

## Episode #2

### Carbon sinks and restoration of landscapes and ecosystems

## How can we strengthen our watersheds?

### Participants:

- Carolina Solano, moderator
- Juan Carlos Funes, Coordinator of Ecosystem-based Adaptation at the foundation Defensores de la Naturaleza
- Lilian Roksana Pérez Caal, Coordinator of Artesanas de Chilascó

### *Carolina:*

Guatemala, a country that stands out for its colorful artisanal markets, surrounded by lakes, rivers and mountains that together give this country an amazing natural landscape. As part of the Bonn Challenge, an initiative created by Germany and IUCN to restore 150 million hectares of deforested and degraded land, Guatemala took on the challenge of restoring 1.2 million hectares by 2030. In this episode, we will talk about the restoration of landscapes and ecosystems.

Welcome to our second episode of *The Countdown to 2050*, a podcast developed by the German Development Cooperation GIZ, as part of its mandate as interface project of the International Climate Initiative -IKI- for Central America and the Caribbean. My name is Carolina Solano and I am accompanying you on this journey throughout the region. In the previous episode we talked about the Smart Coasts project that aims to incorporate climate change principles into the management of marine protected areas.

Joining us today to talk about the GreenWatersheds project and its restoration efforts are Juan Carlos Funes, Coordinator of Ecosystem-based Adaptation at the foundation Defensores de la Naturaleza, and Lilian Roksana Pérez Caal, Coordinator of Artesanas de Chilascó.

Let's start with Juan Carlos. **Why work on landscape and ecosystem restoration? How do these efforts contribute to mitigating the effects of climate change?**

### *Juan Carlos:*

Well, thank you very much, good morning. It is a pleasure to be here with you today. Why work on restoration? Well, let me tell you that, as we all know, human activities have taken their toll on our forests. According to researchers, two thirds of the Earth's ecosystems could be considered degraded. So, that is where we need to do

something for our future generations, so that they can generate this livelihood for their families. That is why we need to work on restoration.

I also think it is worth defining restoration, which is nothing more than a process that seeks to return a damaged or altered or degraded ecosystem to its original state, or at least to a state close to what it was like before it suffered this damage. So, how do we do this? What do we know that implies the modification in the daily activities of people and in their economic activities? With the objective of achieving a decrease in greenhouse gas emissions, the restoration of landscapes and ecosystems is a technical activity that seeks to reverse these degradations caused by daily activities.

As a result, this process is not an easy one since it seeks to reverse the degradation tendency that many ecosystems, both marine and terrestrial, are currently suffering, with the objective of recovering the ecological functionality that translates into better productivity. This is why we focus on restoration work.

***Carolina:***

Juan Carlos, **what is this project about? And how did it come about?**

***Juan Carlos:***

Well, the GreenWatersheds project seeks to promote the implementation of ecosystem-based adaptation measures and of innovative governance mechanisms to achieve the implementation of these measures. Also, we focus on the implementation of EbA measures and capacity building. This is about providing trainings to the communities situated within the watersheds we are working in and to provide them with alternatives.

An example of this is Lilian, from Chilascó, who we are going to have the opportunity to listen to later on. And, finally, we focus on the political advocacy that is achieved through the systematization of experiences. The objective of the project is to promote these governance mechanisms and innovative measures that are being developed, and the political actions that promote these ecosystem-based adaptation measures to increase the resilience of forests and ecosystem services, especially water services, in Cuba, Guatemala, Mexico and the Dominican Republic.

The project was born in 2018 through a regional initiative with the four countries that I mentioned. In Mexico we are working with Pronatura, in Guatemala with Fundación Defensores de la Naturaleza, in the Dominican Republic we are working with Centro Naturaleza and in Cuba we are working through UPSA, which is the National System of Protected Areas in Cuba.

All this with the support of OroVerde, which is the German Tropical Forest Foundation, and supported by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety of the Federal Republic of Germany, within the framework of the International Climate Initiative. At the beginning, the project was planned for 4 years, however, due to the good use of resources and the quality of the expenditure, it was possible to extend for 1 more year, and the project will finish in December of this year.

