



LAC Future Lab for Innovation and Policy

Background Note: Food and Agriculture in Latin America & the Caribbean October 13th, 2022 | 9:00 am – 12:30 pm (UTC-5) | Digital

About the Latin America & the Caribbean (LAC) Future Lab

The LAC Future Lab for Innovation and Policy – a collaborative partnership between <u>SEED</u> and <u>GO4SDGs</u> – offers a platform for green SME stakeholders, such as policy makers, financiers and entrepreneurs, to make the agriculture and food sector ready for 2030 by developing future-proof solutions for today's challenges. The participatory lab process will connect policy makers, intermediaries and SMEs in a co-creation setting in order to develop tailored solutions in five action areas such as Innovation, Non-Financial Support, Finance, Policy and Market. The co-created solutions will provide concrete action items on how to better support Latin American and Caribbean green SMEs applying circular technologies or business models operating in the **agriculture and food sector**.

The LAC Future Lab was designed to engage a community of 30-40 participants leveraging the expertise of key green SME stakeholders across the region. The LAC Lab is part of a Global Lab Series that engages green SME stakeholders in the Agri-Food sector in Africa and Latin America and the Textile-Fashion sector in Asia and West Asia. The practical insights of the regional labs will inform a **New Green SME Action Agenda** and the I-GO solution supporting the global advocacy efforts of the growing green SME community leading the way for future SME policies and frameworks.

The LAC agriculture-food SME sector context

The Agriculture-Food sector is a key driver of the Sustainable Development Goals. As the world's largest employer, changes in the agriculture-food sector have the potential to reduce poverty, promote social equity and improve livelihoods (UNEP, 2019). Over the past decades, huge progress in agricultural production has made it possible to feed a growing population, reduce real food prices worldwide and limit food-borne illnesses. This progress happened despite the added challenges of climate change-related effects on agriculture (FAO, UNDP and UNEP, 2021)(FAO, UNDP and UNEP, 2021). However, today the agriculture-food sector is increasingly considered in terms of its own impact on the environment. Globally, food and agriculture are responsible for 26% of all greenhouse gas emissions. Moreover, 51% of all habitable land is used for agricultural purposes, as well as 70% of all freshwater withdrawals. Due to the use of pesticides and other harmful substances in agricultural practices, the sector is responsible for almost 80% of the global ocean and freshwater pollution (Ritchie & Roser, 2020).

While the threats of climate change and biodiversity loss impact the global ecosystem, the food and agriculture system is under additional pressure. These include the still-growing population that will reach 9 billion people by 2050, increasing food demand by an estimated 60% globally (Morris et al., 2020). Additionally, chronic hunger persists, with roughly 10% of the population in developing regions suffering from hunger, while 30% of produced food is lost or wasted along its value chain (UNEP, 2017). These challenges have been exacerbated by the COVID-19 pandemic, disproportionately affecting the world's most vulnerable groups (WHO, 2021).

There are 570 million farms in the world, 84% of which are smallholdings comprised of less than two hectares in size. These small- and micro-sized farms produce over one-Third of the world's food and

























even more in emerging economies (Ritchie, 2021). Throughout the remaining value chain, including post-harvest, transport, processing and retail, agriculture-food SMEs play an important role, constituting over half of most food economies (ISF Advisors, 2021; Netherlands Food Partnership, 2021).

