The delay in defining the measure was the result of intense lobbying by forestry interests — including oil palm developers, pulp and paper companies, logging firms, and the agroindustrial, mining, and energy sectors — that feared losing access to forest lands. The language of the presidential indicates that they were successful in their battle to narrowly define the moratorium, which includes only peatlands and virgin forests. Secondary forests, as well as primary forests and peatlands that have already been granted as concessions, will be exempt from the moratorium.

In total, the Indonesian government estimates that 64 million hectares of primary forests and peatlands — roughly 35 million of which are already protected — will be off-limits to concessions through December 31, 2012. Greenpeace says that roughly 40 million hectares of Indonesian forest are left open for deforestation under the moratorium.

"Millions of hectares of forests will still be destroyed. And most of the areas included on the map are already protected, so the moratorium offers 'little' extra," Bustar Maitar of Greenpeace Southeast Asia said in a statement. "In the forests, large scale destruction will continue as usual. This announcement is a long way from the Indonesian President's commitment to protect Indonesia forests."

"Most of the remaining forest areas in Indonesia are actually secondary forests," said Wetlands International in a statement. "Millions of hectares of the Indonesian forests may still be converted."

Some environmentalists had hoped the decree would be more broadly defined, using carbon storage or conservation value as a bar for excluding forests from new concessions. Those measures would have protected selectively logged forest that serves as habitat for endangered species like orangutans, rhinos, tigers, and elephants. Instead the moratorium will allow these areas — amounting to 36 million hectares according to the Ministry of Forestry — to be logged and converted to plantations. Furthermore, because the measure is the form of a presidential instruction, it is not legally binding.

"Ministers and state officials could, in theory, violate or ignore the presidential sanction without incurring legal sanctions," said an observer who asked not to be identified.

But Dipo Alam, Cabinet Secretary for President Susilo Bambang Yudhoyono, disagreed.

"There will be legal sanctions for those who do not obey the INPRES," he told mongabay.com. "Law enforcement will be applied."

Other loopholes under the moratorium also raise concerns. Due to food and energy security concerns, the moratorium grants exemptions for rice, sugar, geothermal, and oil and gas projects. Therefore a massive agricultural project planned on forest lands in Indonesian New Guinea will proceed.

"This is a bitter disappointment. It will do little to protect Indonesia's forests and peatlands," Paul Winn of Greenpeace Australia-Pacific told Reuters. "Seventy-five percent of the forests purportedly protected by this moratorium are already protected under existing Indonesian law, and the numerous exemptions further erode any environmental benefits."

Reason for optimism?

But while there were reservations over the details of the moratorium, environmentalists and scientists expressed hope that it could at least represent a symbolic political step toward better protection and management of Indonesia's forests.

"This moratorium represents an important political shift towards protecting our forests," said Greenpeace's Maitar.

"This is a positive development," added Daniel Murdiyarso, a scientist at the Indonesia-based forest research institute CIFOR. "This will see a large area of natural forest protected from being cleared and it will help preserve the country's carbon-rich peatlands."

Slowing conversion of peatlands and forests will be critical if Indonesia aims to meet its commitment to reduce carbon dioxide emissions 26-41 percent from a projected 2020 baseline. The country is presently the third largest greenhouse gas emitter after China and the United States. Roughly 80 percent of its emissions result from degradation of peatlands and deforestation.

The hope is that the moratorium could help Indonesia transition toward a greener development path by pushing wood-pulp and oil palm plantation expansion to less sensitive areas, including deforested grassland and heavily degraded scrub, which cover millions of hectares of land, but haven't been developed to due social conflict and lack of economic incentives.

"This moratorium can now help to shift these sectors to degraded areas with mineral soils," said Marcel Silvius of Wetlands International.

But while Indonesia's palm oil industry, which has lately been battered by criticism that it drives deforestation and greenhouse gas emissions, could see a boost in some markets if companies voluntarily stop converting forests for new plantations, it seems unlikely that most would do so. However there may be exceptions. For example, PT Smart, Indonesia's largest palm oil producer, recently adopted a forest policy that goes beyond what is established under the moratorium. The policy, which came in response to a Greenpeace campaign that caused the

firm to lose tens of millions of dollars in business due to concerns over deforestation, prohibits conversion of peatlands and high conservation value forests and requires free, prior, and informed consent from communities.

Accordingly, SMART Director Pak Daud Dharsono, said his company supports the moratorium.

"In line with our sustainability commitment, SMART supports the two-year moratorium," he told mongabay.com. "This initiative will enhance SMART's own efforts in preserving primary forests, peat land and protecting biodiversity in Indonesia."

"The two-year moratorium is an opportunity to review and strengthen Indonesia's policies such as land reconciliation and GHG measurements."

Nevertheless, Agus Purnomo, the Indonesian president's special adviser on climate change, seemed to indicate the palm oil industry could proceed on a mostly business-as-usual path under the moratorium.

"There is no limitation for those who want to develop business-based plantations," he was quoted as saying by Reuters. "We are not banning firms for palm oil expansion. We are just advising them to do so on secondary forests."

Opportunity for reform

Supporters of the Indonesia's REDD program say it could help set in motion much-needed governance reform, including helping root out corruption and harmonizing policy between different agencies and levels of government. Currently there are inconsistencies in the way concessions are distributed, laws are enforced, and existing land use is recognized by the state, creating opportunities for graft and mismanagement.

The presidential instruction on the moratorium aims to streamline forest policy by assigning coordination and oversight responsibilities to a single agency: the President's REDD+ Taskforce.

"Up until now, insufficient data and lack of coordination between the national, provincial and district authorities has meant that Indonesia's land management, from spatial planning to issuance and enforcement of permits has been chaotic, and the Presidential Instruction allows us the breathing space to get it right." said Kuntoro Mangkusubroto, Head of the President's Delivery Unit for Development Monitoring and Oversight and Chair of the REDD+ Taskforce, in a statement.

Kuntoro's Taskforce says the moratorium will create a window for reform.

"The suspension gives opportunity to improve forest governance by reviewing and refining the regulatory framework for land use permits and establishing a database system with in-depth information on degraded land that enhances spatial planning, clearly designate land for

development, and support companies that move into d egraded land," continued the statement from the REDD+ Taskforce. "The two-

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year suspension gives time to improve agricultural productivity, solve land tenure issues related to overlapping concessions and the rights of local communities, strengthen enforcem ent of sustainable logging and mining practices, reduce illegal logging and decrease the clearing of land through fires."