Long-Term Impact Report 2015-2022

South Africa

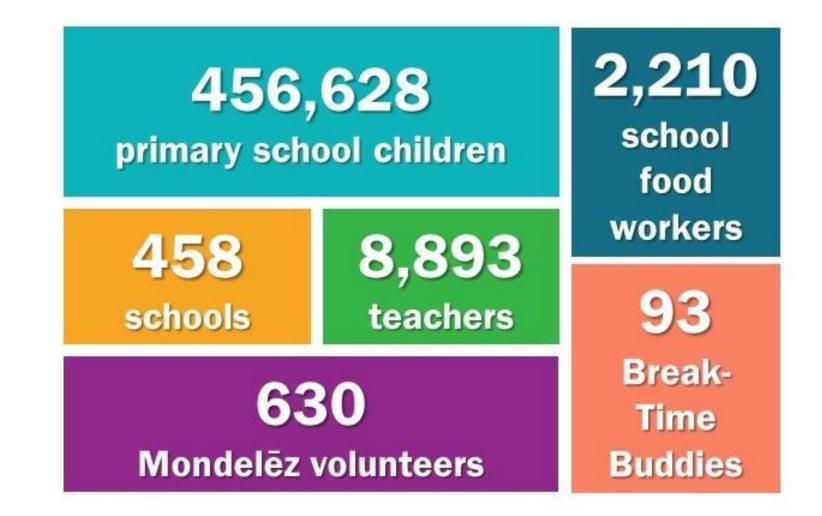




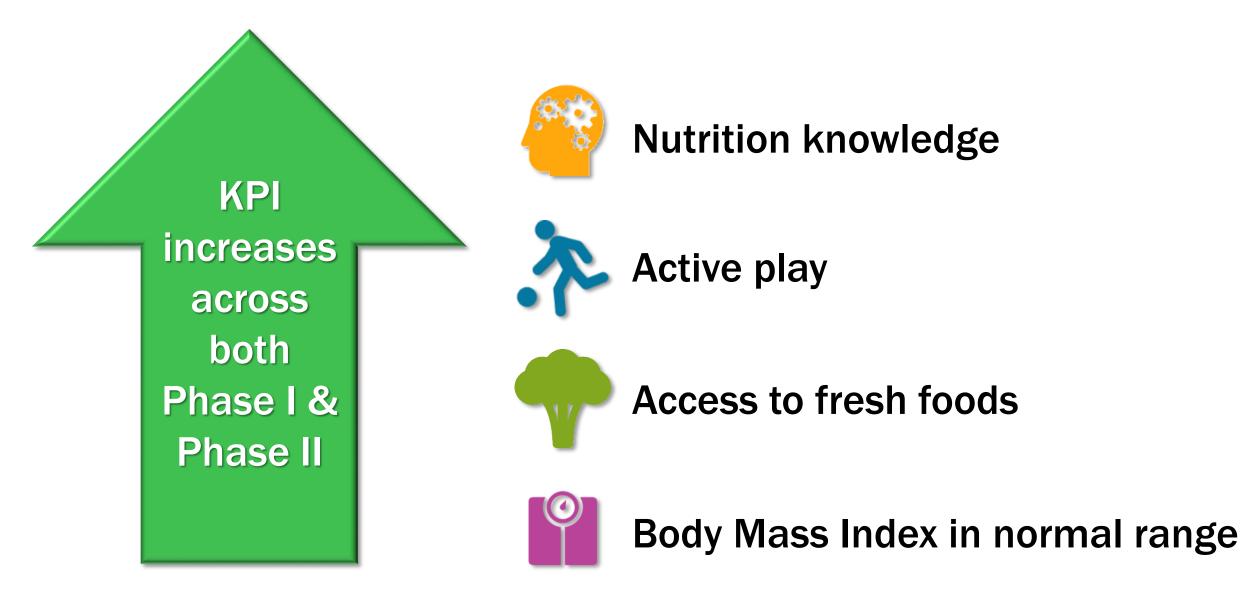
18 locations in
3 provinces

(Gauteng,

Eastern Cape,
Western Cape)

