

URL: <https://stvp.stanford.edu/clips/developing-water-markets>

Water markets can be more challenging to monetize than carbon markets, according to Jennifer Morris, Executive VP of Conservation International. Morris says that to drive watershed service transactions, market mechanisms must provide "financial incentives to people who manage land to protect their watershed." Due to deforestation in China, and the resulting siltation and sedimentation, dam operators in that country are developing new models for water markets, in concert with Conservation International and interested corporate partners.



## Transcript

There are a lot of issues around waters.. It's not the same as carbon, which is a global commodity which doesn't really.. It's no different if it's carbon from Guyana in South America to a piece of carbon or a ton of carbon from DRC, for example.. Water's a little bit different, more localized, a little bit more challenging.. I want to talk a little bit about watershed service transactions.. So those watershed services and water payments that are directly related to conservation or forest protection of key watersheds.. And that's obviously the space of the market that CI is very interested in, which is different from say wetlands banking or other types of water trading which is more common in the United States.. We're really providing financial incentives to people who manage land to protect their watershed.. So this is really important for a variety of different reasons, from businesses to community's access to not only fresh water but also electricity.. So for those of you that don't understand this exactly, so basically we have fresh water flows and if deforestation happens upland from this fresh water flows, then a couple of things happen..

One, you have greater siltation and sedimentation that flows into the water because of deforestation and when the rains come, all of the soil that was on top that was currently held down by the trees goes into the water.. Well, that's really challenging for dam companies.. Dam companies who need fast water flowing through their dams to create efficient electricity, deforestations are a real problem.. So a lot of dam companies have said, "Maybe we should start paying for those farmers upstream or those land managers upstream to stop deforesting." So it's a great market mechanism for protecting watersheds.. In addition to the benefit to the dam companies, there are also the community benefits and of course, climate and ecosystem service benefits.. So the market right now, this is actually due to a 2008 numbers, \$9 billion in payments, a 113 active programs, China representing almost 50% of the market and there's a very important reason for that.. Often, it's related to dams.. However, well, some of the challenge in this is people just assume water is a public good.. "It's just there, it's for us.. Why should we pay? If we pay, let's just pay a little bit..

The government should be providing us water.. It's a public good." I mentioned before the challenges with water versus carbon.. Often it's just a single buyer, the municipality and electrical company.. So how do you trade watershed services? We haven't quite gotten to the maturation of the market yet.. But again, thinking through some issues in specific countries and example's from some really interesting projects in China and in the United States and some entrepreneurs like yourselves, we can hopefully to a market for this.. Same issues of carbon relate to water.. Who owns it? Right? If it passes through your land, do you own it and you have the right to trade it? Or is it really still just in a domain of the government? I do want to mention some entrepreneurial projects that CI and companies like Marriott and dam companies in China are doing.. Here's an example from Szechuan province.. Pingwu is the name of the town and it's called the Pingwu Water Fund and this is basically, as I mentioned before, a dam company, coming to CI and working with Marriott.. Marriott has about 34 hotels in China and is looking to expand significantly over the next few years and recognizes that they use a lot of water in their hotels..

So they're very concerned about water.. In this particular area, this province and this watershed supports 400 million people with drinking water-critical watershed throughout China and the rest of south and Southeast Asia for water.. They're a critical area.. So together we created the Pingwu Water Conservation Fund which is working with us, Marriott, and the local government and utility company to create a fund that will help mitigate deforestation above the watershed to stop that run-off that's going into the dams.. The dam companies provide reduced price of electricity to the communities in exchange for the conservation activities.. But recognizing, of course, that people mean to deforest to plant crops and often to use trees for

housing construction, but promoting sustainable livelihood is a key part of this.. So Marriott is helping them and CI is helping them with honey production and mushroom on farming that been there than selling in their hotels.. And as well, as this is helping to protect 24,000 hectares of critical habitat.. So the communities win, Marriott wins, the dam companies win because of reduced deforestation and it's a great win for climate and conservation of watersheds in this area...