Kambwili	Pressure	2020	Irrigation
8	World Relief	Salima	TA Kambwili	Pressure	2020	Irrigation
9	Gibson Nkanaunena	Lilongwe	Gibson	Pressure	2020	Irrigation

New Hires

Workshop Technicians and Communications Officer - Ms. Jayne Saka

2 Interns from Local Colleges joined the workshop team beginning in July

Workshop - in 2021 we split the workshop into two teams. The teams were empowered with tools and all the other necessary machines. This helped in speeding up the work that the workshop was supposed to do. Teams began using tents and airbeds for camping so that time commuting is reduced. Introduction to Welding and Fabrication plus Safety Considerations Training Completed for all staff (February & March 2021)

Vehicles - Mazda BL 415 (Christopher's Blue Truck) and Hilux ZA 6502 (truck purchased in 2011). Staff will provide vehicle inventory as well as maintenance needs and list of parts to see if we can repair vehicles, but in 2021 these vehicles were unreliable and took a lot of staff time trying to find parts and repairing vehicles.

Security Upgrade - Thieves made two attempts to steal from the office. During both occasions the thieves did not manage to steal sizable property, the only item that was reported missing is a horse pipe that was left outside the office building. Changes: Made fence higher, added razor wire. Two security personnel as well as the office assistant who resides within the office premises have phones.

Irrigation Technology Innovations - One windmill has been installed on a higher tower to allow it to capture as much wind as possible in the mountainous areas of Dedza district. This windmill will help AWP technical team to study windmill performance on a higher height and hilly areas. A new windmill design that uses gears has been developed. The bicycle pump has been reintroduced in areas where wind is not an option.

CHIGONTHI IRRIGATION PROJECT

Established in 2017 at which time demonstration gardens were established in 14 different agriculture clubs with a total of 450 farmers. Extension Workers and Lead Farmers Training - A total of 99 new farmers have been trained as lead farmers to promote the adoption of rope and washer pumps. Out of the 99 farmers trained, 68 are male while 31 are female. In addition to the lead farmers, 7 extension workers attended the training. Farmers were equipped with necessary skills in plot layout, making well-constructed and sized irrigation basins, construction of irrigation canals (primary and secondary), understanding all parts of a rope and washer pump, assembling the pump, installation, operation and maintenance. Field Day - Chigonthi Extension Planning Area (EPA) office organized a field day in the course of the year. *“Adoption of modern technologies key to achieving food security, incomes and improved nutrition status among rural farmers”*. The aim of the field day was to showcase all the agricultural interventions that are being carried out by the government and other players in Chigonthi EPA. Africa Windmill Project showcased its irrigation technologies (windmill, bicycle pump and a rope and washer pump.). The windmill was demonstrated on Mr. Stafiel Katambala's garden in Suza which was chosen as a model village. This year, a number of visitors came to Chigonthi EPA, these include; Welt Hunger Hilfe (WHH), Dr. Kamdonyo, Mr. Kamkhwani along with other members from Charismatic International Church, journalists from Zodiak Television and a family; Trezor and Liz who came to learn more about windmills.

Chigonthi Windmills

#	Name	Village	Club	Section	Year	Type	Coordinates
1	Steven Mphadwe	Chipasula	Zonde	Mlumbwira	2020	Lift	-13.780060, 33.695838
2	Layitani Zakeyo	Chitedze	Mango	Chitedze	2018	Lift	-13.684851, 33.722999
3	Daniel Kamenya	Mayenje	Mteza	Chitedze	2020	Pressure	-13.713016, 33.734897
4	Mercy Kamdambo	Makalani	Phazo	Chilitsi	2020	Pressure	-13.721086, 33.698994
5	Deborah Chaguzika	Nyanda	M'buka	M'bang'ombe	2020	Pressure	-13.751482, 33.714967
6	Haiford Dakashoni	Katela	M'buka	M'bang'ombe	2020	Pressure	-13.749910, 33.716591
7	Michael Kayiyatsa	Guzikonde	Mteza	Chigonthi B	2019	Pressure	-13.750578, 33.719926
8	Yohane Patisoni	Mwambakulu	Mwambakulu	Chilitsi	2020	Pressure	-13.729904, 33.715453
9	Milward Dzonzi	Makoza	Mango	Chitedze	2021	Pressure	-13.680962, 33.722059
10	Elisa Kabango	Katola	Tikondane	Mlezi	2021	Pressure	-13.825679, 33.827454
11	Henry Chikondi	Katola	Tikondane	Mlezi	2021	Pressure	-13.827045, 33.828084
12	Mavuto Chikadza	Katola	Tikondane	Mlezi	2021	Pressure	-13.825066, 33.827066
13	Lackson Million	Katela	M'buka	M'bang'ombe	2021	Pressure	-13.751161, 33.716465
14	Stafiel Katambala	Mwadzama	Matowe	Chitukula	2021	Pressure	-13.806476, 33.737552
15	Nyamulani Gulule	Mkhalapadzuwa	Tikondane	Chilitsi	2021	Pressure	-13.701652, 33.718296
16	Maxwell Karonga	Mbangombe	Phazo	Chilitsi	2021	Pressure	-13.721939, 33.700444
17	Moses Chikapisa	Guzikonde	Mteza B	Chigonthi A	2021	Pressure	-13.751957, 33.717103
18	Mateyu	Katela	M'buka	Mbangombe	2021	Pressure	-13.737721, 33.720278

