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MAPUTO - MOZAMBIQUE

ABSTRACT

The role of Pedagogical University in the promotion of renewable energy in Mozambique

As we know the climate change all over the world has very negative impacts in our last days. But nuclear power plants are still working every where, people are cutting woods and trees to sell or to cook without any replacement plan, factories and cars are smoking without a end. In this context, the pedagogical university in Mozambique has 3 tasks: teaching, research and extension. Through extension the pedagogical university is identifying problems in the urban and rural communities and bring them in to teaching process and at the same time try to find out solutions through the research. In this way we are developing and building trainingsmodels to Photovoltaic, Solarthermie and Biogas for our students with local materials and we are giving courses (for 2-6 weeks) about renewable energy and sustainable development in the urban and rural areas. By the use of research with other institutions we are creating a data base about publications in the field of energy and renewable energy in Mozambique.

Our main aims are: (i) to get a solid promotion of renewable energy in the urban and rural areas in Mozambique (ii) to promote a good management of environment in the urban and rural areas in Mozambique.

Our main methodology is orientated by practical activities in interdisciplinarity form. The results of all our activities are very positiv because they can ensure the success of training process. The students and other participants can develop their knowledges and habilities by the use of trainingsmodels to Photovoltaic, Solarthermie and Biogas. For example, the trainingsmodel (see picture below) help us to demonstrate the influence of shadow and inclination of solar painel in to the efficiency of the whole PV System.



Picture: Trainingsmodel for PV System made by Dr. Urânio S. Mahanjane in Mozambique

Through our activities in the urban and rural areas more and more people are needing PV Systems, they can manage the waste satisfactory and they try to plant a lot of trees with the name moringa.

As a conclusion, the results show us that we (pedagogical university) must intensify our activities and in this process is the cooperation with other institutions, NGO's, communities in the rural areas and with industry in the urban areas very important.