

## **Web Chat: Is Poverty Relevant to Conservation?**

Nature Conservancy web chat with Andrés Ferrer, Director of the Conservancy's Dominican Republic program, discusses whether poverty is relevant to conservation.

Moderated by Jim Peterson, the Conservancy's Communications Officer, moderates.

(Edited for clarity and brevity.)

**Jim Peterson:** Hello, and welcome to the latest in a series of Nature Conservancy web chats where important and timely conservation topics are discussed based on questions submitted by chat participants. At the heart of our conversation today is whether poverty is relevant to conservation?

Our guest today is Andrés Ferrer. Andrés is the Director of the Conservancy's Dominican Republic program. To begin, Andrés, why don't you tell us a bit about the Dominican Republic, where it is, and why the Conservancy is working there.

**Andrés Ferrer:** The DR shares the island of Hispaniola, which is located in the center of the Caribbean, with the Republic of Haiti. It's an island on some 72 square thousand kilometers, two-thirds occupied by the DR, and one-third occupied by Haiti. The reason why we operate here is the rich biodiversity that occurs in Hispaniola.

We base our work in four major strategies: accounting for environmental assets; strengthening of local partners; promotion of conservation policy; and biodiversity conservation through poverty alleviation.

We have the White Water to Blue Water project in the Samaná Bay area where we are measuring the impact of the inflows of the river into that estuary, which is an important source of shrimp fishing. We have been working in developing conservation plans for Madre de las Aguas, the central mountain range of the Dominican Republic that provides water for like 80 percent of the population in the DR, and like 70 percent of the population in Haiti supporting rice production in that neighboring country, which is the poorest country in the Western hemisphere.

Most recently, we completed an "eco-regional assessment" for Hispaniola, which, in my opinion, is one of the most advanced planning methodologies implemented on Hispaniola.

We work out of three major platform sites: Samaná Bay and its network of nine protected areas, Mother of the Waters and its network of seven protected areas, and Parque del Este. From these three sites, we radiate lessons learned, best practices, and conservation in each of these throughout the national system of protected areas.

**Jim Peterson:** I want to get to a couple of the questions now that have come in from some of our listeners at nature.org/chat.

**Rafael in Indonesia:** In Komodo National Park in Indonesia there is a significant problem with poverty which is encouraging fishermen to rely on unsustainable practices, such as over-fishing and bomb and cyanide fishing. And he wonders what sort of steps can we take to resolve the conflict to make certain that poverty will not function as a reason to forego conservation?

**Andrés Ferrer:** The most important thing we have found when deal with poverty issues and your end goal is protect biodiversity is to develop relations of trust with local communities. You have to understand how they perceive the surrounding environment. You must realize that local communities have related to the environment for centuries, sometimes for millennia, and have developed certain practices for their subsistence.

In those practices, in my opinion, lays the solution to many of the pressures that the people themselves place on the environment. Some of those practices, after being characterized and studied, can be a streamlined and converted into conservation tools that, at the same time, result in an increased income for local communities.

For example, we supported a project in Samaná Bay, which is a national sanctuary for a population of 2,000 humpback whales, where we had an over-fishing problem. We helped support fishermen to become whale watching guides for the ever-increasing number of tourists that came to watch the whales, because the fishermen lacked techniques, they lacked training, and they lacked knowledge of the whale populations.

Today, many of those former fisherman are not pressing the marine resources in the bay. They have become guides for whale watching, and we have provided support for a partner that works to convert these fishermen into that eco-tourist practice. So I think the solution is to support poor communities.

**Diana from Calgary, Alberta, Canada:** What sort of responses do you typically receive from local people in regards to conservation, and are you often welcomed with open arms or do most believe that there are more important things to deal with than conservation?

**Andrés Ferrer:** People tend to prioritize issues according to importance, and, if you're poor, survival will be your number one item on the list. However, in any poor community, almost everyone realizes the needs for conserving the environment. It's incredible. They are very aware. But it may be second or third item on their list.