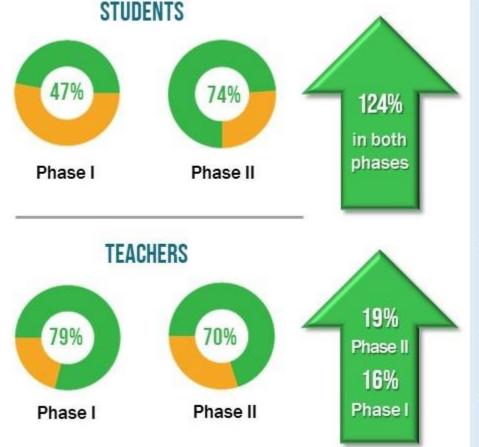


Key Performance Indicator Achievements



KPI: Nutrition Knowledge

KNOWLEDGE OF NUTRITION & HEALTHY LIFESTYLES POST-TEST AVERAGE SCORES



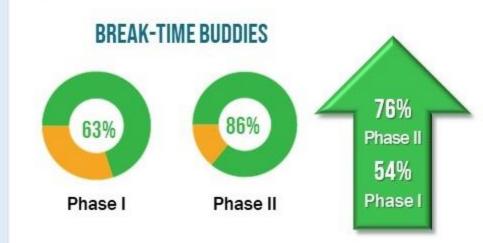
NUTRITION EDUCATION KPI:

% of students who improve their knowledge of good nutrition and healthy lifestyles basics

CORE PROGRAM ACTIVITIES:

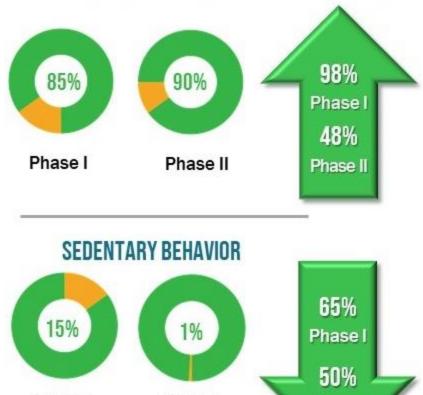
- Participatory nutrition and healthy lifestyles education
- Curriculum-linked educational materials
- Teacher, school food worker & Break-Time Buddies training





ACTIVE PLAY AND OPPORTUNITIES FOR PHYSICAL ACTIVITY

PHYSICAL ACTIVITY – AT LEAST 30 MINUTES DAILY



Phase I

Phase II Phase II

ACTIVE PLAY KPI:

% of students who report that they are physically active or engage in play for 30 minutes or more daily

CORE PROGRAM ACTIVITIES:

- School-based physical education
- Break-Time Buddies to guide recess and PE activities
- Group activities in schools and neighborhoods

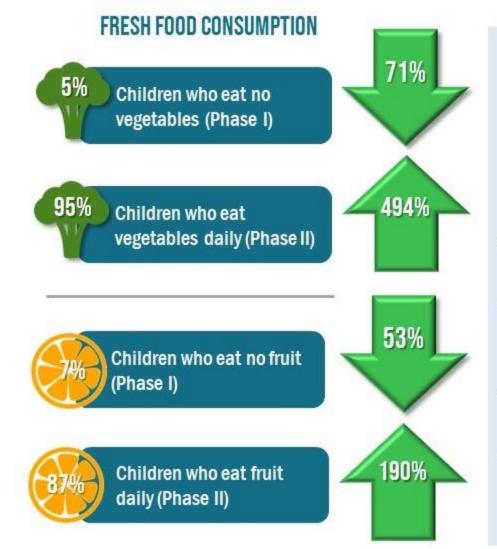
PHYSICAL ACTIVITY DURING PE CLASS



ORGANIZED RECESS ACTIVITIES



KPI: Access to Fresh Foods



ACCESS TO FRESH FOODS

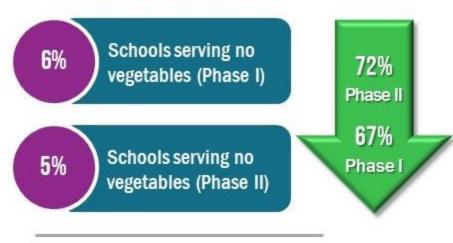
ACCESS TO FRESH FOODS KPI:

% of students who report increased consumption of fresh fruits and vegetables

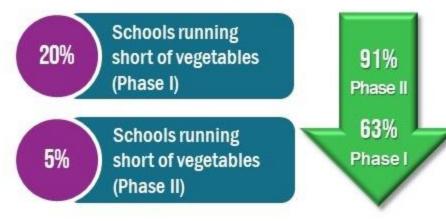
CORE PROGRAM ACTIVITIES:

- School food gardens to supply school meals
- Aquaponics systems for intensive vegetable and fish production
- School food worker training
- Home garden promotion & training

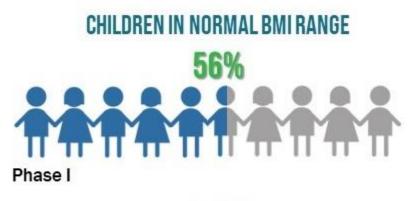
FRESH FOOD AVAILABILITY

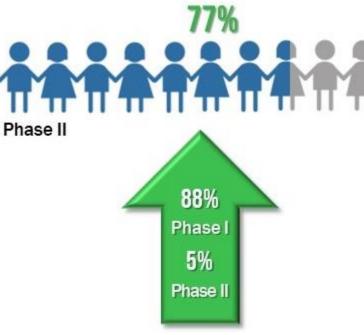


FRESH FOOD SUPPLY

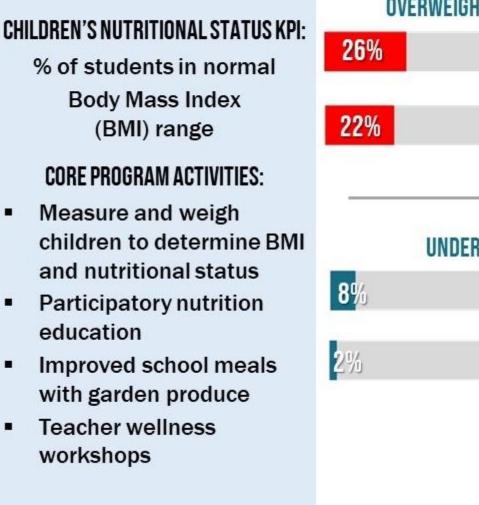


KPI: Nutritional Status (BMI)

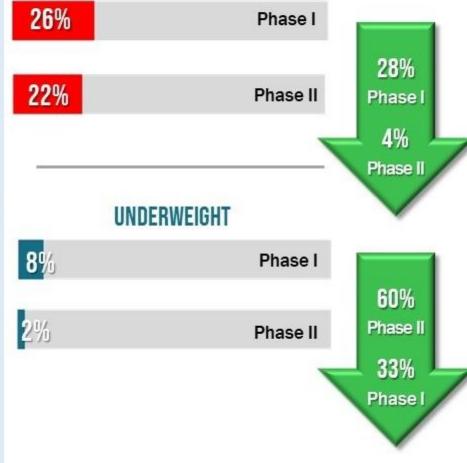




CHILDREN'S NUTRITIONAL STATUS



OVERWEIGHT & OBESITY



The Health in Action program model was designed with long-term sustainability and community ownership as a goal. The slides that follow highlight many of the factors that help develop an overall healthy lifestyle culture.



Partnerships (1/3)

Partnership building and stakeholder engagement represent the foundation of program success and sustainability. Across both phases of the Health in Action program, we established alliances with influential partners including:

- National Department of Education
- Provincial Departments of Education: Gauteng, Eastern Cape, Western Cape
- District Departments of Education: Johannesburg, Port Elizabeth (Gqeberha)
- Johannesburg Department of Public Health
- Nelson Mandela University
- Wits University
- University of Johannesburg
- World Fish



"When we look back before the start of this program, we see a lot of improvement not only in our children in schools but also in our officials, whose knowledge on nutrition and healthy lifestyles has improved dramatically."

– Linda Goba, Chief Education Specialist for Education Social Support Services, Port Elizabeth "We are very grateful to both INMED and Mondelēz for the continuation of this program. Reports from our schools and engagements with school representatives in our district continuously inform of great impact from this program, and for that we are thankful."

