

hen Sivan Ya'ari visited the Makurunge Primary School in Tanzania about a year ago, she couldn't understand were closed in the evening. The organization she founded in 2008, Innovation: Africa (iA), had installed solar panels at the school so that the students, whose homes lack electricity. would be able to prepare their homework after nightfall. The solar panels were working, yet changed their approach to the developing no one was there.

the ID2 Gathering on Israeli Innovation for based on sustainable business models... International Development in Mitzpe Ramon

The contributions of Israelis involved in overseas development projects tend to be held in high esteem by international agencies

in January. "It was the witches. Apparently, they felt that their power was being threatened and risk insurance for Israeli investors. by the new technology, and they had placed a curse on those who used it."

in a Tanzanian village is just one of many problems that Westerners encounter when working in the developing world. Speaking at the same conference in Mitzpe Ramon, Ben-Gurion University researcher Adam Abramson, who is working on improving water supplies in rural Zambia, noted that one particular study of 11 countries in Sub-Saharan Africa indicated that "between 35-80 percent of 'improved' water sources were not even working."

The daunting challenges that the developing world presents, coupled with Israel's own domestic difficulties, suggest that Israeli orgaactivities locally, while Israeli entrepreneurs developing world?

If the right approach is in place, Aliza Belman plenty of reasons to operate in the developing world, not the least of which is economic. "The markets of the future are in the developing

world, and Israeli companies with their expertise in agriculture, water management and other technologies have a great deal to offer," says Belman Inbal, who heads a policy research think tank on Innovation for International why the classrooms Development at Tel Aviv University's School of Government and Policy.

The right approach that she has in mind is anchored in "having a sustainable business model." Belman Inbal points out that many international aid agencies in recent years have world. "It's no longer a bad thing to talk about "At first no one wanted to explain what earning a profit in these countries," she says, the problem was, but finally the school adding that many philanthropic organizations principal told me," said Ya'ari, speaking at are increasingly working with social ventures

> After working for 10 years with the Foreign Ministry, and then at the World Bank in Washington for a further three years, Canadianborn Belman Inbal turned her attention to helping Israel to become a leader in the field of developmental technologies. "I see us as becoming the 'development start-up nation," she savs.

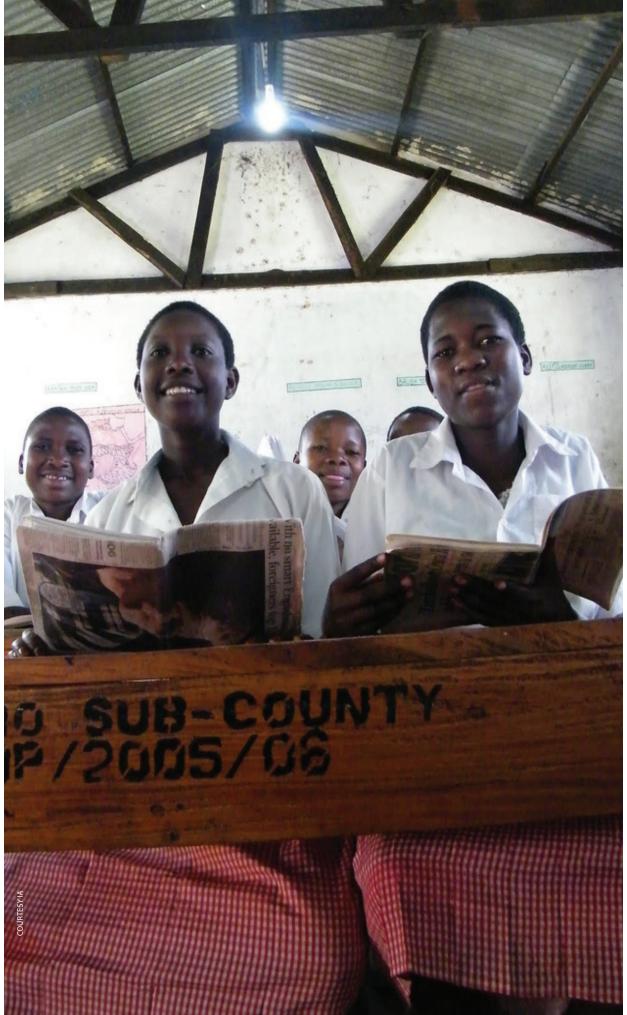
Belman Inbal's group at TAU is involved in trying to match Israeli entrepreneurs with the needs of the developing world. At the same time, she has sought ways to boost government support for activities in the developing world, working, for example, to secure increased grants from the Industry and Trade Ministry

Israeli companies with innovative products that are having an impact in the developing The unexpected resistance Ya'ari encountered world include Scigen, the developer of a vaccination for hepatitis B, Ewave's medical device that provides remote service information for doctors. Prepex's circumcision device. Netafim's drip irrigation devices and OrSense's blood diagnostic product.

> "The secret of designing a product for the developing world is not to take a Western product and downgrade it," says Lior Maayan, CEO of OrSense. "The key is to design something from scratch that suits the needs of that market."

Two years ago, OrSense tailor-made a blood diagnostic product to meet the specific needs nizations would tend to focus their non-profit of the developing world. The device measures hemoglobin levels in the blood, and thereby would seek commercial markets in Europe and indicates the presence or absence of anemia, a North America. Why then be involved in the major medical problem in the developing world that affects an estimated two billion people.

The OrSense product is non-invasive, Inbal tells The Jerusalem Report, there are so there is no risk of infection; it is battery powered, so there is no need for electricity; and it is easy to operate. The device has already conducted more than a million tests and is now



being distributed throughout Asia and Latin America.

