

Author: Ibrahim Babatunde Wilson.

Present Address: University of Trinidad and Tobago

Permanent Address: 15 Fly Street Freetown Sierra Leone West Africa.

Telephone: 00868-779-2568 Email: ibrwilson@yahoo.com

Title: Creating solutions that are sustainable in context (Case study of Sierra Leone)

Background.

I have an NGO “Sierra Energy and Environmental Movement” (**SEEM**) based in Freetown Sierra Leone. The organization undertakes projects and programs in energy and environmental management, from conception, right through the design on to implementation. At present the organization has four major projects, two of which have gone to the final implementation phase. The projects are as follows

1. Generation of biogas from animal waste for cooking in ‘Kono’ northern Sierra Leone.
2. Provision of potable drinking water for the “Sanda Mabolontor” chiefdom in the northeast of Sierra Leone
3. Design and fabrication of the so-called wonder stoves in the capital Freetown.
4. Production of electricity from solar energy (PV technology) in the second city Bo Sierra Leone.

Projects 2 and 3 have almost reached the implementation phase of the project cycle. Sierra Leone is a small country in West Africa with a population of about 5.5 million and is bounded on the north by Guinea and on the south by Liberia. The country has just emerged from a 12 year civil war with devastating infrastructural and economic consequences. This presents the country with enormous developmental challenges. The interaction between humans and computers is still a major barrier towards facilitating and enhancing the productivity of the people of this small country. This paper will seek to explain the different problems encountered, the successes achieved and the challenges that still remain.

Project No 1. Biogas from animal waste in “Kono”

This project was borne mainly from the idea of sustainable development. For too long, the people of this region depended on forest wood as a source of energy for cooking. This practice has caused severe damages not only to the forest in terms of flora and fauna but also serious indoor air pollution problems that have led to many deaths. Therefore we decided with the support of the government of Sierra Leone to find a way of providing cheap, reliable and clean source of energy for cooking to the residents of Kono. The source of energy should address all three facets of sustainable development “Economic, Social and Environment”.

Aim: to provide a sustainable means of energy for cooking to the residents of Kono

Problems: The people of the region had their own beliefs deeply rooted in their land and were very reluctant to adapt to the new ways proposed. Those who chose to learn about the new technology were also very selfish and reluctant to share this knowledge with

other people in the community. Women were the most affected as their roles in these communities are considered less important.

Success/Achievement: Through posters, media coverage and to some extent the internet we were able to disseminate the information to almost all the targeted people.

Results: The more the people interacted with the media and the internet via email sending and poster reading, the more they got to understand the benefits as against the cultural beliefs of the intended project and hence moved slowly towards the project's acceptance. 10% of the population will then get access to better energy services if and when the project is finally implemented

Projects 2 and 3 gave us relatively less tough time from conception to implementation not because these projects themselves are easy projects but because for example project 2 which concerns the provision of potable drinking water had its obvious and easily seen consequences on the health and sanitation of the community. Therefore it was almost readily accepted. Project 3 which has something to do with the wonder stoves did not give much difficulty because it was also seen as a very cheap and effective, alternative method to kerosene and electric stoves. Also the population in the capital Freetown comprises mainly of the so called elites and educated class and they would readily see reason for a positive change and in most cases do not have very hard cultural beliefs.

Conclusion

Most projects and programs could be implemented without many problems in Sierra Leone in particular provided the methodologies used are designed in ways such that the lay person can understand what has been planned by the project and the expected results. However, it must be noted that there are serious religious, cultural and social barriers to be overcome when one sets out to undertake a project. A simple example of an experience that I once got is that some people do not even believe the result from a computer simulation program simply because they are not used to using computers. What they really want to see is the result as evident on the ground. We have the project for photo voltaic technology where we showed a simulation for the production of electricity in the village from the energy of the sun. Their first reaction that we got from the community was that it looked nice on the screen of the computer but they did not believe that it will provide electricity for them in real terms. The problem was further compounded by the fact that the cost of the photo voltaic project is high and therefore could not be implemented and the villagers however believed that it is not the money that is the problem but a non-working technology.