– Saul Japhta, District Coordinator, Johannesburg South Education District

"Our working relationship with INMED and Mondelēz taught us what stakeholder collaboration should be, and for that we are truly grateful." – Joy Sishi, Deputy Chief Education Specialist, Port Elizabeth "As the university, we are proud of the partnership with INMED. Not only does the aquaponics provide food to schools and communities, in doing so it also builds a positive image for our campus."

Sharon Masiza, Executive Director, Nelson
 Mandela University Missionvale Campus

"The work done by social partners such as INMED and Mondelēz is very vital for the department. It improves both learner enrichment and education outcomes." – Thembisa Futshane, Chief Director for Education and Social Support Services, Eastern Cape Department of Education

"As Mondelēz, we really pride ourselves for such a great partnership with INMED that enables us to change the lives of our communities—more especially the children—and it's exciting as well to see that our team has embraced the program."

– Navisha Bechan-Sewkuran, Corporate & Government Affairs Lead for Sub-Saharan Africa

Participatory Education

A participatory approach to learning and applying healthy lifestyles messages—which are linked to the public school curriculum standards—is at the core of the Health in Action program model. Putting children at the center of an action-oriented educational process equips them to act as agents of positive change among their peers and in their families and communities.

"We found that our learners are responding well when we use a participatory approach towards nutrition and healthy lifestyles. As a result, we try to be creative with hands-on activities." – *Mr. Mbokane, Principal, Refalletse Primary School*

"I have always found the lesson plans very easy to follow. Most important, they engage participation from the learners as well." – Ms. Mafani, life orientation teacher, Seyisi Primary School

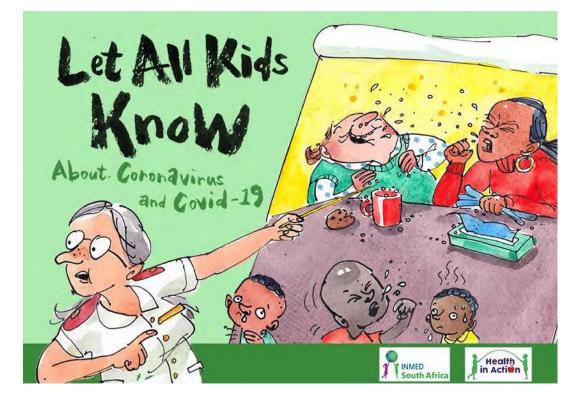
"The learners seem to develop a level of emotional intelligence through caring for plants and animals. It also provides an opportunity for practical learning, instead of only theory." – Pinkie Motlanyane, teacher, Lesedi la Kreste Primary School



Educational Materials

The Health in Action program made many of its educational materials freely available for download to encourage broad sharing of healthy lifestyles messages. Particularly while schools were closed during the COVID-19 pandemic, schools disseminated the program materials in place of in-person learning.





INMED South Africa published an illustrated storybook in the early days of the pandemic to help children understand the virus, the lockdown, and how to prevent infection.

Mentor Schools

Several schools that took part in both phases of the Health in Action program emerged as mentors to other schools in Phase II, showing excellence and dedication in their implementation of the program model. These mentor schools will lead the way toward sustainability through the multiplier effect of sharing knowledge, skills and best practices with others.



"We are excited to partner with INMED now as a mentor school. Over the past years we received so much information as part of Health in Action, we are now at a level to provide support to other schools, and we are looking forward to this new role."

> – Nomonde Ntsundwana, Deputy Principal, Seyisi Primary School

Student Clubs

After-school clubs focused on healthy eating, food gardening and active play provide students with a forum to apply what they have learned through the Health in Action program outside of the classroom. The clubs' 4,000+ members have also taken a leadership role in engaging their peers and family members, expanding the reach of the program's educational messages.



"I like being part of The Foodies in my school. It has really boosted my confidence, and now I am able to share knowledge with some of my peers."

– club member from Charles Duna Primary School

Youth Development (1/2)

The Health in Action program recruited unemployed, out-of-school and disconnected youth from local communities to serve as Break-Time Buddies: physical activity leaders and mentors for primary school children. In carrying out their role, the Buddies gained leadership skills, self-confidence and employment experience that prepared many of them to move on to better jobs or to return to school, and to find new paths to personal purpose and fulfillment. The program also provided university agriculture students with real-world experience through internships in aquaponics.

