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Interview with Mr Jesus Marrero, Managing Director of Fundelec August 2009

How did the organisation Fundelec and the project „Sembrando Luz“ emerge?

The foundation belongs to the Ministry of Energía y Comunidad (PDVSA) and it started to work in 2002. The purpose of the foundation initially was to perform studies on the topic “renewable energy”. For example, one of our duties was to find out which areas in Venezuela do not have electricity supply and how we can improve the quality of life for the communities in those remote areas. Later – thanks to our gained knowledge - we established the project “Sembrando Luz” with its program „agua potable y energia“. We made recommendations for infrastructure improvements in indigenous villages. Fortunately, our government committed themselves to provide financial support for such important programs. Our financial and project plans are laid out from 2007 to 2013. In the future, we'll also start working on Waste Water Treatment and Biogas. In 12 years project should be finished.

How many people work for Fundelec?

It all started with one single person. Soon our amount of staff increased and we're now 70 people involved in Fundelec.

What are middle term goals the goals of the project?

Imagine: Approximately 4500 villages in Venezuela do not have any power connection. The sizes of the villages differ from 3 houses to about 300 houses. It is one of our targets that at least one house per community has electricity. At the same time, we want to provide access to clean drinking. Our next goal is to improve our energy network and achieve economic levels for distribution of solar power into the grid network.

Can you tell us about the progress of the project „agua potable y energia“ ?

In a first phase, we started by electrifying schools, hospitals and communities by use of solar energy. In a second stage, we established energy supply in private houses and at the same time we started our program for potable water. In 2006 we had installed 380 solar systems with 1200 W each and we installed the first 50 solar powered water treatment units.

What success could Fundelec achieve so far?

Up to now, 700 villages could benefit from this program and there are many more to come! 200'000 people have access to electricity and 70'000 people have access to clean drinking water. Our goal is that 1 million Venezuelan people get access to clean drinking water. For example: we have plans to provide water treatment systems for 100 schools and 200 small hospitals (ambulatorios) in order to increase the health conditions especially of children.

How did you learn from Trunz Water Systems?

We were introduced to your company through our partner in Cuba. In regards to solar powered units, Trunz is the only company worldwide who is producing water treatment units - for salt or soft water - water, with such energy efficiency.

What did convince you from Trunz Water Systems?

The good quality of the product and as mentioned above its energy efficiency. This advantage is very important for our projects. All units are powered by solar power which is still expensive in comparison to short term solutions (such as a generator). The other big advantage is the compactness of the units. All their units are easy to install and like “plug and play” solutions.

What is your experience so far with the Trunz Water Systems?

We had some technical issues in the beginning but thanks to the direct contact with Trunz we could sort them out either on spot or through replacement of parts. We all didn't have experience in this field and it took us some time until we familiarised with the local conditions. Actually, the conditions are very different in every community... different water source, different water contamination, different water and/or air temperature etc. I'm glad that Trunz provides training sessions for our technicians here in Venezuela. This allows us to become more familiar with the product and we can share our experience with the people from Trunz. I think it's a win-win-situation.

What kind of contamination do you find in those remote areas?

Mainly biological contamination such as faecal bacteria and virus. In some areas we suffer from high iron content or brackish ground water which exceeds the level for human consumption.

How did the contaminated water affect the quality of life for the people in remote communities?

Especially children suffer from contaminated water. Their body is not able to handle contamination and they got ill very quickly. Adults are more consistent towards contamination but of course this has long-term affects on their health.

However, when they first drank the treated safe water they didn't like the taste. But specially the children got used to it very quickly.

What kind of water did the local people drink before?

They drank whatever water which was available, either well water or river water.

Who is responsible for maintenance of the units?

Each area has its own supervisor for water issues (consejo communal) and they stay in contact with the operator in each village. Further, we have our own team of technicians who are responsible for the service.

Stealing is not a problem, we had only 1 case where a pump got stolen. Normally, the people take care of the system because it provides them an important source – safe water.

How do you transport the Trunz Water Systems and other equipment to those remote areas?

By boat, 4-wheel drive, helicopter, donkey...

What are the critical voices in regards to your project?

Some people claim that we import this technical equipment and there is not that much work for local people.

Does your project provide work for local people?

Yes, there is some more to do. For example, we hire people as technicians or for preparation work in the villages.

Thank you very much for sharing your experience with us.