Overview and Key Conclusions

In advance of the September 2021 World Food Systems Summit, Council of the Americas (COA) and the Inter-American Institute for Cooperation on Agriculture (IICA) jointly hosted a series of expert programs with the goal of bringing the private and public sectors together to explore the future of agri-food systems in the Americas. An on-the-record program on April 6th, 2021 was followed by three not-for-attribution roundtables. The programs featured senior government representatives, academics, and private sector executives (see box) from the hemisphere and beyond.

The themes explored in the three roundtables – international agri-food trade, the digital revolution, and the sustainability of agriculture – are closely intertwined. International agri-food trade serves as a key tool to improve the situation for farmers and rural communities and relieve food insecurity globally, while digital technology has become essential to allowing the same communities to adopt efficient production techniques, increase production, and improve the welfare and quality of living for rural communities. Sustainability has fast become a priority for both large and small producers as a matter not only of environmental stewardship but also of maintaining a livelihood for millions in the agri-food sector. These issues, along with others including finance, equity, and science-based decision-making, must be addressed together in international discussions of agri-food systems. There are no simple or one-size-fits-all solutions.

Experts highlighted repeatedly the importance of keeping the welfare of producers and rural communities at the center of global discussions, with an emphasis on small farmers, women, indigenous, and other underserved communities. They must have a seat at the table, and the private and public sectors have a mutual responsibility to work together to advance their participation.

1 This report was prepared by COA Senior Director Steve Liston, with assistance from William Manogue. Special thanks to IICA Senior Advisor Dr. Jorge Werthein for his guidance, support and collaboration. Quotations used with permission.
Producers Have Made the Americas a Global Agri-Food Powerhouse

“There are 3 billion people that cannot afford a healthy diet and 690 million with chronic malnutrition problems, a figure which increased by between 83 and 132 million, due to the pandemic. The system must change.”

-- Dr. Rattan Lal

The coronavirus pandemic that has increased poverty, inequity, and food insecurity around the globe since early 2020 has brought home both the challenge and the promise of global agri-food systems. Even prior to the pandemic, as 2020 World Food Prize Laureate Dr. Rattan Lal noted, agri-food systems were falling short. Moreover, in the Americas alone, some 16.5 million family farmers are not receiving a fair price for their products. The lack of profitability results in poverty and disorganized migration to urban centers.

Even as environmental sustainability and health concerns take center stage among policymakers, food insecurity remains a significant threat to millions, and equity and poverty concerns grow, agri-food systems are transforming dramatically with technological and scientific advancements and international agri-food trade plays an increasingly central role in feeding billions of people. These developments, taken together, have driven policymakers to focus on how best to manage agri-food systems at a global level.

Experts convened by COA and IICA, from both the private and public sectors, agreed that producers – their productivity, profitability, sustainability, and well-being – as well as that of the rural communities in which they live, must remain at the forefront of these discussions, as their success will ensure ample supply for the rest of the world. When producers prosper, they support rural communities and can continue to produce food for urban populations. As a result, experts agreed, agricultural producers and rural communities must be viewed as part of the solution and have a seat at the table as policymakers look toward the future of global agri-food systems.

Nowhere is this more true than in the Americas. Producers in the region account for a quarter of the world's agricultural land and are the largest net exporter of agricultural products, a feat that has continued even amidst a global pandemic that has seen a precipitous drop in overall trade. As IICA Director General Dr. Manuel Otero pointed out, “In the midst of a crisis of such profound proportions, [producers] continue to supply food to the one billion people living in the Americas. Consider that overall regional exports fell 9% during 2020 versus a 2% increase in agri-food exports.”

Yet, poverty among rural populations and particularly indigenous communities remains high, women in agricultural communities continue to suffer from biases, and many countries suffer from political turmoil or natural disasters. Within the Americas, Caribbean nations face unique challenges with regard to agri-food systems as a result of their geography and susceptibility to natural disasters and climate change.
International Trade is Essential to Supporting Producers and Reducing Food Insecurity

“We can’t talk about Food Systems Summits without discussing agriculture. We must of necessity talk about production, and of course, the elements that relate to trade are substantial, very important, not least because [the Americas] are an exporting region in this area.”

