

Modelling for policy

Environmental economist Jonah Busch worked with a team of economists, geographers and policy specialists to assess different incentive structures for reducing emissions from deforestation in Indonesia.

■ What was the impetus for this project? What was the main objective of the work at the beginning of the project?

The objective of this project was to estimate the potential effects on emissions and income of mandatory and voluntary incentive schemes under the Reducing Emissions from Deforestation and Forest Degradation (REDD) framework in Indonesia. We initiated this work in 2009 on invitation from Agus Purnomo, the head of Indonesia's National Council on Climate Change, who saw our previous work on REDD at the international level and suggested that we do something similar in Indonesia. The REDD mechanism has the potential to provide triple benefits: addressing emissions from tropical deforestation, protecting some of the world's most biodiverse forests and creating a new source of income for development. A lot of work however has to be done to turn this opportunity into reality. We wanted to model policy options on a spatial basis to provide Indonesian decision-makers with a tool to assess transparently the effects of different schemes to reduce deforestation.

■ How did you go about finding suitable collaborators?

We started with an already established core group of economists including Ruben Lubowski from the Environmental Defense Fund, and Frederick Boltz and myself from Conservation International. Geographers, including Fabiano Godoy, joined the team to handle the remote-sensing and spatial data. Conservation International then held a series of workshops locally to gather policy and technical experts from

Indonesia. As a result of this process, the team grew to include researchers such as Arief Yusuf, who was extremely helpful in calibrating an important aspect of our model — deforestation leakage.

■ Did you encounter any difficulties in working with a team of experts with different research backgrounds?

Not really. My research background includes the University of California Santa Barbara's Bren School of Environmental Science and Management, where an interdisciplinary training programme supported by the National Science Foundation helped me to prepare for this kind of work. And in the science department of an international environmental organization we have economists, biologists, geographers and other scientists working together every day.

■ What was the highlight of working with an interdisciplinary team?

Working in an interdisciplinary team that includes scientists and policy experts was a real pleasure. There was a lot of respect for the big challenges faced by Indonesian policymakers — trying to stop deforestation in real life. The policy experts were very open to what we had to offer and this made the collaboration really beneficial to everyone. Also, one of our collaborators, Muhammad Farid, had a really sparkling sense of humour that helped a lot during meetings.

■ Any surprises?

This was my first experience working in Indonesia and the biggest surprise for me

was the enthusiasm shown by the Indonesian community. We started with invitation lists to the workshops of about 20 people and ended up inviting 60 or 70 just because there was so much interest in REDD. During the workshops we were presenting our research products, and the Indonesian government, quite committed on REDD with a 26% emission-reduction target by 2020, was presenting its own work, as was the Indonesian research community.

■ Did you learn any lessons about interdisciplinary collaboration from this project that would benefit others trying to do similar work?

The main lesson has very much to do with having developed the work together with policy experts. Policy experts have a different view about the research questions and it is very import to integrate them in the team from the beginning. Having a policy advisory group from Indonesia in particular was very helpful, not only with practical insights for the study but also in terms of the dissemination of our research.

■ Was it difficult to get financial support?

We obtained initial financial support from the Norwegian Agency for Development Cooperation. We were certainly lucky to start this project in 2009 — a time of tremendous debate about the role of REDD to mitigate climate change, especially in view of the then upcoming Copenhagen meeting; there were funds available for research on the issue. Finally, environmental non-governmental organizations such as Conservation International have a strong involvement in REDD initiatives and supported the study.

■ Any final thoughts?

Climate change and deforestation are multifaceted challenges that require knowledge and approaches from across disciplines. Without contributions from economics, geography and policy, our research would have been incomplete.

INTERVIEW BY MONICA CONTESTABILE

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