***Carolina:***

Juan Carlos. You are talking about four years and a time frame, I wanted to ask you about the four components of the GreenWatersheds project, can you tell us, **what are the expected impacts and in how much time will they be achieved?**

***Juan Carlos:***

Thank you, Carolina, within these four components, the first, as I mentioned, was the development of ecosystem-based adaptation plans. The aim was to develop integrated plans for each of the watersheds we work in, which contemplate the functions and ecosystem services of the existing forests, and respond to the negative effects of climate change in each of the communities or watersheds. So, regarding the impact of this first component, we aimed to create an instrument that allowed the development of adaptation measures and which has been useful for decision-makers to be able to focus on new projects within the area, taking into account climate considerations and the measures that have already been implemented.

The second component was to identify and support new governance mechanisms that support the conservation and improvement of ecosystem services. The impact? We have been able to identify the most relevant actors within each of these watersheds in terms of conservation and resource use, because we need to have that balance, with the objective of integrating a single group of decision-makers for the use of the existing resources in the watershed. This way we keep the ecosystems healthy and meet the needs of all the inhabitants, and contribute to mitigating the effects of climate change.

As a third component, we have the implementation of EbA measures in the field and this component plays a key role in the watersheds where we have been intervening with our plans, because after carrying out the diagnostics and having developed these measures with them, it is time for them to implement them in the field and take ownership of these measures. This will allow us to keep the communities working on implementing these actions over time and feeling comfortable with them. So, the impact is the greater resilience of forests and agricultural areas in the watersheds, and this is thanks to the management, for example, of forest fires, the promotion of

diversity and habitat connectivity that have been achieved through sustainable agricultural techniques, improving adaptation to climate change, among others.

And finally, the fourth component is the incidence or impact; it is to know that the communication of our project is fundamental for its success, and that is why, within this component, we sought to make known the different ecosystem services existing in each of the watersheds, to explain the important role they play for adaptation and to also share the lessons learned. This component's impact is to raise awareness of the importance of ecosystem services, and to guarantee that the information generated during the project reaches the relevant political leaders or communities, so that they may integrate adaptation measures within their own communities and - why not scale up some local and regional policies?

***Carolina:***

Thank you very much. Now, I would like to talk a little bit about the territorial scope of this project. It proposes to implement climate resilient measures on over 210,558 hectares. **What are these measures about?**

***Juan Carlos:***

These climate resilience measures focus on the implementation of the ecosystem-based adaptation measures that I mentioned earlier, which is nothing more than the use of biodiversity and existing ecosystem services in each of the project's target areas as part of a broader adaptation strategy, with the aim of helping people adapt to the adverse effects of climate change.

One example of these measures is the establishment of agroforestry systems. Reforestation, forest regeneration, soil conservation activities, communal gardens, protection of water sources, and capacity building, which includes strengthening tourism, artisanal craftsmanship, and integrated fire management, are actions that will have a territorial impact.

It is also important to highlight that these measures are discussed and selected by the people in the communities themselves, taking into account their customs, their ancestral knowledge, and that is what guarantees the ownership and application in the territories or in the watersheds of the four partner countries participating in the project.

***Carolina:***

Thank you very much, Juan Carlos, I will be coming back with one more question for you, but I'd like to take the opportunity of you mentioning craftsmanship and address Lilian. Lilian, can you tell us, **what is Artesanas de Chilascó?**

**Lilian:**

Gladly, Carolina! We are a group of 20 women from the village of Chilascó, Salamá, Baja Verapaz. We are dedicated to making crafts with pine needles. We select the pine tree, and we work with the Montezuma pine. The group was formed in 2012 and has been active for 10 years.

**Carolina:**

OK, Lilian, and tell us: at **what point or how did Artesanas de Chilascó become part of the GreenWatersheds project? And since you have been part of the initiative, what have you done?**

**Lilian:**

We have been part of GreenWatersheds since 2018. Some of the activities we have done together are reforestation, with a variety of pine called Montezuma, which in the future will provide us with raw materials for our crafts. The project has also supported us with family vegetable gardens, and thanks to the GreenWatersheds project and the Defensores de la Naturaleza foundation we have managed to benefit from the improvement of our sales room.

