

# Rays of Hope + Camphill Village

Rays of Hope (RoH) has supported Camphill Village since 2014. The organisational framework is set by the Master-Plan **CECE>2020** (*Camphill Ecological Centre of Excellence*) which was jointly developed in the early days of co-operation. Founded on a thorough assessment of the prevailing conditions its objective was to set the organization on solid financial grounds by the year 2020. This required that the operational cost of the Village-based enterprises must be reduced, the efficiency of resource utilization must be enhanced, turnover and profits must be raised and the product portfolio must be critically reviewed and eventually adapted to prevailing market requirements. Simultaneously, marketing and sales activities must be improved. The necessary measures were interpreted into clearly formulated and closely co-ordinated projects. For their implementation, sponsor support is continuously being invoked.

RoH's focus of support lay in the implementation of efficient and ecologically friendly Village infrastructure as well as the advancement of organic and sustainable cultivation methods.

For the local acceptance of the Village and its social integration a close co-operation with the neighbouring settlements was of utmost importance. To facilitate such interaction the Centre will exchange lessons learned for instance in the fields of renewable energy use or improved farming concepts. Stability in its financial environment will allow the Village to provide more needy people with a secure home and humane treatment and create additional jobs for people from the region.



## Project “Solar Rays”:

Basis for infrastructure enhancements in the Village power supply were the results of a professional energy audit.

RoH performed the conceptual planning and detail design of its project “Solar Rays”. A number of well-known sponsors from the solar industry came to its assistance during the phases of component sourcing and project implementation. In March 2014 a roof-mounted PV solar plant with an installed capacity of 20 kWh was installed followed by a ramp up in October 2015 to 65 kWh which are operated in conjunction with a dedicated battery bank. [Here](#) you find some impressions captured during the hand-over ceremony. The electricity produced supplies the dairy and thus forms an ecologic micro-cosmos, which allows the production of milk, yoghurt and cheese using renewable energy. Local solar experts and RoH members from Sieckmann Engineering were instrumental in the phases of low-level design, commissioning and testing, and professionally monitoring the plant’s operation. During 2016, over 108 MWh of electricity were generated, resulting in average monthly savings on the electricity bill in the order of ZAR 6.000.

In view of frequent breakdowns in the power supply by the national utility and the ever-rising tariffs, RoH aimed at an off-grid hybrid power supply in the medium-term. The installation of additional renewable energy capacity is planned.



## Lighting Conversion:

As one of the most pressing issues with short payback periods, the energy audit recommended the expeditious conversion of conventional lighting to LED technology. For the exterior lighting requirements, this measure has already been implemented.

## Project “Water Rays”:



The Camphill dairy is currently only utilized to half of its production capacity. A higher degree of utilization required a rise in the volume of milk delivery, which itself depended on the number of cows and the quality and size of the available grazing land. The restricting factor here was the irrigation water supply.

Improving this situation is the objective of the project “Water Rays” for which RoH obtained funding from the German Government’s Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung (BMZ). To counter the latent water shortage a new borehole was sunk, a submersible pump with the associated distribution piping was installed and 14ha of additional grazing land were processed and fenced.

As part of the BMZ sponsored project a number of measures – targeting a more efficient use of water resources – were implemented. They include, for instance, the installation of water metres in each of the care houses, re-use of grey water, water-stop devices in the showers and water-use awareness training of the residents.

Funds provided by Schmitz Stiftungen were used to prepare an additional 4ha of grazing land (including fertilizer, irrigation and fencing) as well as the purchase of 10 Jersey milk cows to bring the total count of the herd to 60.

## Farming and Greenhouses:

In 2016 two greenhouses with a floor area of 300m<sup>2</sup> including all components necessary for drip irrigation were commissioned. The organic tomatoes, cucumber, peppers and basil produced supply the high demand in the Cape region with great success. In 2017 RoH supplied two additional greenhouses thus allowing a doubling of the production.



RoH is in contact with international agricultural experts to further optimize the methods for organic farming. Additional planning will target the large-scale plantation of new products such as Jojoba as well as modern irrigation methods tailored to site conditions.

