



EMPOWERING FARMERS WITH DISABILITIES

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INMED South Africa

With its innovative Aquaponics system, INMED South Africa is empowering farmers with disabilities in the Free State to build sustainable farms.

MARISKA MORRIS investigates

There is nothing quite like getting your hands dirty while working the earth or to see your labour grow – especially when you can literally reap your rewards. Sustainable farming offers small scale farmers the joy of reaping their labour as a source of food and income. But it's not always an accessible career choice.

What if there was a world in which dirt roads were replaced with pavement and crop lands fit in a large greenhouse with raised growbeds and self-irrigation? Well, with the INMED Aquaponics* system, nearly 100 farmers (many with disabilities) are able to farm more vegetables and fish for themselves

and their community.

Aquaponics combines aquaculture (fish farming) with hydroponics (soilless crop growing). Nutrient-rich water from the fish tank fertilises the crops, then filters through the gravel, where it is cleaned and oxygenated, before returning to the tank.

The system is far less labour intensive compared to traditional farming methods. It allows for 10-times higher crop production compared to a traditionally farmed plot of the same size; uses less water; requires no chemical fertiliser or pesticides; and produces crops year-round with the option to further reduce the energy consumption by harvesting rainwater and installing solar panels.

Most importantly, it can be adapted to be completely accessible.

“We would have no life without farming,” says Mary Mkithika, one of the beneficiaries of the programme. The 47-year-old paraplegic farmer from Kroonstad recommends sustainable farming to others.

“It is better to work on your own in order to face your life, including poverty. Farming sustains us and gives us some security.”

It is the desire to see people with disabilities integrated into the Free State economy that encouraged the programme.

INMED Partnerships for Children founder and CEO, Linda Pfeiffer, explains: “INMED Aquaponics in South Africa was born a decade ago out of a desire to help struggling subsistence farmers and marginalised individuals tackle the intertwined challenges of food insecurity, climate-change adaptation, poverty and exclusion from participating in the market economy.

“We’ve been training and equipping people with disabilities to produce their own food, run their own agro-businesses and become self-reliant since 2012.”

The roll out of the system is part of a bigger programme and partnership. Unathi Sihlahla, programme director at INMED South Africa, explains: “As part of our Adaptive Agriculture Programme, we are currently in partnership with USAID to roll out a programme titled: ‘Expanding Participation of People with Disabilities in Climate-Adaptive Agriculture’.

“The overall goal is to integrate people with disabilities into the modern economy through new adaptive agricultural technologies and we plan to reach over 1 000 people in the next two years.

“We also have a nutrition and healthy lifestyle programme that addresses issues of malnutrition in targeted communities through an integrated

approach that includes nutrition education, food gardening and promotion of physical activity.”

A partnership with the Disabled People South Africa (DPSA) Free State assists INMED South Africa to identify the communities in need.

Operations manager at INMED South Africa, Janet Ogilvie, explains: “Since the start of the programme in 2012, INMED has established and built strategic collaborations with various disability organisations including the DPSA, especially their Free State office, and we work with them to select members of their organisation for this project that meet specific criteria.”

“We’ve been training and equipping people with disabilities to produce their own food.”

Mary enjoys every aspect of the farming, especially reaping the rewards of her hard work.

“I enjoy planting vegetables, feeding the fish and looking after my project. It is really satisfying to see the end result at harvest time,” she notes.

Aside from the satisfaction, nourishment and potential income that the project provides, it has taught Mary many, invaluable skills.

“My life has completely changed as I met more people with different skills and ideas. This has taught me so much. I would like to thank INMED South Africa and USAID for bringing aquaponics into our lives. Everything is so much easier, and it is very interesting.”

Ogilvie notes that in-person training is provided to the, over 100, current beneficiaries.

“Training is done face-to-face onsite at each project. Training materials are provided, but most of the aquaponics training is hands-on in



their system so that they can immediately see what is being taught.

“The training covers all relevant aquaponics system information along with marketing and financial understanding, which includes setting your price and calculating profit. This is done at, or near, each site to cut down on travel,” Ogilvie says.

“A translator is also present during the training to ensure each programme participants understands the information imparted. Exercises relating to each topic are done throughout the training to ensure everyone understands the training materials.”

