

## Episode #4

### Biodiversity

## How can we increase the resilience of agricultural value chains?

### Participants:

- Jorge Sanchez, General Manager at Nico Verde
- Joselyn Rojas Varela, from Nico Verde's Technical Department
- Juan Carlos Moscoa, Technical Advisor in Sustainable Agriculture and Landscape Restoration of the From Farm to Fork project of GIZ

### *Carolina:*

Costa Rica, one of the happiest countries in the world, is a Central American country that stands out for its beautiful landscapes, majestic beaches, its "pura vida" mentality and its environmental achievements. With only 51,179 km<sup>2</sup>, Costa Rica holds 5% of the world's biodiversity. This is why, in recent years, the country has made important efforts in environmental protection and nature conservation.

Welcome to our last episode of this first season 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 it has been a pleasure to accompany you on this journey through the region.

In the previous episode, we discussed efforts in the Caribbean islands to strengthen capacities for the development of greenhouse gas inventories, mitigation assessments and monitoring of Nationally Determined Contributions.

Today we are changing the topic, to focus on sustainable agricultural production. For this reason, we are joined by Jorge Sanchez, General Manager at Nico Verde, Joselyn Rojas Varela, from Nico Verde's Technical Department, and Juan Carlos Moscoa, Technical Advisor in Sustainable Agriculture and Landscape Restoration of the From Farm to Fork project of GIZ, who will talk to us precisely about the impacts achieved in the pineapple value chain.

Juan Carlos, let's get right into it: **why is it important to focus on integrating biodiversity into agricultural production?**

### *Juan Carlos:*

Well, Carolina, I think that to answer this question we must start by defining what biodiversity is. Biodiversity is all the variety of living beings and their adaptation to the environment or ecosystem, so an agricultural farm has biodiversity and can be defined as an agroecosystem in which different species coexist, obviously, this includes the target species or the species that is being planted. Since this is an ecosystem, it therefore depends on ecosystem services. And by protecting biodiversity or integrating diversity criteria in farms, this ensures the permanence and quality of its ecosystem services and, therefore, the sustainability of the agricultural activity.

***Carolina:***

Thank you, Juan Carlos, let's talk about From Farm To Fork. **What is the project about and why this name? What is the project looking for?**

***Juan Carlos:***

The project's main objective is the integration of biodiversity in agrifood value chains, specifically banana and pineapple in Costa Rica and the Dominican Republic. This ingenious name From Farm to Fork refers to the work we do along the entire value chain, starting with the producer, whether large or small, in Costa Rica or the Dominican Republic, and all along the chain to the exporter, the supermarket that sells the product to the final consumer. We even engage the consumer as one of the actors in the value chain who is not in Costa Rica or the Dominican Republic, but in Europe.

This is an initiative supported, or financed, by the International Climate Initiative IKI, with support from the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety –BMUV-. The project began in November 2018 and runs until October 2023. It is implemented through five components that range from the integration of biodiversity in the practices of certain farms, where NicoVerde has been a key ally. Then, the work with certifications and seals and integrating biodiversity criteria within these standards, idea competitions for the co-financing of innovative measures, for example, the PineAPP, which is a field application for pest management and control, the scaling of bio-inputs, the use of drones for the application of bio-inputs, where NicoVerde has also been a key player.

Then, we also focus on establishing financial mechanisms for investments of supermarkets in productive landscapes, such as several biological corridors in Costa Rica and the Dominican Republic, where important work is being done. We also work on increasing consumer awareness in Europe, as well as the Dominican Republic and Costa Rica. In Costa Rica, we work specifically with the AutoMercado supermarket chain. And then, of course, there is a knowledge management component.

***Carolina:***

Interesting that there are so many components that interact within the project, **how does From Farm to Fork engage the private sector?**

*Juan Carlos:*

Well, the private sector is a key piece for the project, since the value chain of these products is in the hands of private companies and, only by working hand in hand with them, can a real change be achieved. From the experience of the Business and Biodiversity portfolio, to which From Farm to Fork belongs, there has been a discourse of collaboration with the private sector in which companies are encouraged to change paradigms and see biodiversity as a strategic resource, beyond corporate responsibility. The selection of actors is done by looking for Champion companies, as we like to call them, such as NicoVerde, which sees biodiversity as a strategic resource for its business. And, well, later on, we start knocking on doors and looking for other actors who become interested and join the initiative.