In the LAC region, the agriculture-food sector holds a special significance. The region is often called "the world's breadbasket". In fact, LAC is the world's largest food-net exporting region, with many countries as lead exporters of certain goods, such as Brazil for coffee, Uruguay for cattle, Bolivia, Argentina, Colombia and Mexico for grain, Chile for fruit, etc. The growth of the regional agriculturefood sector has made it possible to feed a fast-growing population across the region. Moreover, it has contributed to stabilising global food prices and providing better access to food (IDB, n.d.; Morris et al., 2020). Additionally, World Bank Lead Agricultural Economist Michael Morris referred to LAC not only as the world's breadbasket but also as its lungs (World Bank, 2020). The region is a major producer of ecosystem services, home to 57% of the world's primary forests that store 104 gigatons of carbon and to 40 - 50 % of all biodiversity (Morris et al., 2020). Economically, agriculture marks a key industry for the region, contributing to more than 5% of GDP in 20 countries, reaching as much as 18% in Haiti. Even though high urbanisation rates have led to lower workforce participation in the agricultural sector, the larger food system still accounts for 15 - 20% of the workforce, including many vulnerable groups, such as smallholder farmers, women and indigenous people (Morris et al., 2020). These groups are often particularly vulnerable to informal employment. For women, informality rates stand at 49.7% (compared to 44.5% for men) and for youth aged 15 to 24, they are even higher at 55.7% (ILO, 2016). This makes the agriculture-food sector crucial in improving social conditions for these vulnerable groups.

Despite these major contributions to the global food system, the ecosystem and the regional economy, the LAC Agriculture-Food Sector faces major challenges: the fast growth of the sector often came at the expense of environmental degradation, compromising the health of the local population. Agriculture uses over one-third of the region's land area, three-quarters of freshwater resources and contributes to half of the region's greenhouse gas emissions (Morris et al., 2020). Moreover, even though LAC countries are the world's breadbasket, the region's own food security is not guaranteed, with 42.5 million undernourished people. This is despite the fact that food is sufficiently available. A major challenge are the high food prices, forcing people to spend between 20% and 60% of their income on food (compared to only 10% in the US and Canada) (IDB, n.d.).

SMEs are a crucial part of the LAC economies, accounting for 99.5% of businesses and 60% of formal employment. Micro-enterprises comprise the most significant share of businesses, accounting for almost 9 out of 10 businesses (OECD, 2019). Especially in the agriculture-food sector, SMEs are key actors in LAC. They engage in production, transportation, storage, etc. Smallholder farms are responsible for much of the agricultural output across the region. In Brazil and Mexico, smallholder farms account for nearly 40% of agricultural output. In Central America, they account for more than 60%. Despite this enormous contribution, they often belong to the poorest people in the region and struggle with a lack of secure access to land, technology, financial services and markets (Nwanze, n.d.).

Five Action Areas for the LAC Agriculture-Food SME Sector

1. Innovation

LAC has built up a massive agriculture-food sector. Big enough to become the world's breadbasket and supply food for people worldwide. However, the current system of food production has come with major challenges, especially for the environment. Innovation is key to overcoming these challenges and moving toward more sustainable production and consumption. Due to the global reach of the LAC food system, international organisations have started to support activities to drive innovation. For example, IFAD's Rural Youth Innovation Award for Latin America and the Caribbean aims to give visibility to young people's practical solutions for sustainability. The award is given to young people aged 18 to 35 that have developed an innovative solution for more sustainability to support the green recovery (Carrasbal & Grangeiro, 2021).























As highlighted above, one of the major issues of the agriculture-food sector is its impact on the region's forests. Years of expanding farmland have led to deforestation, destroying large parts of the ecosystem. To tackle this challenge, **Colombian enterprise Sembrando Vida (n.d.) organises reforestation campaigns of native and endangered trees**. The enterprise works with formerly displaced mothers and youth that have returned to the community.

The regional food system is under additional pressure as the effects of climate change begin to show more severely. Increased droughts and floods have a particularly harsh impact on the agriculture-food sector. Careful water management is one of the possible responses to the new situation. **The Chilean enterprise Capta Hydro (n.d.) offers innovative solutions for improved water management**. By gathering data on water use and availability, the technology makes it possible to control the flow rates for irrigation canals, wells and dams, as well as allowing farmers to verify that they have the correct levels of water flows and adjust according to their demand.

