

Natural wild silk: Making the most of Madagascar's biodiversity

The Natural Silk Project (NSP) involves managing Madagascar's natural silk sector so as to optimise and boost the country's output of this natural product, which is obtained by collecting and breeding wild native varieties of the silk moth. The project, which is being run by the FAMIOVA women's group, is designed to enhance the technical capacity of people living in the proximity of the Ranomafana National Park in eastern Madagascar, to produce and process raw materials and manage the production and sale of finished products.

The history of silk-making in Madagascar is very old. It is one of the few countries with a long-standing sericulture tradition and where the sector is an important part of the national cultural heritage. Madagascan silk crafts use thread spun from the cocoons of *Bombyx mori*, a domestic bred silk worm, or from the cocoons of various wild silk worms, primarily varieties of *Borocera*, a common species in Madagascar's highlands and costal areas.

The target group of the Natural Silk Project are the members of FAMIOVA women's group, from the villages in the area adjoining Ranomafana National Park¹. FAMIOVA is the acronym for "Fanentanana, Fanabeazana, Famokarana Miompana amin'ny Vavaasa mivantana sady manome lanja ny zavamananaina sy mikajy ny tontolo iainana", which literally means "Sensitisation, education and production geared towards direct action concerned with biodiversity and environmental conservation and with the park". Initially, back in 2004, the project was financed by the ValBio Centre (International Centre for Research and Training in the Valorisation of Biodiversity), together with Madagascar National Parks



Ranomafana. Currently, FAMIOVA is responsible for running it.

Improving the management of natural resources

The region's population faces a range of socio-economic and environmental problems due in part to poor management of natural resources. Most villagers live off the forest, using harmful practices that bring numerous pressures to bear on local biodiversity and on the forest. These practices include:

- the illegal gathering of secondary products (bamboo, pandanus, honey, crayfish);
- encroaching of rice fields into marshland in Protected Areas²;
- excessive consumption of wood;
- over-zealous clearing of land for cultivation using the traditional *tavy* method (slash-and-burn agriculture), which is continuing to devastate the land in spite of various measures and provisions adopted by the country's authorities.

Who knows how many forest species are disappearing each year? If the livelihoods of the people living around the park are to improve, the shortage of natural resources – including water and wood – and of food like honey and

crayfish, urgently needs to be resolved. The challenge entails conserving and sustainably exploiting biodiversity whilst at the same time taking into account the needs of the local people. It should also be noted that the women of the region are burdened with arduous daily tasks (including various household duties, seeking firewood, gathering food in the forest, fetching water from shallow rivers, and so forth), which, however, do nothing to improve the family income. Consequently, their living conditions remain very difficult.

For the various stakeholders involved in the park's conservation (including the local people, the park's managers, researchers and the local authorities, among others) it is obvious that appropriate and urgent solutions are called for to stop the destruction that threatens the country's forests, a threat that could easily spill over to the park and the forest corridor linking Ranomafana National Park with Andringitra National Park and the Pic Ivohibe Special Reserve.

Alternatives to damaging practices

Since repressive measures do not appear to bring about the desired effect, the Natural Silk Project is convinced that more energy should



be channelled into fostering alternatives to the practices that bring about the daily pressures on the park. Accordingly, it is advocating the promotion of wild silk as one of the alternative activities that deserve special attention in attempts to overcome the range of problems outlined above. Facilitating women's access to development programmes geared towards conservation will be crucial, because that would enable them to devote more time to profitable income generating activities and slowly but surely change negative attitudes towards the park's conservation.

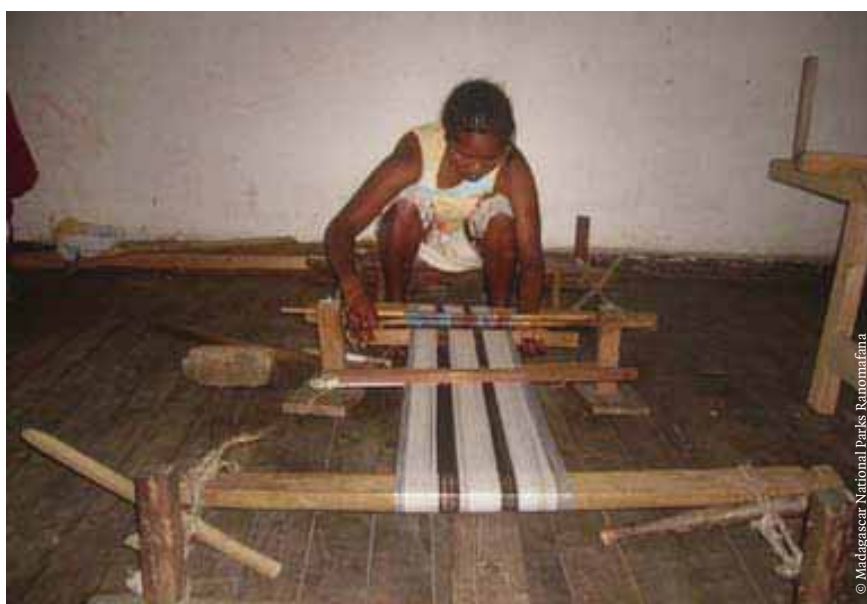
The objectives of the Natural Silk Project are as follows:

- to boost the output of natural products derived from the region's biodiversity;
- to develop silk-making (and related activities) as a profitable sector that offers an alternative to the pressures on the biodiversity of the Protected Areas as well as in the forest corridor;
- to boost the incomes of the beneficiary households.

The project purchases raw materials (cocoons) for processing into finished products that can be sold at local or regional markets. For the time being, improving the breeding of wild species (to produce *landibe*, large silk cocoons made by a number of silkworms) poses problems because the climate in Ranomafana is incompatible with breeding on the *tanety* (deforested, terraced hills) or in the forest. Domesticated silk worms provide only a negligible fraction of the quantity of silk purchased. In the future, the hope is to organise training courses on breeding silk worms on farms (domestication) and to sell the resulting products internationally. These income-generating activities will be accompanied by technical support.

Towards a better quality of life for women and men

In line with the priorities set by the Madagascar government and the principles advocated by the United Nations Development Programme (UNDP) to combat poverty, the project aims to contribute to meeting the challenges related to growth and investment and to lastingly improve the quality of life of the communities. Accordingly, in keeping with the recommendations made by the Global Action Programme for the Promotion of Women, and in line with the National Policy for the Promotion of Women (PNPF) geared towards promoting balanced development, a key objective of the project is to achieve gender equality in the context of the project's implementation.



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In this context, 14 women were given two training sessions on the traditional processing of wild silk into a hand-made natural product at a centre specialising in sericulture. The project sets out to combine the momentum generated from reviving and promoting Madagascar silk with attempts to identify potential sales outlets (by participating in international and national trade fairs, providing training on the domestication of silk worms and so on).

The silk thread is used to make hand-made articles such as traditional raw silk shawls (*lamba landy*³) for comfortably-off Madagascans and tourists, furnishing fabrics, natural or dyed *lamba landy* used by fashion designers to make diverse outfits (partly for export), and traditional burial shrouds (*lamban-drazana*). Currently, products are made either of pure wild silk or of a silk-cotton mix. The main focus of production today is the manufacture of dyed or embroidered *lamba landy*, either for tourists or locals.

Luxury hand-made natural products

The label adopted by the production unit is "Soie originale malgache / Made in Ranomafana. Produits naturels de luxe - fait mains" (Original Madagascar silk / Made in Ranomafana. Natural, hand-made luxury products). Just as the food sector is vaunting organic produce for their nutritional qualities, the lingerie sector is turning more and more to natural, hand-made products. And breakthroughs by the *lamba landy*, which is now an acknowledged haute couture article adopted by national and international designers alike, constitutes an excellent, profitable opportunity for the sector. Madagascar artisans, who are famous for their

The Natural Silk Project advocates the promotion of wild silk to overcome the range of problems that threaten the biodiversity of the region.

manual dexterity and skill, learn fast and turn out high-quality products.

The ultimate aim of the project is to save the environment, promote the island's biodiversity, and propel the region towards a better economic future with reduced poverty. This is to be achieved by creating a more widespread common awareness of current and future challenges to gradual self-development.

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- 1 Ranomafana National Park covers an area of 41,601 hectares and is home to an impressive range of sadly endangered endemic biodiversity. The park is famous for the curative effects of its natural hot spring and for its rainforest. It is run by the Madagascar National Parks Association (PNM-ANGAP).
- 2 Law no. 028/2008, recasting the Code of Protected Areas (COAP), states that a Protected Area is a marine, coastal or aquatic demarcated area which has a particular biological, historical, natural, aesthetic, cultural and/or religious value and therefore requires multiform preservation in the public interest. Protected Areas are managed to protect and preserve biological diversity, conserve particular values of natural and cultural heritage and ensure the sustainable use of resources for the reduction of poverty.
- 3 *Lamba* is a generic term, the equivalent of 'cloth' in English; *landy* specifies that the *lamba* in question is made of silk.