

Unlikely partners develop solar cooker for the poor

Nguyen Tan Bich and Hans van Beek, one a Vietnamese farmer and one an English teacher from the Netherlands, crossed paths in Vietnam after long, difficult journeys. The result was a solar cooker that works.

Hans Van Beek toured Vietnam 22 years ago when the country was still in post-war turmoil. It was enough to keep his interest and he made a plan to come back.

Nguyen Tan Bich was a poor farmer from Quang Ngai Province used to struggling with shovel and buffalo from the early morning until dark.

Van Beek sought a new place to forget a difficult life back home and Bich sought a way to help people living in poverty. Bich's personal studies in English brought them together for an unlikely business partnership.



Hans' story

Hans Van Beek, 54 and unmarried, grew up in Rotterdam, home of Feyenoord football and Ruud Gullit. World War II devastated his family with one member lost.

After graduating from high school, Hans studied technology in Dordrecht but faced financial problems.

"I was haunted very early by the war and by poverty, and they still are still on my mind even now," he says of his early life.

Then, in 1983 he took a 10-day tour of Vietnam.

"At that time, the American War had only been over for eight years but I was allowed to come because Vietnam had had good relations with my country."

"When I arrived and saw the poverty, the past came back to me and I immediately understood that I couldn't leave this country. I thought that I would do something, even if small, to help the people here. In those days, few foreigners came to Vietnam, let alone stayed there for long periods of time," Hans recalled.

To realize his wish, Hans came to Vietnam two more times. He also sent many letters to Vietnamese diplomats in the Netherlands expressing his wish to stay in Vietnam to study Vietnamese and help the people improve their lives.

He also wrote to the Vietnamese Foreign Minister at the time, Mr Nguyen Co Thach, who agreed to help Hans study Vietnamese with the faculty of the Hanoi University.

In 1989, Hans' one-man development mission in Vietnam officially began.

"Hanoi at that time was very poor. There was only one restaurant for foreigners in Hue Street, where I never dared to go. I was given a room at the National Assembly guest house," he recalled of his first days in Hanoi.

"Everyday I pedalled a bicycle to my school. Outside class, I taught English for blind children at Nguyen Dinh Chieu School and did many other volunteer jobs. A while later, when the society had opened to foreigners, I could afford to hire a room at Thanh Nhan, which was known as an unsecured area. Anybody could fear living there, but I didn't."

Hans had chosen Thanh Nhan out of a desire to be close to the poor, and the more time he spent in the country, the more his friends from the Netherlands got interested in his work. Soon, they had organised a walk back home to raise funds for poverty alleviation.

Living in Thanh Nhan, Hans often shared his meals with the poor and patients at the nearby medical facility. He would also bring the homeless and ill to hospital.

"But that wasn't enough. I still thought of something bigger," he says.

Then one day as he returned home after work, Hans noticed an article by Arie de Ruiter about manufacturing solar cookers for the poor in Africa and immediately thought of Vietnam. He contacted de Ruiter while back in the Netherlands, who promptly produced one of his machines.

Hans brought the cooker to Hanoi and put it on his rooftop to cook rice. At first, the results weren't as expected but Hans didn't give up and altered the design to produce five models more suited to the Vietnamese climate.



Results still weren't quite adequate for the cooker to be taken seriously. Then by chance, Hans met Bich, who loved studying English, a rarity at the time, and often surfed the Internet to meet foreign friends to improve his language skills.

Bich's story

Nguyen Tan Bich was 37, married with three children, and lived in Binh Son District, one of the poorest areas in the central region.

Leaving high school early, Bich had become a farmer like many people in his village because he didn't have money to study further. But he had one quality that gave him an advantage over his peers: he was keen on studying English to broaden his skills.

"All the villagers laughed at me when they found out I was learning English because it doesn't bring in food. I studied English everywhere. When the Internet came to Quang Ngai, I saved money to go to Internet cafes in town to seek conversation partners," he said.

"In 1999, I made the acquaintance of Hans through English letters. I was moved when he told me about the poor people he met. One day he told me through a letter about solar cookers and his wish to produce them in Vietnam to present to needy people in rural and mountainous areas.

"I immediately thought of my central poor homeland, where sunlight is abundant all year round. There, it is difficult to search for food and it is also difficult to cook food for eating."

Hans sent English documents on solar cookers to Bich, who then went to Hanoi to take several solar cookers back to his hometown for research. Each was made of a square-shaped chamber wrapped in foil to absorb heat from the Sun through a plastic cover.

Though the Sun was fierce at Bich's test site, the cookers still didn't cook food all the way through. But rather than give up, he altered the cooking chambers, giving them a round design, replacing the foil with an aluminium basin, and replacing the plastic cover with one of glass. He also changed the position of the reflecting plate to better catch the sunlight.

Finally, Bich was successful and he made eight other cookers for his village, much to the delight of his neighbours who now no longer needed to buy cooking fuel every day.

"I wrote to Hans to invite him to visit my village. He was very happy. During several days at my village, we discussed a project to help poor rural people by those solar cookers," Bich said.

On the recommendation of a friend, Hans and Bich then contacted professor Le Quang Xung, director of Da Nang University, who referred them to the Pressure Equipment and New Energy Research Centre on campus.

With help from the Centre's Dr Hoang Duong Hung, the cooker became "Solar Serve" in 2000. Then team promptly opened a showroom in Da Nang, with Hans now project assistant and Bich as director.

Bich also opened a shop for the cookers in his village and now employs 12 workers, all war invalids, disabled or students.

Steal our idea, please

"Solar Serve organization aims to assist poor families and local disabled people to manufacture solar cookers. This is a humanitarian project, so solar cookers will not be sold."

So read Solar Serve pamphlets.

At each site where solar cookers are presented free to local people there is always a workshop on their use. Lecturers are workers at Bich's enterprise and after each session, two local people are selected to act as new lecturers on use and maintenance.

Every year, Solar Serve holds a food festival as well, presenting food cooked by solar energy at all workshops, World Day for Environment Day (June 5), in particular. With around 2,000-3,000 hours of sunlight per year, the central region holds the potential for poor people to save VND200,000/month while protecting the environment.

But Hans van Beek and Nguyen Tan Bich will not rest. They also have plans to distil fresh water from seawater and brackish water for fishermen.

As for the patent, Hans and Bich say go ahead and take it. They're not in this for the money, but to help people.



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