2. Non-Financial Support

Overall, the LAC agriculture sector has been very successful, insofar that it managed to keep up with the rising demand for food globally. This success stems primarily from large agricultural producers, which are the major recipients of non-financial support schemes that aim to increase efficiency. However, these large-scale producers only account for half of the output, which means that much of the region's productivity is wasted. While large-scale producers are always more efficient, as they can benefit from economies of scale, the productivity gap between large and small enterprises is particularly big in LAC. The region's micro-enterprises account for only 3.2% of GDP (compared to 20% in Europe) (OECD, 2019).

Non-financial support targeting SMEs in the agriculture-food sector has the potential to increase the overall productivity of the sector, which would allow it to reduce the stress on the environment and move to a more sustainable food system. Consequently, there have been several activities focusing on this. To help the post-COVID recovery, the region's governments have organised a Virtual Business Roundtable on the Agrifood Chains of Latin America and the Caribbean to promote networking among enterprises. The Central American Trade Network organised the roundtable in partnership with the Secretariat for Central American Economic Integration, the Inter-American Institute for Cooperation on Agriculture, the Executive Secretariat of the Central American Agricultural Council and FAO. It led to the conclusion of business deals worth more than 35 million USD. In the event, over 600 SMEs from the agriculture-food sector were represented (IICA, 2021).

Moreover, incubator and accelerator programmes are aiming to support SMEs from the agriculture-food sector on their journey to scale. For instance, **the Adaptation SME Accelerator Project supports start-ups and SMEs to scale market-based climate adaptation solutions to overcome environmental challenges**. The project is run by the Lightsmith Group and Village Capital and supported by the Global Environment Facility's Special Climate Change Fund, Conservation International and the Inter-American Development Bank (Parham, 2022).

To support SMEs in obtaining financing, **Mexico-based Luxelare (n.d.) functions as an intermediary between SMEs and financiers to increase the chances of SMEs to receive funds.** The enterprise facilitates the operational work on behalf of agricultural insurance companies and offers digitalised solutions and secure backup policies for SMEs. These solutions help farmers to be better prepared for certain risks and lower the risk of fraud for the insurer.

3. Finance

Due to climate change, the risk for farmers has increased as the number of droughts and floods has grown. This increased risk translates into higher costs throughout the food system. Starting with the cost of insurances to the cost of repairs and the loss of crops due to natural events, farmers often face high cost very suddenly. Moreover, high investments into the current system are needed to transition to a more sustainable agriculture-food system. Given the importance of the LAC agriculture system to the world, there are many international initiatives to provide the necessary financing to

























make the agriculture sector more resilient to climate change and more sustainable for the future. For instance, the European Union facilitates funding for many agriculture-food projects through its Latin America Investment Facility (LACIF). The projects "triple bottom line inclusive finance" and the "Latin America Green Bond Fund" both provide climate- and resource-friendly investments, specifically targeting smallholder farmers and low-income populations (LACIF, n.d.).

Additional finance comes from multinational enterprises (MNE). Recent studies have found a great interest of MNEs to support SMEs financially or by integrating them in their value chains, for example, as suppliers or distributors of goods and services. MNEs undertake these initiatives as part of their corporate social responsibility (ILO, 2016). One of these examples is BPC, a leading digital payment solutions provider partnered with Brazilian Desk. The project aims to connect Brazilian agricultural SMEs to digital finance solutions and help facilitate investment. The platform aims to offer local and regional governments, NGOs and foundations the opportunity to join this ecosystem and further support the farming community (Benaissa, 2020)

4. Policy

Even though agriculture is a key sector in the LAC economies to create growth and realise the SDGs, much attention of policymakers has been diverted due to the challenges that came with rapid urbanisation. Moreover, waves of privatisation in the 1980s and 1990s have phased-out state-owned agricultural companies to open the way for private investment. Across the region, except in Argentina, few policies that specifically target agriculture have remained in place since. Recently, this situation has begun to change as the protection of the environment, food quality and safety, and nutrition security have risen on the agenda of policymakers (Morris et al., 2020; World Bank, 2020).

