

In 2006, it emerged that Cargill, the US agricultural giant based in Minneapolis, Minnesota, had expanded a port in Santarém, Pará state, to handle one million tonnes of locally produced soya — without having conducted a required environmental impact assessment. (The assessment was completed in 2010.) Environmentalists cried foul, fearing the impact of expanded production on the rainforest. With the world's attention on it, Cargill formed partnerships with several green groups, including The Nature Conservancy, headquartered in Arlington, Virginia. The aim was to ensure that Cargill was purchasing sustainably grown soya from local farmers and respecting the rights and opinions of other locals who oppose the expansion of soya production.

However, Cargill's apparently environmentally friendly operations in the Amazon may not be as green as they seem. Research by Brenda Baletti, a PhD candidate at the University of North Carolina at Chapel Hill, questions claims by green groups and Cargill that its soya operations avoid deforestation. In addition, the work raises concerns over how well the operations respect local opinion. The research will be presented this week at the International Conference on Global Land Grabbing at the University of Sussex in Brighton, UK.

Baletti contends that a satellite-imaging system capable of detecting deforestation on individual farms in Santarém was not available until two years ago. Before the monitoring system was up and running, there was simply no way to judge whether soya production by particular farmers in the area was sustainable, argues Baletti. This, she says, raises doubts about claims by green groups that their initiatives to protect the rainforest have succeeded.

Baletti also questions whether the Cargill–Nature Conservancy partnership took full account of the views and concerns of small farmers and others who were opposed to industrial-scale soya production in Santarém. Interviews conducted by Baletti indicate that many local people were unhappy with the developments and felt that their perspectives were ignored. The Nature Conservancy's

partnership with Cargill may not have helped much: Baletti's research highlights, for example, that the organization reports those soya farmers who breach national forest-protection laws to Cargill, but not to the government.

The Nature Conservancy told *Nature* that it has been able to monitor broader patterns of deforestation for the past six years. It regards the joint programme with Cargill as successful because it has found clear reductions in forest loss over the past three years. The organization added that working with farmers would be difficult if it reported violations of forest-protection laws to the government, and said that its approach works: more farmers are complying with the laws and sparing the forest. Cargill, for its part, says that the initiative has discouraged the planting of soya in deforested areas and has helped to bring down the rate of deforestation in Santarém.

The company also says that it regularly engages with locals through consultations and public meetings, and has taken on board some of their concerns about soya farming.

Yet the questions about Cargill's soya-production interests in the Brazilian Amazon echo wider concerns about whether market-driven approaches to conservation and sustainable development are always workable. Ensuring that all players, big and small, have a seat at the negotiating table is a worthwhile goal, and involving local communities is a pillar of the United Nations' programme to reduce greenhouse gases from deforestation. But it seems naive to assume that all voices and interests carry equal weight.

If not carefully designed, well-intentioned schemes that aim to protect the environment, respect local interests and boost the economy — all at once — may fall short. It should be borne in mind that if something sounds too good to be true, it often is. ■

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Eye on the tiger

The latest Indian tiger census demonstrates welcome methodological rigour.

Counting wildlife is no easy matter, especially with a wide-ranging and stealthy forest dweller like the tiger, which is in the spotlight this week. On 28 March, India announced that its tiger population, in decline for decades, has increased by 225 animals over the past four years, to a total of 1,706. The scale of the increase is open to dispute, but the announcement signals a welcome development: the beginnings of a more rigorous approach to counting the big cats.

The tiger's worldwide decline is a tragedy, and nowhere is this more true than in India, which is home to more than half of the global population, and which considers the animal a national symbol and a source of pride. Independent scientists and the government have long been at odds over how to count and protect animals in the country's 39 tiger reserves.

But in 2005, the government was forced to come to the bargaining table after the embarrassing revelation that at the Sariska reserve in Rajasthan — once a stronghold for the cats — not a single tiger was left, even though the government had claimed that between 16 and 18 tigers lived there in 2004. A review of tiger management practices, headed by fierce environmental-justice campaigner Sunita Narain of the Centre for Science and Environment in New Delhi, recommended that the government revamp its tiger census, conducted once every four years.

Since then, officials and wildlife scientists have worked in a

spirit of (perhaps grudging) cooperation. The government has abandoned its previous census strategy, which relied on counting tiger 'pugmarks', or tracks, and is incorporating more-modern methods, such as camera trapping and DNA testing. It has also become more serious about defending tiger reserves from encroaching development, and involving people who live near the reserves in policing them for poachers. Although long overdue, these are huge steps in the right direction.

But are they enough to have spurred such a dramatic increase in tiger numbers — especially after many years of relentless decline owing to poaching and habitat loss? It seems unlikely. Nor would it be wise to compare older tiger counts with a census taken using new methods. What matters now is to make sure that the new techniques are scientifically rigorous enough to give accurate data for future comparisons. Some information about the methodology is available, but full details have yet to be released.

Wildlife biologists such as Ullas Karanth of the Center for Wildlife Studies in Bangalore, who has brought tigers in the state of Karnataka back from the verge of local extinction, also emphasize the need to pay closer attention to tiger populations by counting them every year rather than every four years. The tiger population is in such dire straits that a single year can make a crucial difference, and limiting the count to every four years means that worrying trends might be detected too late to do anything about them.

The Indian government has signed up to the goal, and has agreed with Karanth on a methodology. Now the annual counts must begin, with total transparency about how they are done.

The numbers will help to banish wishful thinking about the status of tigers. They will also help India to be sure that it is truly doing everything in its power to bring the cats back from the brink. ■

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