While the project has provided new opportunities, there still remains challenges for farmers with disabilities.

“One of the challenges we face is travelling to the farming area during the rainy season,” Mary explains. “This is very difficult. There is also still a stigma around people with disabilities and we still find that some people in the community will not buy from us because we are disabled.”

While there still remains some stigmas, INMED South Africa hopes to remove this stigma over time, as Ogilvie notes: “Positive impacts include overcoming stigma and a tremendous increase in confidence and self-worth among programme participants.

“Especially in this time of global pandemic, INMED South Africa’s Adaptive Agriculture Programme equips marginalised populations, such as those with mobility issues, with the

MAIN AND COVER PHOTO: Martha Moletsana tends to the raised garden beds that form part of the INMED Aquaponics system.

LEFT: Mary Mkithika working in the garden bed.

BELOW: Martha Moletsana feeding the fish, which form the second part of the Aquaponics.



training, tools and resources they need to achieve food security and sustainable livelihoods – not only for themselves but for their communities.”

Nearly 50-km down the road, 73-year-old wheelchair user from Hennenman, Martha Moletsana, is also benefitting from the programme. With memories of growing up on a farm, Martha grew some vegetables in her backyard – until INMED South Africa introduced an aquaponic system at her local centre.

“I have a small portion of land where I grow my own vegetables,” Martha explains. “INMED introduced aquaponics to my centre and I became very interested in this method of farming. INMED South Africa has helped me and my family a lot as we no longer struggle with having to buy vegetables from the shop.

“The community farming project that we run also helps the community to buy vegetables at affordable prices and good quality; fresh vegetables that are good for their health.”

Through the programme, INMED South Africa has fed Martha and her community, but also provided her with some exercise, skill and knowledge that she can share with her children.

“Farming is part of exercising and gaining knowledge because I work very hard to get good produce. I stretch my muscles and I transfer my skill to my kids at home,” Martha notes.

Even an hour apart, Martha faces the same challenges as Mary. She notes: “The challenge is coming to the project when it’s raining as I am in a wheelchair. I do not have my own transport. Sometimes community members refuse to buy from us because of our disability. Some people still do not accept us and undermine us.”

However, despite the challenges and prejudices, Martha still encourages others to pursue sustainable farming as a career choice: “Farming is very important in our lives and the vegetables have all the nutrients that our bodies need. I encourage them to try farming in spite of all the challenges that they may face.

“It is worth it in the end because you can see what you can achieve with hard work and commitment and support,” Martha concludes. “I’d like to thank INMED South Africa and USAID very much for the good work they are doing for people with disabilities, and the skills they are transferring to us. It is changing our lives.”

When asked what motivated INMED South Africa to invest in the community, Sihlahla says: “At INMED, we believe that disability rights are human rights and, with our work as an organisation, we advocate for the rights of people with disabilities, developing their capacities to manage vulnerabilities to socio-economic challenges.

“In addition to this aspect, we believe the disability sector requires additional support due to stigma,

**INMED Aquaponics is a registered trademark in the United States (US), and will remain the same when registered in South Africa. INMED South Africa is facilitating the programme.*

discrimination and inaccessibility. People with disabilities are therefore less likely to participate in economic activities and basic services. Our programmes try to address this issue.”

In the new year, amid the global pandemic, INMED South Africa plans to further expand the roll out of the INMED Aquaponics.

“It is worth because you can see what you can achieve with hard work.”

Pfeiffer explains: “We are expanding our aquaponics outreach with a new programme called INMED Aquaponics Social Enterprise, which will take INMED’s commitment to food security and sustainable livelihoods a step further.

“It will include an aquaponics training and consolidation centre with satellite centres throughout South Africa to broaden the scope of food security, climate-change adaptation and agro-entrepreneurship.

“The INMED Aquaponics Centre will include remote and certified in-person training; access to quality, lower-cost inputs like fish fingerlings and feed as well as seeds and starter systems; assistance with market development; consolidation services to yield better prices for producer; and even links to financing for start-up and expansion,” she concludes.

Whether you are looking for a more affordable food source, want to make a small income or just want to stick your hands in the earth and see Mother Nature work her magic, consider investing in sustainable farming. All you need is some innovation – or an INMED Aquaponics system. **R**