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SOCIAL RESPONSIBILITY

Food & Thought

First harvest from gas firm's aquaponics CSI venture

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While the fight against poverty remains a focus area in South Africa, industrial and speciality gas company Air Products has partnered with international philanthropic organisation Inmed to contribute to poverty alleviation by introducing a sustainable farming technique – aquaponics – to learners from Carel de Wet Technical High School, in Vanderbijlpark.

Carel de Wet Technical High School is the first school in the country to use the Inmed aquaponics project as part of an agricultural training programme. Since the launch of the aquaponics unit in August last year, the learners have been putting this farming technique into practice and have harvested their first crop of vegetables earlier this month.

Air Products MD Mike Hellyar states that food supply is a major concern, particularly in the economically disadvantaged parts of South Africa. It is therefore important to teach children ways of producing food using sustainable systems that preserve natural resources as much as

possible. The aquaponics system addresses a variety of challenges, including poor soil quality and water scarcity.

"Aquaponics is an intensive food production technique, which combines aquaculture (fish farming) and hydroponics (soilless crop growing). It works on a closed system, whereby the nutrients from fish tanks feed gravel grow beds, acting as a filter for the water. Clean, oxygenated water is then pumped back into the fish tanks," says Inmed South African operations director Janet Ogilvie.

"In a system comprising nine grow beds that are available for planting crops, a variety of crops such as cucumbers, green peppers and tomatoes were planted in six grow beds. The other three grow beds were used to train the learners, using vegetables and herbs. We were excited to see the fruits of our labour turning into sales and profit," says Carel de Wet Technical High School principal Gawie Richter.

He adds that the learners have learnt invaluable lessons using this system, which has been incorporated into the school's curriculum.

Participants are being taught not only about the importance of agriculture in sustainable development but also about agricultural economics, such as having to identify and secure new markets where they can sell their products.

"This phase of the project has resulted in the school experimenting with various crops, and the children are learning how to plant and manage the aquaponics unit themselves," notes Richter.

Meanwhile, Hellyar highlights that the aquaponics project represents a pioneering way in which Air Products can give back to the community in regions where it operates. He points out that Air Product's Vanderbijlpark plant is one of the largest of its kind in the country and, as a result, is an important part of the company's corporate social investment strategy.

"The plight of our underprivileged children is close to our hearts and when Inmed South Africa approached us to help with the aquaponics project, it immediately resonated with us. Pioneering, quality systems and sustainability are a core part of our business strategy," he explains. ■

To watch a video in which Air Products MD Mike Hellyar discusses the company's CSI aquaponics project in Vanderbijlpark, scan the barcode with TagReader (at www.gettag.mobi/) on your cellphone, or go to 'Video Clips', on www.engineeringnews.co.za.



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