





Hassan Ismail Awale - Administrator - Receptionist - cashier; Agbal Hassan - Receptionist - cashier; Hassan Rooble and Abdifatah Ali - Nurses

## Harnessing the Power of the Sun – Bringing Solar Panels to Somaliland

by Danielle Botti, Communication Specialist, UNDP Somalia

In the city of Burao, electricity is provided by a number of private companies using generators that consume a lot of fuel, making it one of the most expensive commodities in Somaliland. Although many development improvements have been made since the end of Somalia's bloody civil war, electricity remains one of the main challenges to both development and investment as people struggle with lack of access to power sources, frequent power cuts and high electricity costs.

The picture is much bleaker in the health sector, where hospitals require constant and powerful electricity currents. Bigger hospitals have their own generators but often struggle to afford fuel for to operate. Doctors are forced to carry out long operations, ensure if power cuts will threaten their work and the lives of their patients.

"We used to spend a lot of money on electricity that we simply did not have," said Hassan Ismail, the hospital administrator at the Burao General Hospital. Burao hosts a growing number of internally displaced persons (IDP) and camps. Despite its increasing population, Burao has only one main hospital with very limited resources. According to MSF, the town has the biggest public hospital in the region, serving a population of at least 350,000 people.

"Even after a 50% discount (for public service), we used to pay \$6000 to \$7000 USD per month just for electricity. Because treatment at the hospital is almost free of charge, the Local Municipality used to cover some of the electric costs and sometimes we used to ask local businessmen and companies for help when we couldn't pay the difference," said Ismail.

To help address this critical energy issue, UNDP and the Ministry of Health teamed up to find an energy-efficient way to reduce electricity costs and improve health services. Installing solar panels at the hospital produces enough electricity to cover nearly 75% of the hospitals' needs, providing the constant power needed to keep the life-saving services working. This renewable green energy that contributes to a safer environment, reduces pollution, supports the hospital to be sustainable, uses clean energy and serves the needs of the community with the provision of a long term uninterrupted energy system.

The Solar Power system has led to huge cost savings for the hospitals on their electricity bills, and it also a remote monitoring component set up an internet connection at each location. This way, the system – set up by UNDP – can record and send information to the vendors servers in Germany to enable remote maintenance of the system. The project has reduced the electricity expense of Burao Hospital from

\$6000/\$7000 per month to just \$1500, allowing the hospital to use the saved amount in its other essential areas.

Staff at the Burao Hospital remember the dark days they experienced when power cuts in the middle of operations left doctors and nurses with no other alternatives or sources of energy. Without steady available electricity, many patients lost their lives.

"I remember one night as we had an emergency and a patient was being operated on, but in the middle of the operation, there was a sudden power cut. It was horrific; I thought the patient was going to die. It was so dark and all the machines stopped" says Hassan Rooble, a nurse at Burao Hospital. "We did not have a generator and even if we did there was no fuel," he added. "For the patient, such a delay was very risky. The doctor left the wound open and only began stitching it once the electricity was back on," he said.