Also offering creative solutions to the problems of the developing world are non-profit organizations like Ya'ari's Innovation: Africa. Despite the occasional setbacks she has encountered in villages like Makurunge, she has succeeded during the past four years in providing more than 450,000 people in Africa with electricity, in more than 50 villages that previously had none.

**THE IMPACT** of the new sources of power has enhanced life in these villages beyond merely extending school hours: Pumps are now able to draw water from nearby aquifers, thus saving families from spending long hours fetching water from distant wells; and medical clinics can maintain vaccines and other medicines requiring refrigeration, thus enabling such programs as a recent campaign in Uganda in which 65,000 people were vaccinated against polio.

"But if there isn't a business model, it isn't sustainable," Ya'ari tells The Report, explaining the secret of the organization's success. Each solar energy project that iA installs in effect operates as an independent small business.

"The reason many development projects fail is because there are no funds for maintenance," says Ya'ari. She points out that after new technology is installed, if there is no funding available to cover the cost of routine repairs, the project is doomed. In order to have funds available for maintenance, Innovation: Africa leverages the proliferation of the one technology that is ubiquitous in even the most remote corners of the world – the cellphone. "People living in regions without electricity who want to recharge the batteries of their cellphones usually need to travel to towns where they pay hefty charges to storekeepers for using their electrical outlets." Ya'ari says.

"So what we do, for a small fee, is give villagers access to the electrical grid in the schools and medical clinics, where we install solar panels. The cell phone charging is run completely like a small business. A manager is paid a salary for overseeing it, and the profits are put in a bank account and saved for maintenance work.'

A crucial part of the setup, Ya'ari emphasizes, is a remote tracking system that enables her Israeli office to monitor how the panels are functioning. "When the solar panel batteries wear our after 3-5 years of use, the funds are there to replace them."

iA's operating costs are funded from donors in the United States (see Heart for Africa, page 21), but the innovative solar energy system components it uses are Israeli made. "I make a point of ensuring that everywhere I go, people are aware of the Israel connection," Ya'ari says, explaining that a major goal of her organization is to nurture Israel's overseas image. The UN ambassadors of several African countries serve on Innovation: Africa's board, and iA was recently granted official consultative status to the United Nations Economic and Social Council.

Entities such as OrSense and Innovation: Africa, already active in the developing world, may soon be joined by a host of budding start-ups that brainstormed ideas at the ID2 event, which was co-sponsored by the ROI Community of young Jewish innovators.

Among the ideas put forth were a novel optic-fiber lightbulb that provides low-cost light and also destroys malaria-carrying mosquitoes, an online gaming platform that raises funds for hunger crises, an electronic data system to provide medical records for migrants, and a filter that turns wastewater into drinking water. The conference also marked the debut of the DevTech Hub, a group that organized the conference and hopes to serve as an accelerator for Israeli-designed projects in the developing world.

Not all of the presentations were pie-in-the-sky. Among the close to 100

(Left) Girls studying under solar-powered light at Bumadanda Primary School, Uganda; (preceding pages) Sivan Ya'ari, the founder of Innovation: Africa meets some satisfied clients in Uganda



Solar-panel installation at Nawampiti Medical Clinic, Uganda

participants at the event was Cecile Blilious, who was representing a group of European investors that facilitates and manages venture investments in socially-driven projects. "Our goal is to take the power of the free market and harness it to benefit society and solve global social problems," Blilious says, noting that the group's newly formed Impact First Investment Fund intends to focus on Israeli initiatives, including those in the developing world.

In addition to the economic factors, initiatives in the developing world also bring diplomaticpolitical benefits, even if, as several speakers at the conference noted, government spending on foreign aid has been reduced over the years.

"The contributions made by the many Israelis

who are involved in overseas development projects tend to be held in high esteem by international agencies," says Inbal Belman, noting that the involvement of Israelis in NGOs continues to grow.

"Harnessing our innovative capacity for the benefit of the developing world can help Israel build a positive dialogue with international organizations and promote its image as a force of good in the world," says Belman Inbal.

Another reason for Israeli involvement in the developing world was provided at the Mitzpe Ramon conference by Yehuda Paz, the former head of the Histadrut Labor Federation's Afro-Asia Institute. "The main reason the founders of this country were so eager to assist wasn't

really connected to political or economic gain," Paz said, noting that during the heyday of the Israel-developing world relations in the 1960s and '70s, people from 150 countries were participating in Israeli-run agricultural and community organization training programs.

"What we need to be concerned with is not who we want to be in the eyes of the world, but who we want to be in our own eyes," said the 82-year-old founding member of Kibbutz Kissufim in the Negev. "For the Jewish people, being involved in international development is a moral imperative, a fundamental reason for us to be here. That's something that Ben-Gurion understood and that we need to understand today more than ever before."

## **Heart for Africa**

**BORN IN** Israel, Sivan Ya'ari, 34, moved to France at the age of 12, and later went on to complete her graduate studies at Columbia University. The idea for Innovation: Africa came to her as a student participating in a UN development program in Senegal, where she noticed that many villages were without power because they constantly ran out of money to pay for the diesel fuel that generated their electricity.

"I remembered the apartment roofs

covered with solar panels in Rishon Lezion where I grew up, and, given all the sunshine there is in Africa, it seemed to me that the same approach would work very well there," she recalls.

Innovation: Africa, formerly known as Jewish Heart for Africa, gained support among a core group of American supporters in New York, where the non-profit organization maintains its headquarters and where its fund-raising

activities are centered. Ya'ari notes that the organization, which now has an online following of about 20,000 people, has had a special appeal to young Jewish Americans – the average donor age is 32. "Studies we have done also show that many of our donors come from the ranks of American Jews who are not affiliated with any other Jewish organization," she adds.

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