*Carolina:*

Thanks, Juan Carlos, I'm going to take advantage of the fact that you mentioned NicoVerde to now address Jorge - **can tell us briefly, what is NicoVerde?**

*Jorge:*

NicoVerde is a company that is located in San Carlos, in the northern part of Costa Rica, where we work mainly in the production and export of pineapple. We are a subsidiary of the Italian company NicoFrutta, which has been buying fruit in Costa Rica for 20 years, mainly from small producers.

*Carolina:*

Thank you, Jorge! I'd like to know, Joselyn, **how did From Farm to Fork enrich the work you do at Nicoverde?**

*Jocelyn:*

As Juan Carlos mentioned, NicoVerde is a company focused on sustainable production, which has entailed the incorporation of biodiversity in the entire production process. Therefore, partnering with From Farm to Fork has been a complement to strengthen each of the initiatives that both NicoVerde and From Farm to Fork have wanted to develop.

One example is the PineApp application, which is a tool that we developed together with the project. This tool allows the producer to search for some of the active

ingredients that can be used specifically in pineapple production and the use of which may or may not be restricted. Therefore, the tool provides the producer with biological alternatives with which he or she can substitute the use of those agrochemicals that are prohibited.

***Carolina:***

And now that you are talking about the producers, Jorge, **what has been the experience of working with small producers and taking pineapples harvested by them to the European market? And what has been the experience of seeing these products in European supermarkets?**

***Jorge:***

We have been working with small producers for years, and as part of that experience we have been positioning the fruit on the European market, which is a very demanding market in terms of quality, safety and phytosanitary issues. And, obviously, during all this time we have found that the producer requires a lot of support, a lot of follow-up, as well as tools to achieve the objectives not only of delivering the product, but also of complying with all the necessary standards.

In this case, together with our parent company in Europe, we focus directly on the sale to supermarkets and market niches where the small producer can benefit, such as market niches or seals with a focus on fair-trade and Fair-Trade certifications. However, all this requires a very differentiated management regarding economic, social and environmental issues.

For us, it has obviously been immensely rewarding that we can position these producers' fruit on the market and that first-class European supermarkets are now carrying it, and that consumers are accepting this fruit that, as we say, is not only the fruit that meets the quality, but the fruit that meets a green heart. A fruit that is the producer himself with all his family and all the communities behind them.

***Carolina:***

Jocelyn, along the same lines, **what is the work you do with small producers to ensure that they maintain the standards you ask of them? At what point in the process do these producers become aware of the importance of biodiversity?**

***Jocelyn:***

Well, Carolina, in order to develop this, it is very important to train the producer in all biodiversity issues, which are tools that the producers have at hand. However, many times they do not know how to use them, which is why the support of NicoVerde in

the technical part and the support of From Farm to Fork in the development of these different tools is important to demonstrate to the producer that they can carry out sustainable production and incorporate biodiversity issues in the management of their crops.

***Carolina:***

And after these processes, **what are the tangible changes they see in their farms, in their crops, in their lives?**

***Jocelyn:***

Well, Carolina, we know that being able to produce in a more environmentally friendly way is a real challenge. However, we have producers at NicoVerde who are willing to make changes in their production, and this is quite positive, because it goes hand in hand with NicoVerde's own philosophy, and, in this case, also the philosophy of From Farm to Fork. As fruit exporters, the main objective is to be able to maintain a profit, right? So, to guarantee that the quality of the fruit that is leaving the farm meets the required standards, that is the first check that we must put to each of the producers when incorporating this differentiated management.

After this, being able to go to the farms and observe the biodiversity that we have is also quite positive, because this is a plus or added value to our agricultural production. And finally, one of the most tangible changes is that we guarantee the customer a healthier product by producing it with a lower amount of chemicals and implementing biological inputs for its management.

***Carolina:***

Thank you very much, Jocelyn.

Juan Carlos, going back to the From Farm to Fork project: **what are the main results you have achieved to date and what are you still looking to achieve?**

***Juan Carlos:***

The results of the project are many, but to make a brief summary: we have more than one 160 farms that have integrated biodiversity in their production through the application of the GIZ-developed tool Agricultural Biodiversity Check, which is a tool that determines the level of relevance of biodiversity in certain companies and helps these companies to develop an action plan for improved management. We have an investment of more than 1.6 million Euros in measures implemented through this tool.

