

Forty-fourth Regular Meeting of the Executive Committee

Hemispheric Partnership for Food Security and Sustainable Development in the Americas: Summarized concept note on the Regional Dialogues on the Future of Agriculture

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- For a significant portion of human history, agriculture has been the main economic activity. In the 19th century, science, technology and the development of capitalist forms of production triggered profound changes in the agricultural structure and more recently in food systems. Agricultural transformation will be even more profound in the future, due to changing scenarios in science and technology, as well as geopolitical, environmental and social trends. Given the importance of agriculture and agrifood systems for Latin America and the Caribbean (LAC) and the global food and environmental balance, anticipating the types of changes that lie ahead will be essential in determining the region's ability to develop effective strategies and policies to address future scenarios, in particular, the second generation of collective actions under the Hemispheric Partnership for Food Security and Sustainable Development of the Americas.
- As such, the Inter-American Institute for Cooperation on Agriculture is proposing to organize a series of sessions for qualified representatives to exchange ideas on the future of LAC agriculture and its main drivers, to inform the development of consensus strategies at the regional level and the formulation of new national polices. This initiative will consist of a series of panel discussions on various topics, which will take place during the latter half of 2024, ideally at the same time as the various events scheduled for this year in relation to the Partnership.
- The debates will be structured in two parts. First, the moderator and two panelists will open the discussion, based on the concept note prepared specifically for that purpose. In the second part, two ministers from countries in the region will be invited to join the discussion.
- The debates, which will be published individually, will provide the basis for a document that will compile the main results, for use in a technical event prior to the meeting of the Inter-American Board of Agriculture in 2025.

Annex. Tentative content of the panel discussions

Panel Discussion 1. Digital Agriculture

Agriculture and rural life are undergoing a major transformation, stemming from the eruption of digital technologies, among other factors. The sheer scale and potential implications of this transformation for the functioning and structure of agrifood systems demonstrate the need to establish a public policy framework to guide and shape these changes, ensuring that the process results in more productive, resilient, sustainable and inclusive agrifood systems.

Through the perspectives of specialists in these topics, the dialogue will seek to analyze and anticipate how the eruption of these digital technologies will influence the evolution of agriculture and rurality in the Americas (potential benefits and risks, actions needed to mobilize digitalization and to avoid negative impacts, restructuring of the scenario for stakeholders and their roles, etc.).

1) Given the inevitable incorporation of digital technologies into agrifood systems, how could the structure of agriculture and rural life change between now and the next 10 years? What positive outcomes and possible risks could arise at the micro level (for example, the farmer) and at the macro level (for example, for the country)?

2) In a bid to ensure dynamic and responsible digital transformation in the countries of the region, what priorities and functions should public agricultural portfolios consider?

Panel Discussion 2. Trends, eating habits and nutrition

In the past, the focus was on "cheap calories" and "convenience foods". Various developments, such as rising urbanization and the involvement of women in the labor force, have changed the food industry, in particular with respect to processed and ultra-processed foods. Among the challenges affecting nutrition and health are consumer habits, food security, non-transmissible diseases and access to healthy diets.

- 1. What are the nutritional and health trends that are influencing the food demand?
- 2. What should be the focus of public policies with respect to health and nutrition?
- 3. What role will innovation play in the production of nutrient-rich and high-quality food?
- 4. To what extent will products of animal origin (such as dairy products and meat) impact hunger, malnutrition and global food security?

Panel Discussion 3. Climate change

Climate change is one of the most pressing challenges throughout the world. On the one hand, global warming is altering production conditions in different ecological zones and, on the other, extreme climate events are on the rise, such as droughts, heat waves and flooding, all of which are having a negative impact on agricultural output. Likewise, the reduction of greenhouse gas emissions has become one of the objectives of various economic activities, including agriculture. Thus, sustainable agricultural

practices, direct seeding and voluntary carbon markets have become extremely important. LAC agriculture is part of the solution to the challenge of climate change, as it can efficiently supply more food in an environmentally responsible manner. The agriculture sector sequesters carbon through photosynthesis in crops, pastures and forests. Therefore, the carbon balance (difference between emissions and carbon sequestered through photosynthesis) of different production systems, including in silvopastoral livestock production systems, must be measured and compared to confined systems.