-- Ambassador Gloria Abraham

The experts agreed convened by COA and IICA agreed that international trade is a critical component of the effort to support producers and improve the living standards of rural populations. Comparative advantage is real, and allows for increased income and reduced environmental impacts. For this reason, it is important to move away from subsidies and instead adopt support programs that have positive impacts on environmental outcomes. As important, producers need access to capital markets, a reduction in regulatory barriers to trade and investment, and improved transportation infrastructure – particularly in the Caribbean – all of which constrain producers’ export potential, income, and incentive to adopt sustainable methods.

The experts pointed out that while agri-food systems have evolved, international rules on agricultural trade reflect systems of a generation ago. As there is no single model for production producers must be free to select approaches that are appropriate to their situation, as long as they are following the same, empirically-based standards and working toward similar, sustainable outcomes. Modernizing and harmonizing the rules of agri-food trade will give producers and rural communities the ability to participate more easily in international commerce, access additional markets, and sustainably increase profits and production.

Experts from both the public and private sectors emphasized the need for regional integration. Mutually agreed rules, as one participant put it, will allow producers to “work together to create an agriculture revolution in developing countries.” Many participants expressed the need for open, rules-based trade among countries in the region as a means to open new markets for producers. As Dr. Otero noted, only 14% of food exports from countries in the Americas go to other countries within the hemisphere; with appropriate incentives and integration, this could double or triple. He called on the region to work together to achieve greater competitiveness, adding that integration must also result in the development of joint policies for climate change adaptation.

A New Age of Farming: Science and Digital Technologies Must Serve Producers and Rural Communities

Farmers want access to the latest technologies and are eager to use them to transform their work. In the dairy industry, we’ve seen even the smallest of producers using drones in their daily work. There are concepts like gene editing with which we must all start to get familiar. But above all, what farmers want is transparency and accountability from all stakeholders involved in the food industry and in food marketing.”

-- Ms. Krysta Harden

Trade and integration are key tools for improving the well-being of producers and rural communities. Alongside such efforts, agriculture in the region must become more competitive in international markets. Increasingly such
competitiveness is being driven by the use of new scientific and technological tools that are revolutionizing agricultural production. Such advances are allowing farmers to increase their productivity, efficiency, and sustainability dramatically by helping farmers water crops more efficiently, understand the health of the soil, better control for environmental factors, prepare for and manage the effects of natural disasters on production, and maximize crop potential, among many applications now in use.

This new age of farming can allow smallholder farmers to be more competitive and make farming much easier and increase productivity and profitability. Incorporation of robotics is allowing farmers and agricultural workers to reduce the need for repetitive, low-value tasks to focus on the higher value aspects of production for which humans are best suited. Digitally enabled food value chains can provide more accurate and timely information about where there is most need for certain products, allowing producers to receive the full value of their products. Digital records are allowing for tradability and traceability of goods in ways that companies and consumers are demanding and which were previously cost-prohibitive.

Nobel Prize Laureate Dr. Michael Kremer, who is also an IICA Goodwill Ambassador, discussed the importance of small-scale farmers having access to new information and communication technologies to improve the economic and social situation of rural areas in increase the productivity of farmers. “It is crucial not only to bring technology to rural areas, but also to work to increase the digital skills of farmers so that they adopt practices that improve yields and are sustainable,” he said. “Together with IICA, we are already assisting farmers in Brazil and Colombia through digital technology solutions that will enable them to increase their productivity and improve their living conditions.” Dr. Kremer cited research suggesting that relatively low-cost digital extension services can have an outsized impact on small farmer productivity and income. Other digital information tools, such as remote sensing and weather forecasts, can also help farmers maximize income. “An accurate weather forecast via a smartphone can prove crucial in terms of enabling a farmer to make an adequate decision regarding when to plant,” he said.

These changes are part of the answer to feed the world’s growing population even as agriculture becomes more efficient and sustainable. Moreover, beyond the agricultural sector, these technologies can act as a catalyst for innovation ecosystems. According to one government expert, some 1,500 start-ups in Brazil owe their existence to a focus on agriculture-related technologies, which have led to broader applications in other sectors.