The examples of policy support that exist mainly take the form of regional cooperation. For example, IFAD has contributed to the development of MERCOSUR's Commission of Family Farming. This Commission aims to be a regional platform for family farmers and strengthen South-South cooperation (Nwanze, n.d.). The effects of COVID-19 have strengthened this cooperation. As the pandemic shut down global trade routes, regional economic cooperation in production, trade and technology became more important. The governments of 34 LAC countries organised an intergovernmental meeting to share policies, actions and plans to jointly respond to the impact of COVID-19 on food security. This dialogue aimed to avoid unilateral actions that would affect the flow of food to the disadvantage of one's neighbouring states and instead overcome the shortages through cooperation (IICA, 2020; Morris et al., 2020).

5. Market

SMEs face many challenges regarding market access in the agriculture-food sector: suboptimal agronomic practices, unpredictable weather patterns, crop disease and loss, high production costs, price volatility, etc. As they cannot enter the market, they can also not obtain investments to improve their standing in the market. To combat this dilemma, the Smallholder Market Access Programme of the Walmart Foundation aims to enhance the production of small-scale farmers and integrate them into more inclusive and profitable market systems. In a holistic approach, the programme aims to facilitate financing and investment to allow farmers to improve their productivity and profitability so that they can access the market (TechnoServe, n.d.).

Similarly, Raiz Brasil International helps reduce the cost enterprises face when entering the international market by up to 50%. The company helps facilitate international trade and supports networking activities of enterprises that want to export internationally. As a company, Raiz focuses on agricultural enterprises and works specifically with family farmers to improve their access to the market (international and national) (Connect Americas, n.d.).





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References

- Benaissa, N. (2020, July 24). BPC Marketplace partners with Brazilian Desk to provide financial access to Micro and SME communities in Latin America. https://www.bpcbt.com/blog/bpc-braziliandesk
- Capta Hydro. (n.d.). *Capta Hydro | Telemetría y Automatización | Chile*. Captahydro. Retrieved 29

 June 2022, from https://en.captahydro.com
- Carrasbal, J. I. C., & Grangeiro, J. (2021, July 1). Second Edition of the IFAD Latin American and Caribbean Rural Youth Innovation Award. IFAD. https://www.ifad.org/en/web/latest/-/second-edition-of-the-ifad-latin-american-and-caribbean-rural-youth-innovation-award
- Connect Americas. (n.d.). Community for Businesses in Latin America and the Caribbean |

 ConnectAmericas. Retrieved 29 June 2022, from https://connectamericas.com/company/raiz-brasil-international
- FAO, UNDP and UNEP. (2021). A multi-billion-dollar opportunity Repurposing agricultural support to transform food systems. https://doi.org/10.4060/cb6562en
- IDB. (n.d.). Will Latin America face a food crisis in the future? Inter-American Development Bank.

 Retrieved 29 June 2022, from https://www.iadb.org/en/improvinglives/will-latin-america-face-food-crisis-future
- IICA. (2020, April 22). Ministers and Secretaries of Agriculture from 34 countries in the Americas coordinate actions to ensure food supply in light of COVID-19. Inter-American Institute for Cooperation on Agriculture. https://www.iica.int/en/press/news/ministers-and-secretaries-agriculture-34-countries-americas-coordinate-actions-ensure
- IICA. (2021, June 7). Virtual business roundtable for agrifood SMEs resulted in tentative business deals valuing more than USD 35 million. IICA.INT. https://iica.int/en/press/news/virtual-business-roundtable-agrifood-smes-resulted-tentative-business-deals-valuing-more
- ILO. (2016). Formalization of SMEs in supply chains in Latin America: What role for multinational enterprises? https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---ifp_seed/documents/publication/wcms_533197.pdf
- ISF Advisors. (2021, April 8). Rethinking our understanding of Agri-SMEs: A comprehensive taxonomy | RAFLearning. https://www.raflearning.org/post/rethinking-our-understanding-agrismes-comprehensive-taxonomy