"From this experience I have learned to be responsible, as every day I had to wake up early and be at schools for my Break-Time Buddy responsibilities. I can safely say this opportunity gave me a good reason to live, as previously I was just unemployed and doing nothing in my community."

– Ntobeko, Break-Time Buddy

"Before I started working as Break-Time Buddy, I was a bit scared of working with children, thinking I had nothing much to offer. With the comprehensive training from INMED, I became more confident about myself and abilities to be a positive force toward others. Today I work very well with children of all ages." – Dineo, Break-Time Buddy



Youth Development (2/2)

"Working with INMED has opened my eyes to a lot of things in the world. It has motivated me to always look for ways to improve myself and search for something better in my life."

– Break-Time Buddy

"Being the first person to have a tertiary qualification in my family, it is such a proud moment for all of us at home. At the start of this internship I really struggled to put into practice the theoretical knowledge gained through my studies. My participation in this program has been a great boost for my confidence. I am very grateful to INMED for the experiential learning opportunity."

– Unathi Mgcebelele, aquaponics intern



"After joining INMED as a Break-Time Buddy, I started organizing children to coach them to play netball in the afternoons. After noting that some of the children were not keen to participate in play activities, I discovered that it was because of hunger, and that's when I started the soup kitchen."

– Ntombekhaya Ngindana, Break-Time Buddy, explained how she came to establish

a hunger relief effort for families in her neighborhood

Teacher Wellness (1/2)

In recognition of teachers' unique and critical position not only as educators but as role models for their students—and with an understanding of the many stresses they face—the Health in Action delivered a series of wellness trainings specifically targeted to teachers. Teachers were also encouraged to apply new healthy habits through ongoing communication in WhatsApp groups and wellness challenges.

"In our school we practice what we preach to learners. As educators, we exercise and we eat healthy."

– Mrs. Mtimbane, teacher, Leresche Primary School

"We feel that we cannot just fold our arms while many of our fellow educators succumb to lifestyle diseases at a very young age." – *Ms. Vaas, Principal, Yellowoods Farm School*

"Training such as these for educators are very important. Hundreds of our colleagues have succumbed to COVID-19, mostly because many had underlying comorbidities, including diabetes and high blood pressure." – Teacher wellness training participant



Teacher Wellness (2/2)

"I heard about these teacher wellness sessions from a colleague, and I told myself that no way will I miss this one because I have realized that I have to adopt good eating habits and a healthy lifestyle if I want to live long." – Teacher wellness training participant

"As teachers, we appreciate the support from INMED and Mondelēz. It is very rare that we receive support that enriches our lives. This training is all about our well-being. The knowledge we gained today will improve our health, and for that we are very grateful."

– Teacher wellness training participant

"I really appreciate the time that the INMED team spent with us and their concern about our diet, health and lifestyle. I learned that it is not a matter of having everything money can buy and vast amount of land to be healthy, but it's your desire to live good and take little steps each day. Thanks for showing us love and adding more years to our lives."

– Ms. Sibindi, teacher and wellness challenge winner



Professional Development

In South Africa, school food preparers are typically selected from among unemployed community members, and many have no previous related experience. Training through the Health in Action program equipped food preparers with the skills and knowledge to fulfill their vital role in ensuring children's nutrition through balanced, safe and appealing meal preparation. The training raised their status in the community, built their confidence and introduced transferable skills to further improve their future employment prospects.

"In our school we have learners that are dependent on the meals provided by the school. The role that the kitchen staff plays is an imperative one. We are forever grateful to INMED with their Health in Action program. The workshops they provide have ensured that the quality of meals prepared are healthy and highly nutritious, and that ensures that our learners are able to perform well in class."

– Mr. Henna, Principal, Enkwenkwezini Primary School



Permanent Equipment & Supplies (1/2)

Because the schools selected for participation in the Health in Action program were among the poorest in their communities, many lacked essential materials needed to put the program messages into action. To ensure that all schools had an equal chance to succeed, the program provided infrastructure improvements and equipment and supplies that can be used for years to come.



