

Smallholder farmers contributing to climate change mitigation in Paraguay

Paraguay has ample natural resources and almost 7 million inhabitants. The country has had one of the highest economic growth rates in Latin America in the last 10 years. Agriculture is one of the key sectors in the economy and the country has a dual agricultural productive structure. On the one hand, producers with over 500 hectares are mostly dedicated to the production of soybeans and livestock, mainly for export. On the other hand, most small-scale family farms (less than 50 hectares, <u>representing 96% of total farms</u>) produce crops like sesame, cassava, sugar, corn, etc. for the domestic market. Family farming is considered the main cultural and productive nucleus of rural Paraguay, contributing to the food security of its members and communities.

Paraguay's Nationally Determined Contribution (NDC) includes organic production and conservation agriculture as strategies to mitigate emissions and adapt to the effects of climate change, but still needs metrics on carbon storage and applying better agricultural practices.

Challenges and Objectives

Paraguay's main sources of GHG emissions are the conversion of land and the agricultural sector (including cattle breeding). While agriculture represents around <u>25% of the country's</u> <u>GDP</u>, Paraguay imports most of the fresh vegetables and fruits it consumes. Food production is increasingly affected by climate change since fluctuations in temperature and rainfall are reducing the quantity and quality of harvests. One of the main challenges faced by small producers is access to markets for their (sustainable) products, exacerbated by consumers' lack of awareness on sustainability. The countries initiatives up to date have mainly focused on isolated interventions at production level, but not involving the entire value chain up to the consumer.

The project aimed to promote a more holistic approach to solving the interrelated issues of climate change, biodiversity loss, and rural development by developing sustainable supply chains models and supporting the enactment of policies aligned with the SDGs and a 1.5° C world.

Trade-offs and Synergies

One of the trade-offs the project was confronted with had to do with rationalizing the use of agrochemicals in agricultural production, balancing between the need of certain amounts of pesticides for pest management to ensure satisfactory yields, and the reduction of pesticide use to avoid GHG emissions. The project conducted a scientific study that demonstrated that using fewer chemical products in combination with best agricultural practices, like cover crops, reduced the total emissions from small-farm production. Another trade-off was consumers' perception that sustainable or organic products are more costly since the price at point of sale can be higher than conventional products.



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Transforming Food Systems in the Global South Federal Ministry for the Environment, Nature Conservation Nuclear Safety and Consumer Protection



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Strategy

The project focused on leverage points across three key stakeholder groups: policymakers; agri-food businesses, particularly retailers; and consumers.

- The project carried out a range of policy advocacy interventions, engaging the national government during policymaking processes as well as providing support by developing climate mitigation strategies and action plans for the agrifood sector to generate political will for implementing mitigation actions within the food system.
- With businesses, the planned interventions focused on providing knowledge on the economic and environmental benefits of SCP, and collaborating to integrate SCP practices into business models, decisions and operations, such as through developing "sustainable shelves" with retailers and developing a market for smallholder sustainable products through more accessible certification schemes such as Participatory Guarantee Systems (PGS).
- To change consumer behavior, the project targeted interventions that could lead to improved availability, accessibility, and quality of consumer information to increase consumer awareness of SCP, and to establish a narrative around SCP among food system stakeholders, such as government bodies, producers, and businesses.

Tools

As a first step, a market access analysis was conducted to examine the barriers that might prevent smallholder farmers from entering the market with their new sustainable products. To increase the uptake of organic farming methods and certification, the PGS approach has been applied, based on the promotion of farmer-to-farmer trainings and peer review. The PGS system was adopted by existing networks of farmers, organic production initiatives, business platforms, retail associations, and other civil society groups.

Communication tools and campaigns were applied to build awareness within consumers in the main cities of the project area. 60 influencers were involved for the launch of the <u>PLANETA-T campaign</u>, to amplify content through their audiences and generate engagement. This was complemented with two television channels and several radio and press outlets covering the campaign, while interactive actions were carried out in partner supermarkets including distribution of PLANETA-T tea boxes and educational online trivia surveys.



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Lessons Learned

Using a multi-stakeholder approach and building a large coalition of civil society organizations along with private organic production companies and associations, the project was able to advocate with the Ministry of Agriculture for increased investment in sustainable agricultural production and lay the groundwork for the development of new retail business models that were made available to the public. By applying a whole systems approach, the project was able to benefit from its efforts in enhancing collaboration with the ministries responsible for the SDGs 12, 13 and 15, re-establishing inter-institutional working groups to update the countries SDG indicators in the framework of the <u>National SDG Commission</u>.



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Results

The project achieved the establishment of stronger collaboration processes and mechanisms between public sector, private companies and chambers, and smallholder farmer associations, such as through the engagement in the of the National SDG Commission, to which WWF-Paraguay was nominated member. To reinforce the policy recommendations advocated by the project, the development of pilot sustainable supply chain models proved an important feat.

- Public sector Pillar: The project implemented a national communication campaign on SCP with the Ministry of Consumer and User Defense (SEDECO) to disseminate information on sustainable production and consumption, including agri-food products and the use of eco-labels. Support was also given to SEDECO for the restructuring of the national interinstitutional thematic roundtable on SCP. The project delivered another campaign promoting the organic production sector aimed at government representatives, including 281 mayors, 2,781 incumbent members, and an equal number of alternates for the municipal board, leveraging the National Organic Program of the Ministry of Agriculture and Livestock. Scientific evidence was produced on the carbon footprint of agricultural crops with the help of the Ministry of Agriculture and Livestock for subsequent inclusion in the national Climate Change reports. Technical assistance was also provided to the Ministry of Environment and Sustainable Development and the SEDECO resulting in the development, for the first time, of national indicators for the SDGs 12; 13 and 15.
- Private sector Pillar: In a joint effort with civil society organizations, the project assisted "Los Jardines" Supermarket with the implementation of the "Brillemos juntos" (Let's shine together) campaign. The aim of this campaign was to expand the offer of sustainable products while helping stimulate increased demand from the consumer base. At the end of the campaign, eight new sustainable products were put on the shelves with a cash incentive to enable continuous expansion of their production. In total, more than 60 new products were listed and identified during the campaign. "Los Jardines" Supermarkets also contributed to the consolidation of the PGS organic label, helping to the Organic Producers Association (APRO) to kick-off pilot tests to commercialize a range of organic fresh food and vegetables. By 2023, thanks to that first impulse, APRO has entered into the retail business, creating their own physical stores. Through the implementation of the PGS to certify 'organic' production, a total of 27 producers, 12 of whom are women, were certified.



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Conclusions

The project focused on leverage points across three key stakeholder groups: policymakers, agri-food businesses - particularly retailers -, and consumers. Advocating the need for a systems-based approach, the project supported the re-establishment of governmental and inter-sectoral mechanisms to promote the application of SCP practices across the agri-food system. Through a combination of technical assistance, policy advocacy efforts and targeted campaigns, the government advanced on the reporting of several SDGs, indispensable to establish a path towards progress, and made the case for government support to sustainable agricultural production, including through new public procurement regulation. Not only were pilot sustainable supply chains developed by training smallholders through accessible PGS certification but, by working with local businesses and associations to create a market for sustainable produce, a new retailer was born, with the opening of the first pilot stores selling PGS organic produce.



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