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- LACIF. (n.d.). LAIF Projects | LAIF Latin America Investment Facility. Retrieved 29 June 2022, from https://www.eulaif.eu/en/projects
- Luxelare. (n.d.). Agroseguros | LUXELARE. Retrieved 29 June 2022, from https://luxelare.com/en/agroseguros/
- Morris, M., Sebastian, A. R., Perego, V. M. E. P., Nash, J., Díaz-Bonilla, E., Pineiro, V., Laborde, D., Thomas, T. S., Prabhala, P., Arias, J., De Salva, C. P., & Centurion, M. E. (2020). Future Foodscapes: Re-imagining Agriculture in Latin America and the Caribbean. Washington D.C. World Bank Group.
 https://documents1.worldbank.org/curated/en/942381591906970569/pdf/Euture-Foodscapes
 - https://documents1.worldbank.org/curated/en/942381591906970569/pdf/Future-Foodscapes-Re-imagining-Agriculture-in-Latin-America-and-the-Caribbean.pdf
- Netherlands Food Partnership. (2021, August 11). UN Food Systems Pre-Summit | Spotlight on SME's. http://nlfoodpartnership.com/insights/UN-Food-Systems-Summit-Spotlight-On-SMEs/
- Nwanze, K. F. (n.d.). Smallholder farming key to development in Latin America and the Caribbean.

 IFAD. Retrieved 29 June 2022, from https://www.ifad.org/en/web/latest/-/speech/smallholder-farming-key-to-development-in-latin-america-and-the-caribbean
- OECD. (2019). SME Policy Index: Latin America and the Caribbean 2019—Policies for Competitive SMEs in the Pacific Alliance and Participating South American countries. OECD. https://www.oecd.org/latin-america/SME-Policy-Index-LAC-Key-Messages-Brochure.pdf
- Parham, B. (2022, March 7). Applications Open for SMEs from Latin America and the Caribbean.

 ASAP. https://climateasap.org/applications-open-for-smes-from-latin-america-and-the-caribbean/
- Ritchie, H. (2021, August 6). Smallholders produce one-third of the world's food, less than half of what many headlines claim. Our World in Data. https://ourworldindata.org/smallholder-food-production
- Ritchie, H., & Roser, M. (2020). Environmental Impacts of Food Production. *Our World in Data*. https://ourworldindata.org/environmental-impacts-of-food
- Sembrando Vida. (n.d.). Sembrando Vida | Facebook. Retrieved 29 June 2022, from https://web.facebook.com/sembrandovidabuga/about/?ref=page_internal





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- TechnoServe. (n.d.). Improving Market Access for Smallholder Farmers. TechnoServe. Retrieved 29

 June 2022, from https://www.technoserve.org/our-work/projects/improving-market-access-for-smallholder-farmers-in-central-america/
- UNEP. (2017, September 28). Food and food waste. UNEP UN Environment Programme. http://www.unep.org/explore-topics/resource-efficiency/what-we-do/sustainable-lifestyles/food-and-food-waste
- UNEP. (2019). Policy Brief: Fiscal Policies to support sustainable agriculture. Geneva. United Nations

 Environment Programme. https://greenfiscalpolicy.org/wp-content/uploads/2020/09/Policy-brief-Fiscal-policies-for-sustainable-agriculture.pdf
- WHO. (2021). UN report: Pandemic year marked by spike in world hunger. Rome.

 https://www.who.int/news/item/12-07-2021-un-report-pandemic-year-marked-by-spike-in-world-hunger
- World Bank. (2020, November 12). Agriculture and Food Systems in Latin America and the Caribbean Poised for Transformational Changes. World Bank.

 https://www.worldbank.org/en/news/press-release/2020/11/12/agriculture-food-systems-latin-america-caribbean-changes





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