**Carolina:**

Thank you very much, Lilian. Now, Juan Carlos, for you, **how have you perceived the collaboration between the different stakeholders, from the different organizations to the small producers, such as Artesanas de Chilascó? Why is it important to connect all these stakeholders?**

**Juan Carlos:**

Well, what can I tell you? From my point of view, it has been very good. Although I did not have the privilege of starting the cooperation from the beginning of the project, after two years I can assure you that the interdisciplinary work that has been done within the GreenWatersheds project is one of the main cornerstones of our project's success. As any process, we know, it starts slowly, but as we have been seeing results, we believe we have all achieved a special bond.

By taking an interest in the work that we as a team have planned over time, and through all of this collaboration, we have learned more than we would have if we had worked on the project alone. We know that there are always differences and contrasts regarding perspectives and opinions, but I can tell you that in general this has been an unparalleled process of construction and knowledge.

On the topic of connecting all these stakeholders, I can also say that I consider this important in that they are aware of the conservation of our natural resources. Additionally, we have been strengthening these connections through experience exchange formats that we have held in the different locations, which have helped to strengthen us and unite us even more. After having understood that ecosystem-based adaptation measures are highly relevant in the future and seeing that our work is stronger together, I believe that all of this has helped support us and helped to strengthen the adaptation actions in the field.

**Carolina:**

Thank you very much.

And for you, Lilian, **how has this experience exchange been? From the perspective of Artesanas de Chilascó, what have you learned along the way?**

**Lilian:**

These have been enriching experiences that have brought us new and better knowledge, and innovative ideas for our various products. Also, helping other women to start their own business, sharing our experiences, because as women we can also move ahead with our own business.

**Carolina:**

**Has being part of GreenWatersheds meant a change for Artesanas de Chilascó and if so, what kind of change have you experienced?**

**Lilian:**

Thanks to being part of this project, we have become known internationally through the visits of people from several countries who are interested in getting to know our 100% natural craftsmanship and who have left with their hands full of our beautiful products.

Also, with the financial support that GreenWatersheds has given us, we have positioned ourselves on the market, local and national bazaars and gift shops, which helps us attract new customers, and allows our handicrafts to reach new places, thus making our products more known.

**Carolina:**

Thank you very much, Juan Carlos and Lilian.

And now, Juan Carlos and Lilian, to close this episode: considering that this podcast is titled *The Countdown to 2050* and seeks to know IKI initiatives that contribute to long-term global sustainability goals, as a last question for you: **What is your vision for 2050? How does your project contribute and what is still needed to achieve these goals?**

***Juan Carlos:***

My vision is that we cannot continue with the same activities we have been doing until now, because in 2050 we will not have natural resources that allow us to develop as human beings. This is where the GreenWatersheds project contributes to seeking this change in actions that are currently being carried out, seeking to give inhabitants environmentally friendly alternatives that are comfortable and useful to meet their daily needs by using existing biodiversity.

As I mentioned before, it has been essential for the GreenWatersheds project to provide the necessary capacities and tools to our communities, so that, whether we can count on a second project phase or not, these communities will continue the work to see the results of this adaptation to climate change by 2050. Because ecosystem-based adaptation is a vision for the future and the results will be seen in the long-term.

***Lilian:***

We hope that our brand will be positioned nationally and internationally and continues to keep alive the knowledge of our ancestors through the production of our handicrafts. Thanks to this project we hope to continue maintaining and expanding the forests of our community that are a source of income for our families. At the same time, we aim to maintain water sources and prevent fires, in order to mitigate the impacts of climate change on the environment. We hope to continue working as we have been doing so far, hand in hand with the institutions that have always supported us in order to go even further.

***Carolina:***

Lilian, Juan Carlos, thank you for sharing the work you are doing to promote the implementation of Ecosystem-based Adaptation measures.

We invite you to follow GreenWatersheds on Instagram at CUENCAS.VERDES and on Facebook at CUENCASVERDES.

In our next episode, we will discuss the Caribbean Cooperative Measurement, Reporting and Verification Hub, which focusses on capacity-building to develop

Greenhouse Gas inventories, mitigation assessments and tracking Nationally Determined Contributions on the Caribbean islands.

To learn more about the IKI portfolio in Central America and the Caribbean, follow us on Twitter under IKI\_CAC or at [www.iki-cac.org](http://www.iki-cac.org).

This was *The Countdown to 2050*. We look forward to seeing you in the next episode!