The key for success is supporting such practices that they have validated as beneficial for their well-being and for the environment. That way they have ownership of the solution. It is not a big NGO coming to a far, remote location and telling them what to do. No, no, no. There are

things that they are doing that need to be identified, studied and improved, so they will continue doing some of the things that they do. But again, there are no simple strategies or fast solutions.

**Carrie in Durham, North Carolina:** Can you please discuss the effects of large-scale, all-inclusive tourism on poverty in the Dominican Republic. How does the rise of eco-tourism in the Dominican Republic affect poverty?

**Andrés Ferrer:** By the end of 2006, the DR may receive some 3.5 million tourists. Today, large-scale, all-inclusive tourism fuels the economy with jobs and hard currency, but at the expense of natural resources -- species and ecosystem loss due to visitation density, contamination from petro-chemicals, poor waste management. At this point, the environmental movement in the Dominican Republic is confronting economic interests planning to develop pristine coastal and marine environments in protected areas that harbor unique endemic species and scenic views -- probably the last great marine places in Hispaniola.

The real challenge for government is enforcing existing policies. The challenge for the tourist sector and environmentalist is to gear into an environmentally aware segment of the market -- to reengineer the DR tourist office to address that segment of the market that has not yet been reached. The conscious traveler is willing to enjoy culture and nature. I would say government policy is a key to that.

Today there are, for example, 90,000 hotel rooms in the DR supporting these major economic tourist activities, a former law that doesn't exist anymore, the Tourist Incentive Law, may be responsible for such impressive development. It provided tax and investment incentives to investors in the tourist sector. That's why the DR is today the preferred destination for sun and beaches, tourism that we call it.

However, we have a national system of protected areas. We have desert, we have waterfalls, we have high peaks where there is frost every night, we have saltwater lakes with crocodiles, you name it.

I think the DR could diversify to the eco-tourism market if government incentives can be provided to investors, subject that they partner with communities and NGOs. The unique resources of Hispaniola are there for enjoyment, and that's an indispensable component. Policy you can develop. Great biodiversity you either inherit or you don't have it.

**Brian from Cambridge, Massachusetts:** Andrés, how will the people and the representatives be convinced to balance the needs of today with those of the future when there is so little trust in government or community? Do you see a future where green issues, conservation issues, will be among the foremost in national and local elections in the Dominican Republic?

**Andrés Ferrer:** I like to think that the future is already here. We see already in the DR environmental issues influencing political outcomes at provincial and municipal levels at least, although not at national level.

You know, I work with communities to support environmental education and foster sustainable activities with the potential to increase local income. At governmental level, you need to understand that your best bet is to promote policies. And, if we have a few showcase sites in which biodiversity conservation through poverty alleviation was a success, we have a number of examples where government policy made a change.

In one of our projects in the village of Los Dajaos, community acreage of agricultural lands was decreased 70 percent, and poverty eradicated, through a shift to more sustainable agricultural methods. So that strategy worked, not perfect, but it keeps improving.

From the 60s to the late 90s, the government subsidized propane fuel as a substitute for fuel wood for cooking, banned logging, and opened timber exports with low tax, in some way subsidizing import of timber. To dismantle the deeply rooted culture of cooking with fuel wood, hundreds of thousands of small propane stoves and tanks were distributed in the buffer zones of the national parks and in rural areas.

Today, 46 years later, the DR has 32 percent vegetation cover. It took decades to put in place that government policy, but it worked. It's not perfect, it needs improvement, but in conclusion we must continue partnering with central and local governments and not abandon pursuits to foster appropriate government policies and partnerships. I realize it's time consuming, maybe frustrating at times, but the return on your investment will be several thousand fold.

**Peter in Tucson, Arizona:** As someone who spent many years in the northern neo-tropics, why wasn't the issue of poverty and conservation brought forward as a topic of discussion at least 20 years ago?

**Andrés Ferrer:** In the DR in the 70s and the 80s no one spoke about the environment. We had the perception that we were surrounded by resources that would never be exhausted. We tend to see nature as a being that has our same life cycle, so we really tend to underestimate nature's cycles.