These new scientific and technological advances will only benefit farmers and rural communities if they have access to them. Governments and agri-food companies must work together to enable this, through such innovations as virtual agricultural extension services and on-line training and educational opportunities. Governments must ensure that pubic policies are science-based and promote scientific advances. Private sector experts noted that their companies and others are offering programs, apps, and other ways of connecting the people in rural communities to these technologies. The goal, they stress, is not to dictate to rural communities, but to make new technologies more accessible and to include underserved and previously excluded populations. Working together with local authorities, companies have set up programs to help connect and educate rural youth and current producers on digital technologies. Both government and private sector experts see increased digital literacy rates in rural communities as critical to enabling them to take advantage of new technologies.
Most important, both private and public sector participants highlighted access to new information and communication technologies as a critical component in enabling use of new technological and scientific advances, making agriculture and rural life attractive to youth, and ensuring equitable and sustainable development. Some 77 million people in Latin America and the Caribbean do not currently have access to the internet or digital services. Public officials participating in the roundtables acknowledged that rural areas lack sufficient connectivity and that there is an urgent need to close the connectivity gap between rural and urban areas if countries are to convince young people to remain in rural communities and “fall in love with farming.” Private sector participants expressed their companies’ commitment to work toward digitalization of agricultural operations in Latin America and the Caribbean, but noted that, despite being accelerated as a result of restrictions related to the COVID-19 pandemic, the process is still in the initial stages.

Sustainable Agriculture: Not Easy, Not Optional

“Producers and rural communities must be part of the discussions on sustainable agriculture.... Their expertise is critical and very much necessary for these discussions, not only because they are most affected by them, but because of the understanding they can offer all of us. ... The day-to-day existence of the farming community depends by definition on the sustainability of agriculture – crop rotation, the ability to maintain soil health, climate change – all of these are of significance to the communities which are affected by them.”

-- Mr. Eric Farnsworth

The experts assembled by IICA and COA agreed that improving the sustainability of agriculture is a pressing issue within the discussions on agri-food systems. Even as climate change is having a devastating impact on the agricultural sector in many countries – especially in the Caribbean region, where the high winds and flooding associated with stronger hurricanes and tropical storms are adding to the effects of other natural disasters such as volcanic eruptions and earthquakes – agricultural production is a major contributor to greenhouse gas emissions, accounting for some 30% of overall emissions.

But the experts also rejected simplistic solutions that place the burden for sustainability on producers and rural communities. Professor Lal explained that, “Sustainable food systems are those that ensure food and nutrition security for all without endangering the economic, social, or environmental welfare of future generations.” Achieving this will require rethinking policies on land use, support payments, taxes, and other key policies. It will require exploration of innovative approaches such as circular bioeconomies, negative emissions farming, and considering human, animal and environmental health—including soils, air, and water—holistically. It will require agri-food companies to include sustainability in their calculations and operations. And it will require including producers and rural communities in discussions about how best to achieve sustainability while continuing to work toward food security for all.

Experts again stressed the importance of collaborative efforts by governments and the private sector to improving sustainability. Some of these take the form of practical business practices, including strengthening market access, educating producers in vulnerable groups, including women, and helping farmers get certification and training that will encourage sustainable practices and improve revenue. Beyond this, companies are actively promoting
innovative concepts such as regenerative agriculture, which reconciles the challenge of producing adequate and nutritious food, on the one hand, with that of restoring ecosystems degraded by human activity. Regenerative agriculture promotes practices such as adding biological components to production and using technology to care for the soil, with the goal of reducing the need for fertilizers and pesticides and the consumption of water. More broadly, governments and companies need to work together to foster inclusive growth and equitable treatment of women in agriculture so that rural inhabitants can lift themselves out of poverty.

The Future of Agri-food Systems: A Shared Duty to the Next Generation

“There is no way we can achieve a truly integrated view of agriculture by using only one side’s vision or objectives. This is a team effort, and we need everyone’s vision, ideas, and support.”

-- Mr. Manuel Bravo

As policymakers rethink global agri-food systems, the sessions organized by COA and IICA highlighted the need for farmers and rural communities to play a leading role in such discussions. Policies that favor international trade, the use of innovative technologies, and greater access for producers and rural communities are the key to achieving the dual goals of food security and sustainable agri-food systems.

Experts from both the private and public sectors stressed the importance of keeping the next generation of farmers and rural communities in view. New technologies can bring a world of opportunities to young people, especially women and those from traditionally excluded communities. The future of farming belongs to these populations and global food security will depend on them. As IICA’s Dr. Otero concluded, “It is time to lay the foundation for a new rurality that will entice youth and women, in particular, encouraging them to view these places as what they truly are: areas of opportunity. We must recover lost ground and demonstrate that rural areas are strategic to the development of our countries. The private and public sectors, civil society, and universities must work together in this effort.”