How does this project help people?

Initially the products are intended to be solar power supplies configured for lighting and/or USB mobile phone charging, but the intention is that they could be used for IOT remote sensing and transmission e.g. water well levels, water purity or soil moisture data.

I am currently an electronics lecturer but previously had been working with solar technology throughout Africa for over 20 years and it has shown to be a reliable and long-lasting renewable power source, using a key renewable energy that Africa has a lot of – sunlight.

The key factors that will enable this product to help people are:

1) The availability of good sunlight hours will enable power to be produced for lighting or charging devices. This will reduce the need to use kerosene or the reliance on fossil fuel powered generators.
   This will improve not only the possibilities for education after dark but also the health and well-being of the community. With an intelligent solar light that indicates the amount of charge going in, the state of the battery and adjustment of the light output, the user will learn and understand the products performance and not get frustrated if the light starts to dim.
   Learning about how and when solar energy works needs to happen so ensure product satisfaction.

2) The product will have a wooden frame which will house the key components; the solar module, electronics and rechargeable battery pack. The "up skilling" of the local workforce to enable the manufacture and maintenance of the products will bring jobs and boost the local economy.

3) Future designs for remote sensing and transmission of data could have a profound effect on the health and well-being of the local community.