

# ASSOCIAÇÃO ANGOLANA PARA AVES E NATUREZA

## Special Report: Mount Moco fuel-efficient stoves project

*Michael Mills, September 2014*

**Summary:** After four years, persistence paid off as we delivered and distributed 80 fuel-efficient stoves to Kanjonde village at Mount Moco. After again demonstrating to the villagers how to use the stoves, a representative (mostly women) from each household came forward to accept the stoves. They were received with great appreciation and excitement. Many different people and organisations were involved with the entire process, and I would especially like to thank the Luanda International School community which raised funds for the project, shipped the stoves to Luanda and stored them there; I'm especially grateful to Juliet Mills, Tim Seccombe, Ali Shebani, Di Atkinson, Dalene Dryer, Carolyne Marshall, Catherine McMahon, Beatrix Geraldo and Tony Baron. Further funding came from the Rufford Small Grants foundation, and major contributions were also made by CGG and Mike Rogerson, who organised and paid for the shipment of the stoves from Luanda to Mount Moco, and Susan Fernandes, who handled the shipping of the stoves from Cape Town to Luanda as a favour. The project would not have been possible without all of these people.



**Figure 1.** Representatives from each household in Kanjonde village lined up to receive their fuel efficient stoves.

## **Background**

Mount Moco holds some of the largest and last-remaining patches of montane forest in Angola, the country's most restricted and threatened habitat type. These high-altitude forests support some rare and threatened birds, such as Swierstra's Francolin, which depend on these forests for their survival. At Mount Moco, use of wood for fuel and construction by local human populations has greatly diminished the size of the forest patches. The aim of the Mount Moco project is to reverse this trend by working with local communities. A two-pronged approach is being pursued; one angle is to increase the amount of forest available by planting trees, and the other is to reduce the amount of wood required by local communities. Socioeconomic surveys determined that firewood and people's cooking is the major contributor to forest loss, and so the introduction of fuel-efficient stoves was investigated. Initial trials with the award-winning Vesto Fuel Efficient Stove showed that they would be used by local families for cooking and would greatly reduce the amount of firewood needed. They had the added advantage of making people's lives easier – women were collecting bundles of firewood of up to 13 kg and carrying them to their homes up to 3 km away.

## **Challenges, timeline and contributions**

Getting the stoves produced and delivered all the way to Mount Moco was a great logistical challenge. The most time-demanding component of the exercise was to get the stoves manufactured, since the original manufacturer was no longer interested in producing the stoves. It took time for a new manufacturer to be found, and then a long time for this manufacturer to produce the stoves. With the help of various individuals and organisations a successful conclusion was finally reached. The following timeline shows how long each part of the process took and who was involved with it.

**Jun 2010:** Two sample stoves were ordered from New Dawn Engineering (designers) in Swaziland.

**Jul 2010:** The sample stoves were demonstrated for the first time to Kanjonde and circulated for use, with good results.

**Aug 2010:** The first visit to Mount Moco was made by the Luanda International School, with Juliet Mills and Tim Seccombe visiting the Mount Moco project.

**Sep-Dec 2010:** Luanda International School raises funds to pay for stoves, organised by Ali Shebani and supported by Juliet Mills and Tim Seccombe.

**Oct 2010:** Luanda International School takes biology students on a field trip to Mount Moco, led by Juliet Mills.

**Jan 2011:** An order for 80 stoves is placed with New Dawn Engineering.

**Jun 2011:** Contact is made with company director of New Dawn Engineering, since there had been no indication that the order was being fulfilled.

**Jun 2011 – Jul 2012:** A new manufacturer is sought and found by New Dawn Engineering.

**Oct 2012:** Stove production starts in Johannesburg, South Africa.

**Jun 2013:** Stove production is completed, after at least nine months.

**Nov 2013:** Delivery is taken of the stoves and they are transported by road from Johannesburg to Cape Town, where they are received and stored by Susan Fernandes.

**Feb 2014:** The stoves leave Cape Town by ship for Luanda, on a shipment organised by Susan Fernandes.

**Apr 2014:** The stoves arrive at Luanda International School and are stored at the school until they can be taken to Mount Moco.

**Aug 2014:** The stoves are finally delivered by truck to Mount Moco and distributed to the community, with transport organised and paid for by CGG, with support from Mike Rogerson.



The storey in pictures...



Trial stoves being tested at Kanjonde, July 2010.



Shipment of stoves arriving at Luanda International School, April 2014.



Stoves arrive by truck at Kanjonde, Mount Moco, and are offloaded by villagers, Aug 2014.



Stoves are demonstrated to the village in English, Portuguese and Umbundu, August 2014.



Villagers line up to receive their stoves, August 2014.



Kids outside their hut, using their family's stove to cook breakfast, August 2014.