Now we are seeing the results of habitat destruction in terms of climate change. We are seeing the sudden loss of hundred or even thousands of species, and I think that's planted a red flag at some point.

In our specific case, eco-regional planning revealed that the major source of the most significant threats to our conservation targets was poverty. So it was a clear signal that we needed to address poverty in the specific places where those resources were at most risk.

**Jim Peterson:** You and The Nature Conservancy have joined with other groups in supporting projects that helped find new means for economic livelihoods for communities that also have significant conservation benefits. I wonder if you can talk a little bit about those projects.

**Andrés Ferrer:** Yes, of course. We identified, as I said before, poverty as a major source [of ecological destruction]. In the upper watershed of the Yuna and Blanco River, we had poverty over there. We had problems with invasives. We had goats running around in the park. And we had a plan that was introduced by a company that wanted to build hydroelectric infrastructure within the park.

So we were confronted with the need to remove those goats from the park because they were really increasing in number and exerting a great deal of pressure on the park. But at the same time the local communities needed those goats to sustain their well being.

One community member, a gentleman named Collado -- an herbalist -- started feeding goats caliandra. Caliandra is an invasive species that was advancing pretty fast into the native forest. And all of a sudden we discovered that we could easily cut caliandra to make fences, fence the goats in that caliandra fence, and feed the goats with the leaves of the caliandra.

For me, this is a project that I cherish a lot, and that I visit every time I have the opportunity because we were getting rid of the goats within the national park, we were providing additional income to the peasants because they were able to have more goats in fences growing faster, and we helped keep in check the caliandra that is now controlled to some extent.

Also, at some point, we got the information from community leaders that many people were visiting national parks to go birding, but the tourists didn't know where the birds were. So we supported the creation of a network of friends of the birds -- Amigos de las Aves.

In 27 communities neighboring national parks with sizeable population of birds, we conducted a census to identify people in the communities that love birds. And all of a sudden a number of kids and even mature people revealed their interest in birds. So those people received training in bird identification, and in bird watching. They received binoculars and other gear, and all of a sudden we had a network.

Recently, we worked with the communities again to follow up. In one community everybody refers tourists to a man named Juan because he's the one who knows where the Hispaniolan trogon is. That kind of thing is making a difference because not only are people making a better income, but they are assigning a value to bird populations because bird populations are resulting in an increase in their monthly income.

**Alex from Rushville, Illinois:** While there are many benefits to the environment that can be gained by decreasing poverty, how does one balance these gains against the environmental costs of a higher standard of living?

**Andrés Ferrer:** Well, that question really brings the discussion to a really big scale. I would say we have a mission. In simple terms, we are working to save the last, great places on earth, within the US, the DR or China or even Africa in the near future. I am sure, I am confident, we are making progress at all ends. Results attest to that. But this is not an exclusive obligation of TNC

If we want to increase income for conservation, working in collaboration with others is a better way to get things done. And then there is the need of government and civil society also to influence a solid conservation ethic in every individual living on the planet. I think promoting a solid conservation ethic in every individual, this alone will probably have more impact on climate change and species loss than anything big NGOs may do.

**Christine from Chicago, Illinois:** Is the Conservancy planning to continue to use this approach in working with NGOs and the government in the Dominican Republic to address poverty issues and what other organizations are working in a similar fashion?

**Andrés Ferrer:** Well, our major partner, of course, is the government of the DR. But, at the same time, we are working with local NGOs and also working with bilateral and multilateral agencies. We have an ecological restoration project under discussion with the World Bank that has a poverty alleviation component. We are implementing and the government is adopting eco-regional planning as a standard conservation methodology for the National System of Protected Areas.

We are working with a local organization in Samaná Bay to support development of conservation area planning for the bay and the network of protected areas. We are working with the National Botanical Garden to develop strategies to insure conservation of high watersheds in Madre de las Aguas. We are working with the National Aquarium of the DR and fostering collaboration with the Aquarium of Santiago de Cuba and the National Aquarium in Havana to work on the conservation of marine mammals. We are supporting an important research to identify the breeding and spawning areas for several of the most important marine creatures with economic potential. We want to identify such sites so those sites can benefit from a degree of protection, especially when the spawning season comes in.

