

DROUGHT MITIGATION PROGRAMME (DMP)



ALT launched its Drought Mitigation Programme (DMP) in December 2005 to address the need to improve food security and create livelihoods in the south, whilst also promoting more sustainable natural resource management.

Funded by the Big Lottery, the project has reintroduced sorghum as a main crop, educating and enabling farming families to grow and use seed varieties that are drought resistant and that provide fodder and fuel, as well as food.

The project also delivered tree planting at family level to provide fruit for food, and towards securing formal land tenure; it also launched a commercial tree plantation to help stabilise poor soil areas, and provide employment and food produce.

HIV AIDS awareness activities ensured that members of this community enjoy full health to benefit from the results of the project.

SORGHUM REINTRODUCTION



Since the beginning of the project participating farmers have borrowed 750 kg, reimbursed 1 ton, and harvested well over 92 tons of sorghum seed.

The project saw significant results with the introduction of resistant sorghum in Androy and achieved high recognition from stakeholders at all levels. The total number of direct and indirect beneficiaries to the sorghum activity (including sorghum festivals, trainings and farmers) almost doubled during the course of the project

(Total 28,625 beneficiaries)

The first agricultural season (2006-07) saw a successful harvest in spite of poor climatic conditions. The rapid and effective dissemination of these early results caught the attention of farmers in the south—who signed up in greater numbers, as well as the Malagasy government—who later initiated their own sorghum reintroduction project, and the European Commission – who then funded ALT to extend the sorghum activities into new areas under project [Apemba Soa](#).



More than 500 participating beneficiary families received seeds and trainings.

The second agricultural season (2007-08) suffered from late and insufficient rains that affected all the cereal crops, and the quantities of sorghum harvested were consequently very limited.

The DMP team worked hard to prepare for the project's third and final agricultural season (2008-09), successfully identifying

four new communes and a full complement of participating beneficiary farmers. Again the rainy season arrived very late and was also interrupted by a two-month dry period, which destroyed the majority of all crops in the fields at that time. The sorghum, however, showed its impressive drought resistant capacity and against the odds the DMP gained excellent harvest results.

A total of 293 participating sorghum families have returned twice the amount of seeds they received at the start of the campaigns.

The special value of sorghum, unknown at the start of the project, became clearer during the annual drought and hunger gaps—especially in 2009. Because of its high nutritional and cultural value, sorghum is not sold as a commodity in the same way that corn is. Instead the sorghum harvest is kept as a prize possession and consumed within the family. Families do share with their relatives in an informal distribution which has increased the number of people with access to the resistant sorghum seed.



Over 1500 families gained access to improved seeds from the DMP over the three and a half years of the project.

IMPROVED NUTRITION

Beneficiary families have an average food consumption that is 53% higher than non-participating families.

The results of the December 2008 survey showed that the average food consumption for a person in a beneficiary family was of 578.6 g per day, while a person in a non-beneficiary family was eating an average of 377.5 g per day.

Participating sorghum beneficiary families had a 10% higher average food consumption per household compared to non-participating families.



The project has provided training for women on the use of sorghum in culinary techniques. Members of the DMP team appeared on national television presenting different ways to prepare sorghum and have also participated in the festivals where cooking demonstrations were held.

335 women received trainings and adopted improved recipes using sorghum.

During the eight culinary trainings in 2009, the project distributed colourful booklets presenting nine sorghum recipes, with clear drawings adapted to the Antandroy culture and which promote the use of sorghum in daily diet.

SORGHUM AS FUEL WITH FUEL EFFICIENT STOVES

475 people have been trained in building fuel-efficient TOKO MITSITSY (TM) stoves.

Follow-up after the second year trainings showed an increase in the number of beneficiary families using TM that was significantly higher than the targeted 50%. Monitoring of TM-use during the project's final year revealed that this figure has risen even further reflecting a final increase of over 100%.

After the first two agricultural seasons 61 beneficiary families were already using sorghum stalks as a fuel. The trend is set to continue.



ALT TREE NURSERY AND LAND TENURE



Over 1,500 families bought/ received and planted more than 22,500 value-adding trees. In total over 23,111 trees were sold or distributed to families, schools and associations.

Planting trees increases land tenure security at local and regional levels, as planted trees are one of the principal (and traditional) indicators of land ownership.

They also provide many environmental and social benefits, including soil stabilization, provision of shade and important natural resources (e.g. wood for construction), and food products that can be sustainably harvested and sold to generate income (e.g. mangos, papayas).

The project has contributed to reform of land tenure legislation and processes at national level.



Research conducted by the DMP at the beginning of the project was shared in meetings with the head of the National Land Tenure Programme and the Manager of Madagascar's Millennium Challenge Account. Both these organisations are aiming to reform land tenure legislation and processes at national level. DMP's detailed feedback on the land tenure situation in Androy has helped to ensure that national level reforms also address important

customary issues around clan and family ties.

All families who planted trees from the DMP nursery also received training on tree planting and caring for the young trees.

SUSTAINABILITY

The project implemented a strategy to reduce the number of permanent workers on the nursery site and to increase the price of the trees in order to help ensure its longer term viability. Prices have been increased in a way that remains affordable for local farmers but also covers the majority of the running costs.

