

# CASE STUDY PHILIPPINES

## INDEPENDENT WATER SHOP SOLUTION

### Client

Rotary Club of Iloilo City

### Location

Ban-Ag in the municipality of Santa Barbara in Iloilo Province.

### Introduction

The „Rotary Club Iloilo City“ with the financial contribution by the Rotary Club of Sae Goyang (South Korea) donated to the Barangay (district) Ban-Ag in the Municipality of Santa Barbara in Iloilo Province a solar-powered water treatment unit. The unit supplies the families in the district and people from neighbouring Barangays with safe drinking water at affordable prices.

So as to put a value on clean and safe drinking water and to finance maintenance and spare parts, the members of the community are asked to buy the water at an affordable token price. This makes the system selfsustaining. Five gallons water (18.9 liter) will be sold for 10 Philippine Pesos. This translates to EUR 0.15 per 18.9 liter-container or EUR 0.0079 per liter.

### On-site conditions

Access to location	dirt road
∅ amount of people served	approx. 1'700 people
Water source	well
Common contamination in raw water	organic contamination
∅ distance from source water to unit	approx. 2 metres
∅ water temperature	20 – 30° C
∅ air temperature	20 – 40° C
Site preparation work	flat concrete platform
∅ sun radiation	5 hours

### Technical layout

1 Water source (well) and feed pump 24V with 20m hose
2 4 Solar panels 24 V / 200 Ah each 175 Wp (Total 700 Wp)
3 Power Center TSPC 700 4/4 (Batteries, Inverter, Controller etc.)
4 Trunz Water Box (TWB 002, Ultrafiltration), approx. 800 l/h
5 Water storage tank