We are working with community groups, local NGOs to implement strategies that overlap their mission and our mission. Whenever you work in conservation anywhere in the world, you will see that the mission and the strategies of the Conservancy overlap with that of partners.

So we are working with those many partners in specific sites, but we want to insure that the work we do can be disseminated throughout the National System of Protected Areas. For example, we worked on a project with turtle nesting monitoring last year (by the way, we discovered two new nesting sites in which we are working now with the government to foster management activities to protect during nesting season). But we have expanded the project from its original base in Parque Jaragua, and it's now occurring also in the Montecristy National Park and Del Este National Park. So we try to leverage successes by disseminating lessons learned in places that share similar resources or similar threats.

**Jim Peterson:** And how do you do that? Are you sharing the results of your work beyond the Dominican Republic?

**Andrés Ferrer:** Yes, we are responsible for conservation work in Haiti and Cuba, as well. Both Haiti and Cuba we work mostly with government, and if you would assess the islands of Hispaniola, Cuba, and Jamaica, you would see that there are great commonalities in their natural resources. So in all probability, a strategy that works here will probably work in Haiti or in Cuba or in Jamaica with minor adaptation.

What we do is try to understand the governments' goals and the governments' strategies and see how we can align our priorities and our strategies with those of the governments. And it is working. It was really difficult, for example, to begin working in Cuba, but we have a successful collaboration in compliance with US law and in compliance with Cuban law, as well.

**Vanessa, from the Dominican Republic:** I have visited many of the areas undergoing tourism development in the DR such as Samaná Bay and Bavaro, and I am horrified at some of the abuses of natural resources in those areas. How can the DR be talking about the protection of these resources when examples are in opposition to conservation principles?

**Andrés Ferrer:** Well, first let me say that the Secretariat of Environment of the DR was only recently created in August 2000. So before then the DR had a number of agencies and government departments working on these issues without any coordination. As a result of the creation of the ministry, a number of laws and regulations have been imposed, but let's keep in mind that this is starting almost from scratch.

Today there are rules and regulations that almost every hotel needs to abide to, and I'm certain that most of the hotels are frequently visited and inspected for compliance. It's not perfect, it's not paradise. There is a great deal to do, but, given the lack of resources, the lack of skills, and the recent integration of this ministry, it will take some time before some results can be seen.

With international cooperation we are in the process of making the Environment department more efficient and putting it in a position where it does not necessarily react to environmental threats but acts to prevent such threats from occurring.

**Daniel, from Ecuador:** I am working on rural tourism projects and it's usually not easy to get local people to join community meetings. What sort of methods or tactics have you seen be successful in engaging local communities in conservation projects?

**Andrés Ferrer:** Well, as I said before, the most important ingredient is gaining the respect of the people and working to build relationships of trust. I would say, again, that the most important thing is develop such relations, identify who the leaders are, then help them organize and unite. Often, poor communities just don't have the time. You've got to organize around a priority. If you produce corn, organize in an association of corn producers. If you

use the resources of a river, organize as users of this river. Organize, unite, identify leaders, promote democracy in the organization, and then understand how and why those people are surviving.

And then all those practices, unsustainable and sustainable, will come forward. Next try to find the solutions within the local community. Try to look for the case of the goat eating the invasives, because, when a strategy is born within the community, they own that strategy. They will work hard to make it work because it is their strategy. You don't want to get there and start giving lessons on how to do things.

Among the kinds of things that they are doing, find a couple that work and invest resources and technology in streamlining those practices. And it will work, but it's complex, and it will take time. There are no easy solutions. It's really hard, and you must be patient, and you must, to some extent, put yourself in their shoes.

**Jim Peterson:** I'd like to thank Andrés Ferrer, the Director of the Nature Conservancy's Dominican Republic program for joining us for this web chat. Thank you, Andrés.

**Andrés Ferrer:** Thank you, and thanks to everyone for those wonderful questions and giving us the opportunity to align the work we are doing here.