We have also implemented six idea competitions to date, which have led to the co-financing of 40 innovative ideas that seek the conservation of biodiversity. We also have established cooperation with European standards such as the Rainforest Alliance, Fair Trade, Global Gap, and Démetro, which have integrated certain biodiversity criteria into their standards. We have carried out awareness-raising campaigns, as I mentioned before, in Costa Rica, together with Auto Mercado and its pineapple and banana suppliers. And, we also have achieved to broker an investment by a European supermarket in a biological corridor in Costa Rica.

**Carolina:**

And on the topic of producers, Juan Carlos, **why do you seek and motivate producers to join programs like this? What is the added value for them and above all how does it benefit Costa Rica's biodiversity?**

**Juan Carlos:**

Well, as I mentioned earlier, the From Farm to Fork project works on the topic, specifically on biodiversity. However, this topic cannot be separated from the topic of greenhouse gas emissions, carbon, etc. An agricultural production that integrates biodiversity in its management is, in turn, reducing its emissions. And I am not just saying that, we have data that proves this.

For example, with NicoVerde, we have a very good example where -through the Agricultural Biodiversity Check tool- some measures to integrate biodiversity were implemented, such as conservation areas, use of bio-inputs, reincorporation of organic matter in the field, etc. And later, when measuring the farm's carbon footprint, we realize that they contributed greatly to making the farm carbon neutral and producing decarbonized pineapple.

**Carolina:**

Juan Carlos and Jorge: to close, with *The Countdown to 2050*, we have sought to learn about IKI initiatives in the region that contribute to achieving long-term climate goals and to fulfilling global sustainability commitments. As a last question for you: **What is your vision for 2050 - how does your project contribute and what is missing to achieve these goals?**

**Jorge:**

Well, the project has really been contributing to our work since we started with IKI in 2019. Us producers and companies, we sometimes need an orientation towards where the market is going and where the trends are going. At the time, when we started working with IKI, we saw some important issues to work on, such as the carbon issue,

the issue of sustainability and the inclusion of biodiversity and some other issues that were already foreseen to be relevant in the future. Perhaps the post-covid issue and others accelerated this.

However, many of the goals that are established for 2030, such as the reduction of pesticides, we had already achieved in 2020, when we were certified as zero pesticide residue in pineapple production. Regarding the carbon issue, which is set for 2050, we are about to be audited to also be certified as zero carbon emissions. And what's more, not only zero carbon emissions, but also the production of agricultural carbon, meaning removing carbon in the same farm where pineapple is produced. We have worked with the instruments they have given us to make a better assessment of the farms, of the improvement plans, and also, with the support of the program, we have been able to obtain and develop a series of tools such as is the case of an app for the use of drones and some others that we are using today.

Our commitment has also been to be able to transfer this knowledge, these developments, to the producers, and today we are doing that. We are already scaling up to producers not only within the pineapple sector, but also to other activities, and not only in Costa Rica, but also in other countries such as the Dominican Republic, where the IKI program also collaborates.

***Juan Carlos:***

Well, Carolina, many of us know that the issues of biodiversity, sustainability, climate change, are issues that are on the table today. And that the requirements of consumers in Europe, especially, are clearly changing. For that reason, it is necessary for producers to prepare for these changes and be able to offer products that meet the new market requirements. In turn, these products will contribute to the sustainability of their business through the integration of biodiversity in their production.

Just as a fact, in Costa Rica, pineapple and bananas together cover almost 90,000 hectares of territory and, in many cases, due to the nature of these crops, they are located in areas with high conservation value, so a paradigm shift in these companies has a huge impact on the country's biodiversity.

***Carolina:***

Thanks, Jocelyn, Jorge and Juan Carlos, it has been a pleasure to share with you and learn about the important efforts that Costa Rica makes in environmental protection and nature conservation, and to learn how projects of this nature bring benefits to each of the people who are part of them.

We invite you to follow From Farm to Fork at [www.delcampoalplato.com](http://www.delcampoalplato.com) and on Instagram and Facebook as [biodiversidadynegocios](#).

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 brings us to our final episode of the first season of *The Countdown to 2050*. We hope you enjoyed joining us on this journey throughout the region and we look forward to seeing you in future seasons.