Left: Mondelēz volunteers with students and school food preparers at the mobile kitchen they helped install and paint. *Center and right:* School personnel receive donated sports equipment and gardening supplies.

Permanent Equipment & Supplies (2/2)



"Our school has a general lack of resources for physical activity, [so] the painted games done by the INMED team are such great help for our school. Before we had these games, our challenge was getting children to participate in physical activity. Now our challenge is getting them off the field."

– Mr. Makhafula, Principal, Diepsloot 4 Primary School

School Gardens

School food gardens support the Health in Action KPIs by ensuring ongoing access to fresh foods, promoting healthy eating, and serving as a hands-on educational tool. To secure the sustainability of these vital gardens, the program conducted extensive training on crop cultivation and maintenance, seed saving, seedling cultivation, composting, water harvesting and use of gray water; provided necessary garden equipment; and linked schools to funds for garden inputs through the National School Nutrition Program.

"In our school, we live food gardening. The support we received from INMED and Mondelēz over the years has been amazing. Through their encouragement, our work has attracted other stakeholders who are now providing support to our initiative."

– Nomonde Ntsundwana, Deputy Principal, Seyisi Primary School



Home & Community Gardens (1/2)

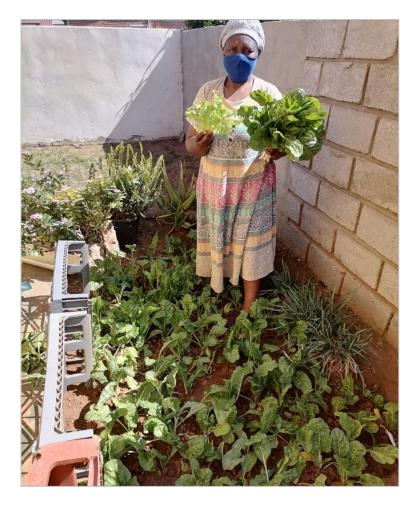
To further expand access to fresh food in students' homes and communities, the Health in Action program delivered house-to-house gardening training and starter seeds to more than 180 families—many of whom have shared their surplus crops and their new knowledge with their neighbors.

"I really appreciate what you did for me, as I love fresh vegetables. I also don't have to buy veggies anymore since you gave me seeds. My garden means a lot to me."

– Ms. Mandisa, home gardening trainee

"Getting access to seeds has always been a challenge for me," Now with the knowledge that I can harvest my own seeds, I'll be able to sustain my garden without any need for support."

– Lerato Mngadi, home gardening trainee



Home & Community Gardens (2/2)

"I had stopped gardening a long time ago because of the changing weather patterns. With this newly found knowledge, I now know what to plant and when during the year." – *Ms. Motloung, home gardening trainee*

"Staying at home and not working is very stressful. To have a garden to look after gives me hope and something positive to do."

– Michael Matlapasheka, home gardening trainee

"I never knew that I had so much in common with some of my neighbors. As we started sharing tips and seeds, we started engaging and learning a lot about each other, and it's so exciting."

– Lungile, home gardening trainee



Aquaponics for Food Production

The Health in Action program established three commercial-scale aquaponics systems and helped to revitalize two existing smaller systems on primary school campuses. While the aquaponics technology is relevant to multiple aspects of community development, its most immediate and substantial impact is in the production of vegetables and fish. Harvests from the aquaponics system were donated to program schools and surrounding community organizations to meet food security needs.

"It is such a privilege for us to be beneficiaries of this project. We serve a community in dire need, and the vegetable donations go a long way in addressing malnutrition and hunger in the area."

– Sabrina Lambers, Manager, Missionvale Care Centre

"The vegetables help to alleviate poverty as the kids can sometimes take them home. The greenhouse expansion has also enabled parents to take part and volunteer."

Pinkie Motlanyane, teacher,
 Lesedi la Kreste Primary School



Aquaponics Education

In large part as a result of our work to raise awareness of the potential of aquaponics to strengthen food security, STEM education, climate change adaptation and sustainable livelihoods, President Ramaphosa announced in his 2019 State of the Nation address that aquaponics would be introduced as a new technical subject in public schools.

