



4th International Off-Grid Lighting Conference and Exhibition



Quality Assurance for Off-grid Energy

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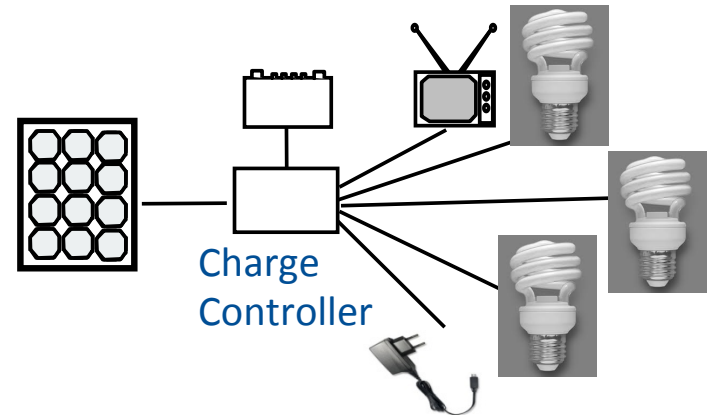
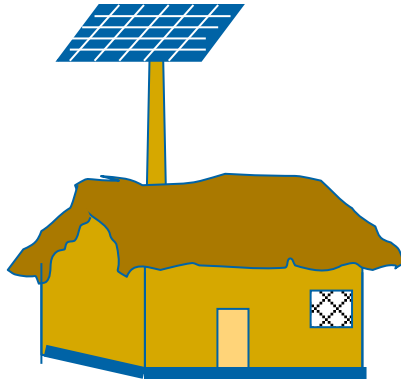


Quality assurance and project success

- Quality control is a primary requirement for success in any project
- However, we need to keep in mind the following while imposing quality control
 - Quality does not come free, there is a cost you need to pay for quality
 - In any project, particularly in the developing and under developed countries, cost sensitivity cannot be ignored
 - For a project to be successful, we need to make a judicious compromise between the quality of the products and cost of the products
- The success of IDCOL (Infrastructure Development Company Limited) solar home system program is a very good example



Solar Home System



- Diagram of solar home system and its components are shown in the figure.
- Reasons for success
 - Addressed the basic need for lighting
 - Basic entertainment of TV for who could afford
 - Mobile phone charging
 - Financial incentive in the form of micro credit to make the system energy cost competitive to kerosene lamps
 - Quality assurance right from day 1.



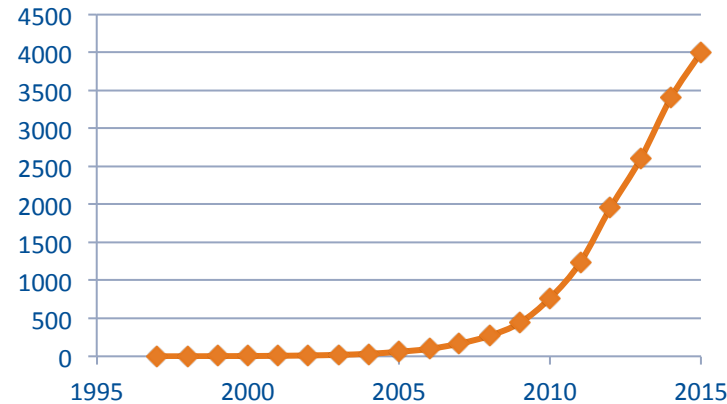
Solar Home System

- Bangladesh is one of the countries that started the solar home system program quite late. In many other countries, it was not very successful, but it was a real success story in Bangladesh. What did we do differently?
 - In quality assurance, we ensured a minimum quality so that the longevity of the components was assured, but we compromised with the efficiency of the components to keep the price low.
 - We identified that battery was the most vulnerable component having an average life less than 3 years. So, we insisted on industrial grade tubular plate batteries having an average life of 6 years. It increased over all system cost, but the overall increase in cost was not more than 10%. So, trouble free life of the systems almost doubled
 - Quality assurance enhance the confidence level of the rural people



Growth path of solar Home system

Cumulative SHS installed,
x1000



- The graph shows the growth path of Solar Home System in Bangladesh. Today it is nearly 4 million installed with around 60,000 penetrating the market every month!



Thank You