MNGWANGWA IRRIGATION PROJECT

Established in 2015 to promote household food security. The project started with 350 farmers as direct beneficiaries and now the project is working with 1700 households impacting over 6000 people both directly and indirectly. Crop diversification has been widely adopted by most farmers growing maize, beans, leaf vegetables, tomatoes, onions, and Irish potato on reasonable plot sizes. Livestock production has also increased as a result of the irrigation project with the increased knowledge of the mutual benefits that exist between the two. Chickens, goats, sheep, pigs, rabbits and cattle are proceeds from irrigation work and have increased in number in the project area which in turn have also increased availability of manure, nutrition status and income generation activities. Mtsukwa, Nsanda and Lombwa irrigation sites farmers received rope and washer pumps. Ten new windmills have been installed in Mngwangwa this year. Six windmills have been fully installed and are operating perfectly while four windmills have been partly installed, all are pumping water into the storage tanks but are awaiting distribution system to be completed early next year as a result of the missing pipe fittings on the market. Training at a Sunche garden belonging to Reuben and Grace Chiweza. 15 windmill pump owners attended from different irrigation sites within Mngwangwa area. The aim of the session was to encourage windmill pump owners to maintain and utilize windmills to fullest potential. By just being at the Chiwezas' garden most of the visiting farmers were motivated to go an extra mile.

Mngwangwa Windmills

#	Name	Club	Section	Year	Type	Coordinates
1	Rueben Chiweza	Sunthe	Mngwangwa	2016	Pressure	-13.793954,33.669990
2	Kamuikeni Chaguza	Tikondane	Mpasa	2018		-13.722591,33.599418
3	Stonard Chimsewu	Tikondane	Mpasa	2018		-13.723750,33.600738
4	Laston Tengenibwino	Tikondane	Mpasa	2018		-13.724213,33.601444
5	Andrea Marko	Maselero 2	Mpasa	2019		-13.724853,33.591637
6	Chimphanje Chiputu	M'sikidzi	Mkwambula	2020	Pressure	-13.858438,33.673554
7	Banda Chisale		Chipokosa	2020	Pressure	-13.739329,33.565279
8	Bonifesi Sadalaki	Umodzi	Matanda	2021	Pressure	-13.962490,33.628036
9	Charles Kazembe	Umodzi	Matanda	2021	Pressure	-13.750499,33.631740
10	Fanuwelo Chidothi	Chipokosa	Malikha	2021	Pressure	-13.739329,33.565279
11	Hardwell Balafuta	Khombe	Kada	2021	Pressure	-13.779706,33.694736
12	Charles Chimombo	Tikondane	Malikha	2021		-13.705394,33.600264
13	Mcloid Mashonga	Tikondane	Malikha	2021		-13.705395,33.600264
14	Langton Alick	Chitsanzo	Matanda	2021		-13.826479,33.633692
15	Kawizi Tsamba	Chitsanzo	Matanda	2021		-13.826193,33.633861
16	Washington Kawizi	Chitsanzo	Matanda			-13.826665,33.634032
17	Alisoni Kangunje	Chitsanzo	Matanda	2021		-13.841076,33.630658
18	Malinga Mawa	M'sikidzi		2021		-13.861565,33.673047
19	Simatiyele Walazi	Kamphinga	Kawoza	2021		-13.747772,33.626747
20	Libe Simeon	Kamphinga	Kawoza	2021		-13.962487,33.628940
21	Mwale	Kamphinga	Kawoza	2021		-13.798890,33.812343

COVID 19 - This is a situation that has continued to affect the work that many institutions are doing here in Malawi as well as beyond. AWP made provisions for staff to be picked and dropped near their homes to make sure that members of staff are not using public transport which was congested in most cases. The provision of face masks and sanitizers also helped as well. A lead farmer training conducted in March reached out to 132 lead farmers to facilitate plot layout in their respective irrigation sites. Lack of formal club trainings such as plot layout due to rising cases of COVID 19 affected preparedness of new farmers to make their garden layout suitable for rope and washer pumps in advance which also affected the distribution of these pumps. The trained lead farmers were responsible for working with follower farmers in their areas to do standard plot layout. The staff will begin in early 2022 finishing these trainings now that large gatherings are now permitted.