In 2009 the tree nursery was transferred into local ownership with ALT Madagascar

The new capacity of the nursery is being demonstrated in its production of trees for stabilising dunes for the ALT Emergency Relief Programme [See emergency relief](#).

LIVELIHOODS - VK PLANTATION

ALT assisted the local Antandroy association VoronoKodoho (VK) to launch a commercial tree plantation in Tshiombe.

VK is registered as a formal village association. **Approximately 1000 local people have directly benefited** from the project since its start and in



the future they will use the revenue generated from the sale of castor seeds (and later coconuts and potentially cashews as well) to help sustain the activities.

In an area with so few alternatives and where 75% of the community lives on less than \$1 a day, the importance of new economic activities cannot not be underestimated. The regeneration and activity brought about by the plantation is already feeding into the local economy and villagers are testifying about renewed hopes for development in the region.

The plantation now covers more than 10 hectares of previous-degraded coastal land



outside the town of Antaritrike. It is a very high profile development for such poor area. Furthermore, the adoption of castor beans offers new and interesting possibilities for the plantation, as these plants are currently providing the project with its first significant harvest since the DMP began. Established trade chains will ensure that all the harvest is converted into income for VK, which will be re-invested into the plantation according to their business plan.

On the main site of the plantation:

12,276 castor bean seeds have been sown in 6,138 holes over 80,000 square meters. 72 coconut trees from the year-two agricultural season also remain on the site.

On two new sites:

142 cashew trees are growing together with castor beans over a combined surface of 20,000 square metres.

TRADE AND SUSTAINABILITY

Statutes and a commercial structure for cooperative, as well as framework documents for profit-share scheme established, have been established during the project.

4,000 castor plants harvested by the end of project

Trade chains for VK's castor bean plants have already been identified and established. A local artisan in Ambovombe called Taza has already placed an order with VK to purchase their entire harvested crop.



Taza will extract the oil under a contract that he has with SEAR, a Malagasy pharmaceutical company that specialises in producing soaps. Taza made a special agreement with VK to ensure that VK will sell the total harvest exclusively to him.

In addition to this local operator a national company called Phileol is also promoting the cultivation of castor bean plants in the region. VK is waiting to know their price and partnership conditions so that they can ensure they are exploiting the best trade opportunities in the future.

HIV AIDS AWARENESS AND RURAL COMMUNICATIONS



Radio programmes concerning sorghum broadcast in rural areas have contributed strongly to the reintroduction of this crop through boosting the number of farmers willing to participate. People listening to the radio have been persuaded to cultivate sorghum again after it had all but disappeared in the south, and the success of the programmes has also been attributed to the active participation of beneficiaries in their production.

176 educational radio programmes have been produced and broadcast monthly.

The programmes are received by radio listening groups with wind-up radios who are encouraged to discuss the programme content. Programmes produced by the project on a variety of themes have benefitted listeners across the southern arc as they are shared through the ALT radio network which reaches approx 800,000 listeners. [See Project Radio](#)

Members from more than 5 listening groups in Androy participated in programme production, including DMP's pioneering soap opera on HIV/AIDS issues.



Many of the educational programmes have been written, produced, recorded and broadcasted by women for women. These are part of a pioneering soap opera on HIV/AIDS issues produced by the DMP female communications coordinator. They have covered themes relating to STDs and HIV/AIDS transmission, prevention and treatment. In one of the programmes a woman plays the role of a doctor, setting a precedent in a region where there are no female doctors.

Festivals are a perfect arena for disseminating information about sorghum: participants can observe the results of the good harvest, learn about techniques to grow sorghum and taste different sorghum recipes at the same time.



12 sorghum festivals promoted sorghum reintroduction, demonstrated planting techniques and provided cooking demonstrations.

The festivals saw a combined attendance of over 4,000 people. The team's approach and planning was similar for all the festivals, however those that drew the biggest crowds and had the best atmosphere were the festivals where DMP beneficiaries were most active in all elements of the festival

preparations, including assuming significant responsibilities on the day.

Attendances at the sorghum festivals has led to significant media coverage through radio and television programmes which in turn has contributed to widespread interest in growing sorghum again in the south of Madagascar.



[See also Apemba Soa](#)

RURAL TRAINING TECHNIQUES - VISUAL AIDS

The DMP field team has used a range of development tools and participatory approaches to make sure that all elements of the DMP activities were accessible to the most disadvantaged beneficiaries.



This included the use of "pagivolts", a series of illustrations on cloth that provide a visual learning aid for both the trainer and the trainee (particularly effective where beneficiaries have limited literacy skills). They have been used during trainings about fuel-efficient stoves.

DMP's communications activities have drawn heavily from oral testimony provided by beneficiaries and this has encouraged greater ownership of the activities.

In partnership with PANOS London, DMP supported a project empowering community members to engage directly in regional, national and international debates on climate change, agriculture and development through the use of oral testimonies and participative video.



[See Project HEPA.](#)

Videos filmed by community participants from Faux Cap have been screened in Ambovombe for the region's political leaders, as well as featuring at international conferences including the Indigenous Peoples Climate Change Summit in Alaska. The United Nations University has also asked permission to screen these videos at the National Museum of Denmark in Copenhagen in December, at an event scheduled within the important United Nations Climate Change Conference.