## Africa Seed and Grain Cemetery view project

Agricultural Research Council together with UP and the NPO's Lewende Woord church, Tapelo and SA Cares embarked on a food system project: Breaking the cycle of poverty: Empowering vulnerable women with food cultivation (a vegetable garden, poultry project with nutrition education component) and life skills.

Project lead Dr Ellenore Meyer, all garden activities were planned and trained by ARC team under the lead of Dr Sunette Laurie. Poultry activities by prof Este van Marle-Köster and Cooking and life skills by Marion Beefort, Reboane Molebatsi Madzivhandila, Tich Maroveke and Tseleng Lekuba

With Seed grant money from UNICEF UP ONE HEALTH project the agricultural project was launched in September 2020 and then training of 25 women and 5 men occurred started 27 September 2021

Session 1 - making seed trays to grow seedlings from seed : 27 September 2021



Picture 1: Launch seedling trays 27 September 2021



Picture 2 and 3: Cooking demonstration by dietetic intern students Egg fried rice – to educate around including protein and vegetables to improve diet diversity



Picture 4: Meal in a box- ingredients for making the egg fried rice demonstrated during launch



Picture 5,6 and 7: Session 2 – planting Moringa trees 18 October 2021







Picture 8 and 9: Planting Moringa and how to care



Photo 10: Session 2: Moringa planting and care, women received to plant at homes and on site and including lentils and beans in diet was demonstrated with lentil curry and lentil and tomato stew. Meal in box included lentils, tomatoes onion and maizemeal

Session 3 Tower gardens – receive seedlings from Africa Seed and Grain project and container gardens



Photo 11 nutrition education including fruit and vegetables daily



Photo 12: Marion and Tich engaging mothers around including vegetables daily and including fish as a protein source to increase diet diversity, pilchards (tinned) or Kapenta/Matemba (dry)



Photo 13 Reba cooking pilchard fish cakes and pilchard and tomato stew



Photo 14: Session 3: Planting vegetables in space-efficient system: Bag gardens (25 Oct 2021)

Empty maize meal bags or animal feed bags are a useful, cheap means to produce leafy vegetables (e.g. Swiss chard, Mustard spinach). The vertical production can yield 12 kg of leafy vegetables from 40 plants per bag and provides four harvests over a 2-3 month growing period. The mothers took part in making holes in the bags, planting of seedlings and watering of seedlings. Due to the high plant population and small area required, the bags gardens are well-suited to keep in space-limited informal settlements. Seedlings donated Africa Seed and Grain during the Happy Smiles event at Malusi.

(S Laurie - Unicef Report)



Photo 15: Women planting the seedlings in the bags prepared by ARC



Photo 16: Women watering their bags. Given the option to have bag garden home or on communal property women opted for the communal garde.



Phot 17: Random photos are taken when training happens this photo tells the story of children playing while mother engage in activity that also strengthens social support and group cohesion. The power of positive engagement and group learning- growing together to alleviate hunger and poverty – long term goal.



Photo 18: Session 3 women were grouped in watering teams – days per week allocated to water garden. 5 teams for a shared responsibility. After 6 weeks the ARC and Lewende Woord teams also installed irrigation. Weekly follow up by ARC team to address any technical problems and community health worker hands on involvement training sessions and watts up group ARC to be the local contacts. Good rain in Pretoria also contributed to some days skipping watering.





Photo 19 and 20: proud mothers and happy children some bags growing better than others, some mothers really spend extra time during sessions to water, fertilize and weed. Women would reprimand each other for skipping watering or for not looking after their bags.



Photo 21: seedlings in the containers also grow well

## Session 4 Sweet potato cuttings planted



Photo 22 27 November 2021 Saturday Leadership with dr Ignatius Hlerema cleaning the soil in preparation for the sweet potato planting – a Saturday and Tich the CHW working along- side. Leadership arranged by Lewende Woord and SA Cares



Photo 23 1 December 2021 sweet potato cutting planting – Tich community health worker with women preparing the ridges.



Photo 24 women preparing the sweet potato cuttings. Irrigation arranged with technical support ARC and Lewende Woord church with SA Cares sponsored the borehole.



Photo 25 planting the sweet potatoes – leaves and tuber can be used in food preparation to increase diet diversity and vitamin A intake





Photo 26 and 27 Mushroom planting and the last garden session for the year, water and fertilisation teams will continue during the holidays and the poultry project daily follow up will continue. Chipu one of the mothers will be the contact person for the team



Photo 28 Sponsorship by Lions Centurion enabled us to provide each mother with a 12.5 kg mealie meal, tinned fish, soya or baked beans 8 December 2021 25 women received the parcel.



Photo 29, 30 and 31 Sponsorship of gifts to children by Lions Centurion club and toy drive, additional 19 mothers received 12.5 kg mealie meal, handover kitchen ware Daspoort and cooking session spinach, potato and pilchard dish. Until kitchen equipped outdoor cooking – and eating. Recipe adapted from cooking done Sekai at Zama Zama.



Photo 30 mothers and children eating



Photo 31 and 32 hand out of gifts



Photo 32 weekly cooking at Zama Zama – including vegetables from the garden Sekai does the garden and cooking on a Tuesday since Nothando left and Mirrian who then cooked is now employed. Sekai recipe used at Cemetery view and received a "thumbs up" for tasty.

Thank you to Africa seed and grain, Humble smiles and the Imvelo group at Cemetery view for moving from plan to action in 2022.