



Sapphire mines that become forests

How communities in
Madagascar are taking
action to tackle the
environmental impact
of mining



Acknowledgements

IIED wishes to thank all those photographed and especially those who shared their stories for this project:

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Joeline Edwige

Célin Eugène Randrianomejanahary

Jocelyne Dalo

Eric Rakotoson

Hanita Razafiasimbola

Also thanks to GIZ Madagascar's Conservation and Sustainable Use of Natural Resources Programme

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Rafanomezantsoa/Ymagoo and GIZ Madagascar (page 14)

Introduction

The island of Madagascar is one of the most ecologically diverse regions in the world. It is also rich in precious minerals and is one of the world's significant suppliers of sapphires.

Most Madagascar gems are mined by artisanal and small-scale mining (ASM) operators. Their activities leave a trail of environmental destruction and, despite the country's riches, its people remain poor.

The German development agency GIZ has set up a dialogue process to try and tackle this complex situation. The GIZ

**This booklet is based on a long read, available at:
www.iied.org/sapphire-mines-become-forests**

Low resolution photos have been used throughout

dialogues have been arranged with support from the Madagascar Ministry of Mines and Petroleum, and with input from IIED.

We travelled to the Sakaraha region in Madagascar's Southwest to learn how individuals and communities are dealing with environmental problems caused by mining. We found out that they are learning new ways to improve their lives and to work towards sustainable development for their local communities.





Reforestation

François Rafila, 50, has set up an association to reforest abandoned mining sites. Associations are a traditional form of organisation in Madagascar, and they still play an important part in local life. The association initiated by François now has some 400 members.

Association members have planted rosewood, moringa and eucalyptus trees on previously bare land.

“We want to become a model for other communities,” says François. “We try to make the community learn to love the environment and take care of it.”

François says villagers used to take wood from the national park, but this has changed thanks to the association's work. “The main change is that all villagers who pass by the rehabilitated areas keep an eye on the plants. If something happens, they let someone know,” he adds.

François says people want to do more reforestation. He has set up a nursery to meet the demand for trees in former ASM areas. The local enterprise produces 10,000 plants each year and sells them to schools, churches and farms across the region.

“We want to become a model for other communities”





Protecting children

Villages can find themselves, almost overnight, surrounded by busy mining camps with hundreds of workers. When prospectors hear rumours of a rich new deposit, they move on, leaving hazardous sites in their wake.

Abandoned pits can be up to 50 metres deep and pose a major danger, especially to children playing.

Joeline Edwige heads the Bekily women's association. She reports: "There's a field behind our homes and the children were playing football there. The ball fell inside a hole and a little boy went in to retrieve it. He passed out because there was [natural] gas in there."

She says: "I knew right there that we had to do something. We needed to protect our children.

"It was a shock and a wake-up call for the whole community."

The women's association took action: for two months, every member dedicated one day per week to filling in holes.

The women also planted trees and look after them.

"I like to see the plants growing," says Joeline, "but the reward is the safety of the children."



“The reward is the safety of the children”



Local leadership

Célin Eugène Randrianomejanahary, 42, is a miner and the mayor of Bekily Ambinany, a rural commune of 14,000 inhabitants. He and other local mayors are participating in the national dialogue on ASM convened by GIZ together with Madagascar's Ministry of Mines and Petroleum.

He says improving the ASM sector starts with communities: "We all need to do something about scams and abandoned sites, and formalisation and regulation too, but we are starting by working with associations on training. We are starting with the communities."

Célin Eugène has run a series of awareness-raising workshops for community associations. "It's working, but little by little," he says. "People are slowly becoming more interested in the environment and talking about it more."

He also joined the hard work of refilling mine shafts. He knows it is important to demonstrate practical leadership: "An animal without a head cannot walk' is a proverb that we have here in Madagascar," he says.

“We are starting by working with associations on training”





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Getting fair prices

Despite its immense deposits of high-quality gemstones, Madagascar mining communities do not always benefit from this wealth. Gemstone buyers don't always pay miners fair prices and unscrupulous traders can act with impunity because miners have little expertise and the market is unregulated.

Jocelyne Dalo, 57, has been working in sapphire mines for the last 14 years, washing rough sapphires in the local river.

“Many years ago I would exchange a large sapphire for a coffee or a plate of food,” she says, during a break from a training workshop on basic gemmology.

“I have come to the training so I can stop being scammed,” she says. “The people we work with scam us because they know that we don't know anything about the price of the stones. Now I'm starting to understand and learn how to identify them.”

“When they tell me that my stones aren't sapphires, I will be able to say that, yes, they are,” she says.



“I have come to the training so I can stop being scammed”



Eric Rakotoson ran Jocelyne's training workshop. He is a trainer with the Institute of Gemmology of Madagascar (IGM), which organised the training along with GIZ. IGM is the first African gemology institute and was set up as part of a World Bank programme.

Eric says the miners need to learn the value of different types of stones. He says: "When I started yesterday, I could see that they only work with sapphires but there are also other stones they can

sell. They find lots of beautiful garnets and topaz, but since they are not sapphires they throw them away."

Miners need to find the right buyers: better and fairer markets are needed. He says: "We need to create connections between buyers and these small producers."

The training participants learnt how to identify and assess stones using a magnifying glass and a torch.

“We need to create connections between buyers and these small producers”





Finding a vocation

Hanita Razafiasimbola, 29, moved 300 kilometres with her children in search of a new life in the Ilakaka mining region.

Last year she attended a jewellery making workshop “just to try something new.” It was a revelation. She says: “Something happened in me when I began to work with the stones and had to choose the colour of the stone I was going to put in a necklace.” She says the word ‘creative’ quietly, as if she were not allowed to use it to describe herself.

Hanita has found her vocation. “Money is not as important as when people like the jewellery I make,” she says.

She is now training others to make jewellery. “Sometimes it’s difficult because many of the women are older than me, or their hands shake and they struggle with the tools,” says Hanita. “But I love to spend time with them. It’s like having several mothers and sisters.”

The Ilakaka women’s association opened a jewellery shop but sales have been disappointing and recently the shop was burgled. These setbacks have not dampened Hanita’s spirits. “I love being part of an association,” says Hanita. “It’s about having good relationships with other people and doing things together. It’s been good for me.”

“It’s about having good relationships with other people and doing things together”






IIED is a policy and action research organisation promoting sustainable development and linking local priorities to global challenges. We are based in London and work on five continents with some of the world's most vulnerable people to strengthen their voice in the decision-making arenas that affect them.

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