IEG
INDEPENDENT EVALUATION GROUP

# Q&A: Protected Area Effectiveness in Reducing Tropical Deforestation.

***Q. 1. What is REDD?***

REDD stands for Reducing Greenhouse Gas Emissions from Deforestation and Forest Degradation. It refers to an initiative to find ways to reward developing countries for reducing deforestation. When trees are cut and burned to make way for fields and pastures, *CO2* is released. About one fifth of all human-induced *CO2* comes from deforestation, and much deforestation is undertaken for unsustainable, marginal agriculture. There are currently intense negotiations underway on how to integrate the REDD approach into a new global climate agreement.

***Q. 2. What have protected and indigenous areas got to do with REDD?***

Protected areas and indigenous areas are motivated by ecological and social concerns, but they are often intended to reduce deforestation. Because they have been implemented for decades, on a large scale, they could provide important lessons for REDD implementation.

***Q. 3. Why is this relevant to the World Bank?***

First, the World Bank has been a very large funder and implementer of protected and indigenous areas. The Global Environmental Facility reports devoting $1.6 billion in direct funding and $4.2 billion in co-financing to protected areas, and the World Bank has played an important role in many of those projects. Second, the World Bank's Forest Carbon Partnership Fund plans to help countries design and fund REDD activities.

***Q. 4. How extensive are protected and indigenous areas?***

They take up a large and growing portion of the earth's real estate. At a conservative estimate, more than a quarter of the tropical forest is now devoted to protected and indigenous areas. At 3.6 million square kilometers, these protected areas are as large as Argentina and Chile combined.

***Q. 5. Why are protected areas controversial?***

Some people view them as ineffectual 'paper parks', unable to stop deforestation and forest degradation. Others fear that they are *too* effectual, alienating local people from the forest resources they need.

***Q. 6. Why does this controversy persist? Isn't it obvious whether or not protected areas are effective?***

No, it's not, for two reasons. First, no one has collected comprehensive, reliable, consistent information on deforestation or on forest livelihoods. Second, people have drawn conclusions from naïve comparisons: for instance, comparing deforestation rates inside vs. outside protected areas. Such comparisons can be misleading if protected areas are placed in locations with particularly high deforestation pressure to defend threatened biodiversity or in locations with particularly unattractive to agriculture, so that rural interests won't contest them.

***Q. 7. So, how did you solve these problems?***

We used forest fires, which are readily detectable and mappable, as an indicator of deforestation. And we carefully matched points in protected forests with unprotected points that were similar in terrain, climate, and remoteness – a kind of case/control comparison.

***Q. 8. What did you find?***

We found that strict protected areas – where forests are devoted solely to conservation – are indeed effective, though somewhat less than a naïve assessment would suggest. Perhaps more surprisingly, we found that mixed-use protected areas – where local people can carry on some forms of sustainable forest and land use – are even more effective than strict protected areas, and more effective than a naïve comparison would suggest. Most effective of all were indigenous areas.

***Q. 9. Why are these findings important?***

The findings are important because they show that there is successful experience, on the ground, with retarding deforestation. And they also show that it is possible to combine productive forest use with forest conservation. It may suggest ways to implement REDD in a manner that protects both the forest and local livelihoods.

***Q. 10. Does this mean that strict protected areas are not justified?***

No, it doesn't. Protected areas can have many goals besides reducing overt deforestation. In some forests, for instance, strict protection may be necessary to curb poaching of mammals and birds or illegal logging.

IEG study on ***Protected Area Effectiveness in Reducing Tropical Deforestation.***