

MITIGATING THE EFFECTS OF DROUGHT IN SOUTHERN MADAGASCAR



ALT's '**APEMBA SOA** project (**AS**) - meaning 'Good Sorghum' - funded by the European Commission 2007-2009, has built on and expanded the success of ALT's [Drought Mitigation Programme](#) (DMP) funded by the Big Lottery from (2005 - 2009).

The principle objective of the project is to improve food security by increasing the production of drought resistant sorghum as well as the number of households stocking and consuming sorghum as food.

Additionally the project undertakes to increase awareness about the nutritional benefits of sorghum by providing cooking and preparation techniques which enable women to improve daily intake of food.

CONTEXT

The south of Madagascar is located south of the equator and is the hottest and driest part of the island. The project area, the Androy, is classified as Tropical Semi-Arid and Tropical Dry (SAP). Fluctuating rainfall patterns result in the majority of the communes receiving between 400-600mm a year, while the southernmost coastal communes targeted by the project receive less than 400mm annually.



The dry spiny forest of the south, a priority conservation zone, is host to unique endemic succulents and species that survive on very little water. However, an estimated 10,000 hectares of the unique spiny forest of the south is lost annually, mostly because of charcoal production for urban areas. The cost of environmental degradation, principally from soil erosion, silting, and declining soil fertility and loss of forests has been estimated to be 5-15 % GDP annually.

Almost two million people live across the southern Province of Toliara which stretches between Ft Dauphin and Tuléar, and the population is growing at a rate of 3.62% per annum. At least 75% of the population are illiterate, rural producers living below the poverty line.

TARGETING FOOD INSECURE COMMUNES



57% of the population (626,204) in the south are Antandroy, the majority are agro-pastoralists engaged in subsistence activities centred on raising livestock and cultivating maize and manioc.

The region's already low and sinking water table means that accessibility to water is a serious and growing concern for the region's population. Many villagers live up to 20 km from a permanent source of drinking water.

Most families cultivate maize, manioc, and sweet potato. However, across most of the region production is insufficient to assure an adequate food supply. The plough was introduced some fifty years ago which, in combination with the strong southern winds, has helped to desertify much of the southern landscape and render the soil infertile or of such poor quality to limit crop yields. Local people in the hardest hit areas will live on *raketa mena* (prickly pear cactus fruit) for up to, and sometimes more than, three months of the year during an annual hunger gap. See also [Emergency Relief](#).

TRAINING FARMERS



A team of ALT field trainers work to the agricultural calendar to identify farmers, set up farming groups, train trainers, distribute seeds and provide technical trainings for those farmers who want to cultivate drought resistant sorghum.

65 farmers have been trained as local trainers

The farmers agree to return a percentage of the seed they successfully grow to the project in order to improve local seed stocks for further distribution across the region. Informally the farmers have also been reported to share surplus seed with close relatives and neighbours, further increasing the take up of sorghum in the region.

AGRICULTURAL CAMPAIGNS 2008-2009, 2009-2010



A total of 1280 farming families have benefited from seed and technical trainings in sorghum growing techniques. Since the beginning of the project 1929 Kg of sorghum seed has been distributed to farming families, together with 1800 kg of peas.

165 Tons of Sorghum have been produced over 478 hectares.

In 2009 all the primary crops of maize were wiped out due to the late arrival of the rains. The sorghum beneficiaries were the only cultivators left with a harvest in May 09, with sorghum as the strongest and most resistant crop in the Androy.

NUTRITION



58 nutrition and culinary trainings have been organised with beneficiaries of the DMP and AS projects. These trainings served to promote the nutritional benefits of sorghum and demonstrate various cooking techniques.

In collaboration with local partners GRET and CITEA the DMP/AS teams designed a recipe booklet with colour illustrations highlighting the preparation methods, cooking techniques for sorghum, as well as several recipes. This booklet has been distributed during cooking trainings to local beneficiaries.

The project has participated in National Nutrition Day events and also appeared on national television and in National publications from the National Office of Nutrition.



RURAL COMMUNICATIONS

Radio programmes and sorghum festivals help to promote the drought resistant sorghum seed varieties that are proving successful enough to deliver food during the annual hunger gap.

Radio



Apemba Soa has produced over 134 educational radio programmes to create awareness, educate and help mobilise community participation. The radio programmes have increased knowledge and understanding about the project and ensured good participation for sorghum events/trainings. They also serve to address broader environmental issues.

The radio programmes are broadcast via the [ALT Project Radio](#) rural radio network. This network ensures a considerable regional production and broadcast capacity for educational programmes reaching approximately 800,000 beneficiaries.

Festivals



9 sorghum festivals have attracted thousands of participants and provide important events for sharing information, celebrating harvest and learning about nutrition

Attendances at sorghum festivals have been high with crowds of approximately 2,000 people at each; the majority of all festivals were televised for National TV.