

The BIC Thesame of Annecy and SOLAREF (France) visited the Dominican Republic



March 2009



From the 23th to the 28th of March 2009, Pascal Bourcier from the BIC Thesame (Business Innovation Center Thesame in France) and Olivier Dervaux from Solaref (autonomous solar ice Fridges Company in France) realized a mission in the Dominican Republic. The mission has been organized within the framework of the ART GOLD Program in Dominican Republic and the IDEASS Program, as the autonomous solar ice fridge and cooperative trade was awarded for the second price in the EBN/UNDP Award « Innovation for human development and cooperation ».

The main objective of the mission was to identify the actors who will have to play a role in the technological transfer for the autonomous solar ice fridge and to draw a

road map in order to reach the results.

The mission, prepared by the IDEASS International Secretariat, was piloted by Marina Lo Giudice, the UNDP ART GOLD Coordinator, and the UNDP Country Office's staff composed by Megan Rounseville, Manuel Castillo Figuereo, Rita Sciarra and Jehova Pena Cornielle. During the mission, various meetings were realized with:

- TECSOL : Mr Luis Arroyo Valdes – Vice President Executive
- UERS (Unit for rural electrification) – Ms Thelma Eusebio – General Director; Mr Gerges Jimenez, Director of the schedule; Mr Juan Moreno Castro, technical assistant; Mr Onofre Rojas, senior consultant.
- PROINDUSTRIA (national incubator) – General Director; Miss Ana Cecilia Alvarez and Miss Tamara Mera.
- Ministry of Health : Sub secretary Miss Tirsis Quezada
Dr Zacarias Garib Arbaje (National Director)

Before all these meetings, we visited the National Cartographic center of the Dominican Republic to catch information about the solar radiation in the country (thanks to Jehova Pena).

To give more weight to our mission, we also visited a rural hospital in the village of Manabao in a rural and isolated area of the Cibao County.



Results

As we already said, numbers of visits were organized by the team during this week. We are going to explain the most important of them and the results of the discussions.

First off all, Jehova Pina introduced us with the company TECSOL. The goal of this visit was to see if they were able to assembly and to produce some parts of the fridge. The General Manager was really interested by the project and he seems to be ready to be of good help. As we noticed, the actual products manufactured by this company are in the same field of competences as needed for Solaref fridges.



Secondly, the meeting with the Agency for rural electrification was interesting as everybody found the product very appropriate but not under their authority. With the kind help of Mr Onofre Rojas, they introduced us with a pronounced sustain to PROINDUSTRIA with the clear objective to find local technical support to help us for the local production of the units.

The DG makes us a very interesting proposal: he offers to rent premises (100 to 300 m²) in one incubator under their control for free (except the regular charges for services).

After a field visit of this incubator in San Cristobal city, we know that we can count on this proposal. The incubator has all the services we can expect.

Thirdly, facilitated by Mr Onofre Rojas, we visited the Health Ministry. The Sub Secretary was interested by the Solaref solar fridges and especially for the national plan for vaccination. They request a test on the field before an extension on their territory. As the problem of the fund rising is critical for a small number of fridges, they took that into account and agreed to finance the testing by buying 5 to 10 units.

As we discovered on the field, the need for sustainable systems for vaccines preservation is clearly necessary because the existing PV solar systems to rescue the classical electrical fridges are not sufficient, because the maintenance and the battery replacement are generally not scheduled in the investment plans. The Solaref technology is a precise response to this problematic thanks to the simplicity of the functioning: no engine, no electrical and electronic components and no mechanical part in movement.

Nevertheless before thinking about a mass deployment of the technology on the whole country, it is necessary to make a pertinent field test in order to validate if the solar radiation is sufficient to the good functioning of the fridge over the country.



Conclusions

Thanks to the good work of all the actors of this mission, it's a big success. All the objectives for this mission were reached. We can clarify the logical list of events to come:

- The Ministry of Health gives its approval to finance 5 to 10 fridges for the field test.
- PER will find 10 appropriate places (with better solar radiation) all over the country to make the field test.

- BIC Thésame and SOLAREF will find funds for the actions of installation and evaluation during 1 year. These last ones can be realized by PER under the control of SOLAREF.
- The UNDP ART GOLD Programme in the Dominican Republic will organize a mission allowing the signature of a protocol between the various partners, and makes sure of the good progress of the test operations.

If the objectives of the test are in accordance with the expectations of the Ministry of Health, we can then envisage a vaster deployment of the autonomous solar ice fridges SOLAREF in Dominican Republic. Big funds givers will then be called, PROINDUSTRIA and TECSOL will then be sought for the local production of these refrigerators.