That addition became official in the 2022 school year. We have since met with curriculum and education specialists in the provincial education departments to discuss how we can support the roll-out of aquaponics education—including through the development of a "plug-and-play" system design appropriate as a school learning tool, recently approved for funding through South Africa's Technology Innovation Agency.

"This is really a model worth scaling up in our schools because it's simple, functional and a great resource for STEM education, especially in low-resource schools." – Christa Havenga, Curriculum Director, Gauteng Department of Education



INMED Aquaponics[®] Social Enterprise (1/2)

Phase II of the Health in Action program included a social enterprise component through aquaponics, through which the cooperative contracted to manage the system in Soweto sold a portion of the harvests to the local community. This approach represented one of the first steps to the INMED Aquaponics[®] Social Enterprise (IASE), which has since been launched with an investment from Mondelēz's Sustainable Futures initiative. The IASE now provides the pathway for key components of the Health in Action program to continue, through ongoing training and technical assistance in aquaponics for schools and community-based entities that adopt the technology.

"We really feel privileged to be beneficiaries of this aquaponics enterprise. We are not only learning about the technology, but we also get an opportunity to feed our families and send our children to school from the income we make."

– Max Nkwane, Chairperson, Ndofaya Agricultural Cooperative

"This project is such a drawcard for our community. We are now able to get fresh vegetables at our doorstep. We will continue to support the project to ensure that it's a success that will benefit more people."

– Michael Dube, Soweto resident



INMED Aquaponics[®] Social Enterprise (2/2)

"Working on this continent we used to talk about African solutions to African problems, but we should be talking about African solutions to the world's problems. What you are doing right here is a solution that can be replicated around the world."

- Will Stevens, Acting U.S. Consul General (fourth from left in photograph), commenting on his visit to the aquaponics system at Nelson Mandela University <image>

"When I joined the project, I struggled to produce highquality seedlings on my own because of lack of knowledge, and as a result we were depending on big commercial farmers to supply us with seedlings. Now through mentoring and support from INMED, we are able to produce our own seedlings, which we also sell to the community."

– Ndofaya Agricultural Cooperative member

"Our research work in the region revealed Diepsloot as the hotspot for freshwater fish consumption. We are very eager to collaborate with INMED and tap on this opportunity that could potentially benefit other aquaponics farmers in the area with market opportunities."

– Victoria Nkole, World Fish

Stakeholder Commitments (1/2)

As INMED's involvement in the Health in Action program came to an end, participants committed their support to continuing the important work we started together.

"Thank you to INMED for choosing Isaac Booi to be one of the schools to be in your program. We truly appreciate the honor, and we will pick up from where you left off and carry on with what you've taught us." – *Mrs. Nobomvu, Deputy Principal, Isaac Booi Primary School*

"We would like to thank you for choosing us as a school to feature in your program. We are sad that the program is coming to an end, but we assure you that the work you've started was not in vain and we will continue where you left off."

- ViVi Nondikane, teacher, Emfundweni Primary School

"We commit to taking this initiative forward. A lot of work has been put into the program. It would be a big mistake of us not to carry it forward. The whole program has built the morale of the learners; they are always looking forward to being physical or to be in the garden. We are truly thankful to INMED, and we hope this is not the end of our relationship."

> – Jarren Ganghia, teacher, Charles Duna Primary School

Stakeholder Commitments (2/2)

"Prior to the support of INMED, we had given up at having a sustainable food garden at the school as we struggled with resources and lack of know-how. Now from this experience, we will also do our part to encourage and support other schools nearby."

> – Hilda Thema, Principal, Vezokuhle Primary School

"I am really grateful that I was chosen to receive support. The seeds really helped and saved a lot of money for me and my family. Already we are harvesting some of the vegetables, and I also plan to share surplus with other community members who are less fortunate... Thank you INMED and Mondelēz."

– Elizabeth Thompson, home gardening trainee

"I thank both INMED and Mondelēz for making this training session possible. I have learned how important it is to eat a balanced diet and eat to keep the mind working. As part of my tasks, I'll share this information with my community and save lives."

– Health in Action workshop participant

Thank you to Mondelēz International for its long-term support and commitment to the Health in Action program in South Africa