

The Forgotten Climate Solution

Source: global.nature.org

Published: February 17, 2016

By Justin Adams, Executive Director, Tropical Forest Alliance (Currently seconded to the TFA from The Nature Conservancy)

Click here to watch “Natural Climate Solutions”: <https://youtu.be/nU0yNgHHH1g>

Natural Climate Solutions Natural systems provide obvious but often forgotten solutions: in addition to forests, habitats such as wetlands and grasslands can absorb and store enormous amounts of carbon.

Let’s face it: technological innovation is attractive. It has solved so many of our problems that people have come to view technology as the key to improving society. The world of policy, big business, investment, and venture capital mirrors (and often leads) this perspective. Tech companies dominate the top 10 of the world’s most innovative companies, according to Boston Consulting Group’s most recent report. More broadly, perhaps part of the appeal of “innovation” is that we implicitly associate it with economic progress, at least since the second half of the 20th century.

This modern association of technological innovation with economic progress may help to explain why one obvious solution to climate change remains often forgotten or underrepresented in mainstream conversations: natural solutions to environmental challenges. Nature has solutions that can sustainably balance environmental health and human priorities. In other words, sometimes nature can outperform our best technological innovations.

At least 20% of the solution, but only 0.1% of the attention

With around 3,000 journalists in attendance, the UN Conference of Parties (COP21) in Paris generated more column inches than any previous COP. And not surprisingly, energy terms and topics received hundreds of times more attention than the land sector, which received just 0.1% of the media coverage. Yet, the land sector can potentially deliver at least 20% of the climate solution — and likely much more.

Certainly, within the negotiations, the land sector and especially parts of the forest sector are recognized for the solutions they could contribute to the global climate situation. More than 100 countries mentioned climate mitigation or adaptation from the land use sector in their Intended Nationally Determined Contributions (INDCs) submitted for Paris, and the COP21 agreement explicitly recognizes the role of tropical forest protection, the agriculture sector, and restoration of oceans and coasts. And while more and more companies are recognizing the importance of

removing deforestation from their supply chains (which I have written about [here](#) and [here](#)), that potential hasn't been translated through to action or the message hasn't reached capital markets, private enterprises, public policy, and mainstream media. At least, not yet.

What needs to happen to provide nature an equal seat at the table?

This is about changing the conversation around climate change solutions. Decarbonizing the energy sector is critical and it is encouraging that the renewable energy sector is now attracting some \$300 billion of capital each year. But it is insufficient on its own. We can't get to a 2 or 1.5 degree Celsius stabilization pathway without taking land use more seriously. Indeed, it is the only sector that can switch from being a net source of carbon to a net sink. For us to reach a 2 degree world, we must optimize land use through smart land management decisions. The renewables sector scaled up with a mixture of developments in public policy, business models, technology, and finance. The land sector can scale up too, with this same approach.

“The land sector is the only sector that can switch from being a net source of carbon to a net sink.”

- *Justin Adams*

This also requires changing how we think about land use. Resistance to rethinking land use practices is often based on several beliefs: restoration is “too expensive”, changing land use is “too difficult”, and returns will take “too much time”. But actually, these beliefs are misconceptions. Dozens of cases have disproven our beliefs around changing land use: The Nature Conservancy has been closely involved in such successes from Indonesia to China, Africa, the U.S., and Brazil, where we are also exploring new business models that can be scaled up in the land sector.

Progress without delay... or new technology

Along the Mississippi, the Conservancy helped to restore critical areas of floodplain and increased carbon storage [when a Norwegian renewable energy company](#) purchased marginal production farmlands and forested it with native commercial hardwoods.

In California, the Conservancy helped develop the forest carbon offset protocols and successfully advocated for adoption into the state's cap and trade program. Win-win forest projects like these can be financed not only by carbon credits but also by future sales of lower-impact timber harvest. They also create the opportunity for new investment models in sustainable forestry where carbon is just one value stream among many.

In another example, in Brazil's state of Pará [the Conservancy is helping the state government](#) meet its goal of spurring economic growth with net zero deforestation by 2020. We have found that by restoring degraded pasturelands and implementing other agricultural strategies, ranchers in Pará can sustainably graze three cows per hectare, tripling current productivity without expanding their agricultural footprint — thereby avoiding further deforestation.



***Brazilian Amazon** An aerial view showing forest cleared for cattle ranching at Sao Felix do Xingu, a municipality that has one of the highest rates of deforestation in the country. © Haroldo Palo, Jr*

Of course, scaling this up requires substantial funding. Fortunately, sustainable intensification is a profitable investment. Through new investment models that attract private capital, Pará can reasonably boost its beef production by 50% without any new deforestation. This shift from expansion to sustainable intensification holds tremendous environmental benefits: in this one state alone, more than three million hectares of land can be protected or restored, reducing carbon emissions by around one billion tons in 10 years.

These are only three of many promising stories of optimizing land use by turning to nature-based solutions while generating an economic return. All of the examples show that successful interventions do not have to wait for new technology, although certainly, technology can help in the land sector as a whole.

Examples such as these are investable today, and their economic, social, and environmental benefits can be immediate. The type of innovation we need here is developing more business models such as these and the new financing structures, and policies that would make these practices investable at a much larger scale.

The next steps

Such a scaling up can only be achieved by mobilizing the full resources of the private sector, mainstream finance, and public policy. The conversation around climate change solutions as a whole has already started to shift, with encouraging results. The [New Climate Economy](#) shows how climate solutions are not economically impractical, but rather hold positive economic opportunity. The [Carbon Tracker Initiative](#) has successfully reached the investing and financial sector with its carbon and stranded assets argument. The land sector requires a similar turnaround in conversation — and thinking.

It's time to take action on the agreement formed at COP21 in Paris. And we can only meet its goals by tapping further into the land sector. We've made outstanding progress in scaling up our energy sector, and we need to apply the same level of vigor and capital to lands. We need to

work with governments to design policies that encourage better land management in much the same way that governments incentivized green energy. We need to shape investable and scalable options across the land sector. Most of all, we need to act upon the unique potential that the land sector offers in shaping our global climate — today. Let's get to work with a little more innovative *thinking*, rather than purely relying on the next technology fix.
