

Current Uses of Geothermal Energy in Uganda

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1. Introduction

The Uganda geothermal project is still at the surface exploration stage with no geothermal wells drilled yet and therefore the current utilization is from the fluids discharges from hot springs. The geothermal water has been used as a source of salt, for spas, watering of animals, and a tourist attraction.

3. Spas

Most of the Uganda hot spring waters are currently used for spas and are believed to have curative powers for skin diseases and rheumatics (Figure 3). The only known in-house use of geothermal energy is at Kisiizi hospital situated in Rukungiri district, SW-Uganda, where hot water at a temperature of 32°C is tapped from a hot spring and used in hospital for bathing and other domestic uses.



Figure 3: Rwagimba hot springs, Fort Portal.

2. Salt production

Salt is produced locally at Kibiro and Katwe. At Kibiro the hot geothermal water is concentrated using dry soil by capillary attraction, the impregnated soil is then scooped and dissolved in water. The separated brine is evaporated to dryness by boiling (Figure 1). At Katwe, the method is different from that one at Kibiro, the brine is channelled into concentration ponds from which the salt solidifies on the surface by natural evaporation during dry weather (Figure 2). The salt is then scooped, dried and sold within Uganda, the DRC, as far as Rwanda and Tanzania.



Figure 1: Salt production at Kibiro.



Figure 2: Salt production at Katwe.

4. Salt licks

The hot water is also used for watering animals as a substitute for salt licks because of its high salt content.



5. Tourist attraction

Hot springs are a tourist attraction (Figure 4).



Figure 4: a) Katwe craters and b) Sempaya hot springs.