



REDD+ AND IMPROVING AGRICULTURAL TECHNOLOGIES

It's no secret that in many tropical countries a key driver of deforestation is the expansion of agricultural lands. Hence, one should expect that improved agricultural policies and/or technologies are viewed as fundamental to making REDD+ effective in the long term. Yet, they are given little consideration in current national strategies. For example, the REDD+ National Strategy of Indonesia (available at <http://www.satgasreddplus.org/>) refers only vaguely to increasing agricultural productivity, and the focus is on palm oil.

Why this blind spot? Perhaps it is partly due to the fact that REDD+ is still seen as essentially a forest sector issue and, in most countries, falls under the remit of the forest administration. Consequently, land which falls outside their jurisdiction, and sectors which are not part of the forestry portfolio, receives less attention than they deserve. Conversely, other divisions of government see REDD+ as none of their business.

However, before we start criticizing the lack of real or proposed actions in sectors beyond forestry, what is actually the evidence that interventions from these sectors can actually help address the drivers of deforestation and forest degradation? One popular hypothesis is that an increase in productivity per hectare can help to limit agricultural expansion. A classic book exploring this issue is edited by Angelsen and Kaimowitz (<http://www.cifor.org/online-library/browse/view-publication/publication/1068.html>). Their very clear answer is that it all depends. On what? On numerous factors, including types of agricultural technologies, commodity and producers, the nature of markets and prices.

In *Agriculture and Deforestation: Is REDD+ Rooted in Evidence?* Pirard and Belna revisit earlier work and link it to REDD+. Not surprisingly, they confirm that many types of agricultural technologies generate various impacts on forests and that the nature of impacts depends greatly on external factors. While they posit that intensification is a necessary condition for reducing deforestation, without appropriate support either nothing will happen or the pressure on forests will even increase. The most convincing story comes from Argentina where soybean yields almost doubled over a period of fifteen years. The area devoted to soybean production tripled during the same period, although not all expansion resulted in forest loss. This should not surprise. Where high commodity prices and an increase in global demand drive production, the forest frontier is driven back with little mercy. This is particularly the case when intensification gives a country or region a comparative advantage in export markets that it did not previously have.

The key lesson from Pirard's and Belna's analysis is that a change in agricultural technologies, generally speaking, or even an increased yield per hectare more specifically, is not a sufficient condition for success. There is a need for public support policies that address several flaws related to productivity gains from the perspective of reducing deforestation and forest degradation. These policies should be complementary rather than substitutive to changes in agricultural technologies. The interventions they recommend are fostering changes in agricultural technologies, harmonizing sectoral public policies, adopting the PES principle and acting on global demand; the latter probably being the most difficult to tackle. Just as important is to enforce the law to prevent further forest conversion and to demarcate on the ground where the forest starts and where it ends.

What we learn from all the work on the interactions between agricultural intensification and forests is how necessary it is to apply the precautionary principle. Commercial farmers, in particular, sometimes react to improved technologies and new policies in unexpected ways. For example, labor-saving technologies can provide an incentive to farmers to expand crop cultivation, and should therefore be treated cautiously. New agricultural products for sale in large markets may accelerate deforestation in labour-abundant contexts. Any improvement in the profitability of agriculture in places with remaining forest and abundant labour is likely to have the same effect. Technological changes also have the greatest potential for fomenting inappropriate deforestation where government policies, such as subsidized credit, price supports and infrastructure investments, effectively subsidize forest clearing.

Pirard's and Belna's article is available at <http://www.sciencedirect.com/science/journal/13899341/21> for those who want to delve deeper into the matter.

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, www.unredd.net. Please note that you must be a member to join the Discussion Forum. To request membership, please contact admin@unredd.net with your name and affiliation. The **Go-REDD+** team welcomes feedback, suggestions or inquiries to goredd.th@undp.org.