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GO-REDD+

REDD+ AND PLANTATIONS: WHAT DOES THIS MEAN FOR WATER?

The Government of Lao PDR has temporarily halted the granting of land concessions for eucalyptus and rubber plantations in order to properly assess advantages and disadvantages, after concerns over potentially considerable negative impacts emerged.

What does this have to do with REDD+, you may ask. Quite a lot, if we consider forest multiple benefits in REDD+ planning and implementation. That is, if we consider the benefits properly and based on scientific evidence. A recent report by FAO warns that if "large-scale forest plantations are planned, for instance, for carbon sequestration and climate change mitigation within REDD-plus initiatives, it should be ensured that water shortages will not be accentuated."

What? So much for the "sponge theory" that so many of us believe in. According to the theory, the complex of forest soil, roots and litter acts as a giant sponge, soaking up water during rainy spells and releasing it evenly during dry periods, when the water is most needed. Obviously, at least to some extent and particularly when it comes to plantations, the theory is better rejected. As the FAO points out, with "the exception of cloud forests, forests return less water to the soil than, for example, well-managed grassland or cultivated areas, as a greater quantity of water is given back to the atmosphere through evapo-transpiration." This statement should not be misinterpreted or generalized. But there is certainly a problem with dry season low flows and fast-growing plantations. As Bruijnzeel pointed out as early as 2004, actually as early as 1990, this reflects to some extent the higher water use of the newly planted trees but it cannot be ruled out that soil water storage opportunities may also decline as a result of soil erosion on sloping lands during the post-clearing phase. Both Bruijnzeel and FAO recommend more research because the cause and effect links still remain somewhat ambiguous. Others have taken action for years. For example, South Africa is imposing water use or forest charges on the forest plantation industry. If you would add to that a tax for biodiversity loss then it might not be financially rewarding to establish carbon plantations.

Invitation

Go-REDD+ welcomes your contribution to the debate on REDD+ and plantations: What does this mean for water. We invite you to share your comments in the Go-REDD+'s discussion forum.

As water scarcity is already posing a challenge for hundreds of millions of people, we should probably think twice about plantation establishment under REDD+ and follow the example of Lao PDR. Better to be safe than sorry.

Go-REDD+ is an e-mail listserv managed by the UN-REDD Programme team in Asia-Pacific, based in Bangkok. The main objective of **Go-REDD+** is to distribute information, synopses of research results and activities related to REDD+ in Asia-Pacific, to assist countries in their **REDD+** readiness efforts. Old messages will be archived on the Regional Activities pages of the UN-REDD Programme website. Discussion forum on **Go-REDD+** is available through UN-REDD Programme's online knowledge sharing platform. The **Go-REDD+** team welcomes feedback, suggestions or inquiries to goredd.th@undp.org.