**Solar Lanterns for 1,000 School Children in Tanzania**

**TAHUDE Foundation**

**Invitation to Become Philanthropic Partner**

**1. Introduction**

Tanzania is a Young country. As per census 2012, Tanzania’s population was 44.6 million in which 44% is below age of 14 years, i.e. more than 19.6 million in numbers. A lot of this young population is in schools registered in classes between 1st to 7th standard. For their own growth and nation’s growth, this young population must be well-educated and well-trained. The lack of electricity in rural areas during dark hours hampers the education and growth of young, who are the foundation of our future. The Government has successfully implemented the policy of ‘Primary Education Program for All’, but we also need to give ‘Right to Clean Light’ as well to ensure better education and growth of a child. The young students cannot and should not wait for light. Surprisingly, using LED for lighting, a student needs less than 1 unit of electricity for entire year for study! Therefore, the question is: “Can’t we guarantee light to a child, every day on sunset, in economically viable and environmentally friendly way?”

**2. About Solar Lanterns for 1,000 School Children in Tanzania**

In response to current situation explained in the introduction part, TAHUDE Foundation initiated a social enterprise project “**Solar Lanterns for 1,000 School Children in Tanzania** through localization of Solar Energy” with possibility of receiving financial support from various partners across the globe. This project’s main objective is to provide One Child One Light in various districts of Tanzania. It will facilitate to assemble and sell 1,000 solar lanterns through “localization of solar energy” in several remote backwards areas in Tanzania by June 2014. This is to be done with the objective of providing one solar lamp to each and every child in a given locality. The proposed solar study lamps will have 1 Wp solar panel, 0.5 Watt LED and 2000 mAh of battery storage, which will be able to provide about light intensity of 150 Lux (good enough for study) and 6 to 7 hours of daily service.

3. **Localization of solar energy**

In the 1,000 Lantern Project, "localization" of solar energy, is a key concept, wherein proposed lanterns are to be assembled by local people, used by local people and serviced by local people. Local assembly can result in employment generation on one hand, and ability to repair the faulty solar products on the other in the cheapest and fastest way. Solar lamps are doubted for their service issues - but local service and modular way of service can dramatically solve this issue. The local repairing capability will be very useful in increasing product lifetime and confidence in solar PV technology. As a part of the project, adequate training will be provided for repair and maintenance of the lamps. It is proposed to train about 3 to 5 entrepreneurs (from the local area) to assemble solar study lights in their own districts. These social entrepreneurs will become assembly-cum-service centers, owned and governed by them, ensuring long life of solar study lamps.

**4. Impact of project**

The project will have very long lasting impact on the education of the students in the intervention districts. Other than education, there will be noticeable impact on environment and economy:

* It will provide 300,000 extra study hours per year

(Assuming one extra hour of study per day, for 300 days in a year)

* It will save nearly 36,000 liters of kerosene per year (Assuming 3 liters/month/family of kerosene)
* It wills save 100,000 kg of CO2 emission

(Assuming 1 liter of kerosene burning emits about 2.5 kg of CO2)

* It will save 44,600 US$ per year for the benefiting families. Also foreign exchange for importing kerosene will be reserved (One litter of kerosene in Tanzania is $ 1.23)
* It will create direct employment for at least 20 people for assembly and distribution, and several other indirect jobs

**5. Cost structure**

The lanterns cost is $ 10 per piece (includes raw material, assembly, transport, maintenance support for two years). The donations will pay for 75% of this cost. The remaining 25% (A QUARTER OF THE MARKET PRICE) will be paid by a child. This makes children proud of their lanterns. They feel ownership and are more responsible to take care of “THEIR LANTERNS.” However, TAHUDE Foundation has already made arrangement for poorest children who will receive the lanterns for FREE. The poorest children are identified in partnership with local education committee which involves teachers, parents represented, and local village leaders. In this project the idea is to guarantee solar light to each and every child in a given locality. The repair service will be provided at the local area by the local repair shop technicians – identified by the TAHUDE Foundation.

**6. Invitation to become philanthropic partner**

We invite you to come forward and become a philanthropic partner and make this initiative successful by ensuring the guaranteed light to every child and ensure the ‘Right to Light’ for child. As described earlier, a contribution of $10,000 for 1,000 children is required. After the success of this project we want to reach much more number of children in rural Tanzania.

We would like to offer the following benefits to our partners who would like to directly join our effort:

• Your company Logo printed on the solar lanterns

• Acknowledgement to your company whenever we disseminate our success story – in media, exhibitions, conferences, our website, and other outlets

All donations will be handled and audited through TAHUDE Foundation Exim or CRDB bank account.

**7. Beyond 1,000 Children**

The current project aims for 1,000 solar lanterns, but if we target 1 light for every child across Tanzania, we need to target about 10 million lights within a period of 4 to 5 years. For this purpose, the program will be expanded and entrepreneurs will be chosen throughout Tanzania. If the proposed model becomes successful, the model can be used to promote other technology oriented products like Biogas, Smokeless stoves, Solar PV, Solar cookers, etc. in remote rural areas in faster and cheaper ways.

**8. Contact us**

For any queries regarding becoming a philanthropic partner for this 1,000 lanterns program AND BEYOND, kindly contact:

1. Dr. Askwar Hilonga, Director of TAHUDE Foundation ([hilonga@gmail.com](mailto:hilonga@gmail.com), +255764574919)

2. Shukrani Majogoro, Planning and Programs Director of TAHUDE Foundation, ([smajogoro@gmail.com](mailto:smajogoro@gmail.com))