- 1. What are the major trends with respect to global warming and the greater frequency and impact of extreme climate events?
- 2. What role will investment in innovation and technology play in the context of more extreme climate conditions and soil degradation, for example in adaptation and resistance to drought or efficient water management?
- 3. What will be the main mechanisms to drive innovation and channel resources to finance climate change adaptation, resilience and mitigation in the agriculture sector?

Panel Discussion 4. Geopolitics

The 2008-2009 financial crisis, the economic slowdown, increasingly protectionist economic strategies, the weakening multilateral trade system and the new geopolitical context of greater fragmentation and increased armed conflicts have affected the world of trade, in particular, agricultural trade.

Within this complex global framework more specific issues are emerging, such as the impact of environmental concerns and the decarbonization objectives, and their possible effects on global trade (for example, the European Union's From Farm to Fork and Green Deal programs, which include measures such as deforestation-free certification and the carbon border adjustment mechanism).

In this context, the strengthening of the multilateral trade system is critical from a financial, environmental, trade and peacekeeping perspective, among other areas. In particular, we must ensure that measures adopted in the fight against climate change are based on scientific evidence and do not become a hidden barrier to international trade, among other considerations.

- 1. What are the main trends and scenarios arising in terms of geopolitics, growth, trade and conflicts?
- 2. How can these scenarios impact agricultural production in LAC and what strategies and policies are needed to address this global uncertainty?
- 3. What scenarios do you anticipate in the multilateral financing system for development and how will it contribute to the expected transformations in the agriculture sectors and food systems in the region?
- 4. What measures should the countries of the region adopt to drive agricultural trade in the new global context of the World Trade Organization and in the region, considering, for example, actions with the potential to restrict agrifood trade?

Panel Discussion 5. Trends in rural life

In 2022, the global population surpassed 8 billion people. In 2050, this figure is expected to increase to almost 10 billion, with a consequent increase in the demand for food. There will be a proportional increase in the urban population, given the reduction in the rural population and the lack of

generational succession. Africa is the content that will see the greatest increase in population, whereas China and India are the countries with the largest populations. Forecasts suggest the China will experience a decrease in population, in contrast to the increase in India.

- 1. What changes do you foresee in agricultural structures and the composition of the labor force, as a result of population, migratory and urbanistic processes, among other factors?
- 2. What implications will they have for agricultural production and conditions in rural life?

Panel Discussion 6. Technological Innovation

In the last 50 years, the Green Revolution in agricultural technology has been pivotal to the increase in productivity and production. Currently, there are new demands and trade-offs (food security, climate change, biodiversity conservation and the nutritional quality of food). The region of the Americas is faced with inadequate investment in and funding of research and development (R+D) for agriculture, as well as a growing involvement of the private sector in the development of cutting-edge technologies. On the other hand, advances in biological sciences, data sciences, information and communication technologies and robotics are allowing us to enter terrain that up until recently was analytically inaccessible, and to compile and analyze data that facilitates more informed decision making by farmers. Among the new technologies are precision agriculture, artificial intelligence, remote monitoring, automation, drones, etc., all of which allow us to better understand soil quality variability and the variety and optimum amount of the seeds, agrochemicals and fertilizers needed to increase crop yields.

- 1. What role will science, technology and innovation play in boosting agricultural production, bearing in mind the limited available arable land and the new demands and trade-offs?
- 2. What disruptive developments do you foresee in different areas of innovation and technology and what will be their impact?
- 3. How should investment evolve and how will the region attract the funding needed for agricultural R+D?
- 4. How can digital technologies contribute to transforming agriculture, through the efficient and sustainable use of resources?
- 5. What are the major limitations that will have to be overcome in order to take advantage of these technologies?

Panel Discussion 7. Bioeconomy

The bioeconomy—defined as the production, utilization and conservation of biological resources, including related knowledge, science, technology, and innovation to provide information, products, processes and services to all economic sectors, with the aim of building a sustainable economy—has significant potential to transform society.

Agriculture and the rural environment, as sources of economic and social wealth creation, will experience significant changes in terms of the economic density of rural areas, as a result of various mechanisms, among them, greater efficiency and sustainability in agrifood system processes, due to technological convergence; cascading value addition; the creation of new value chains; improved nutrition and health; as well as the energy transition, environmental sustainability and climate resilience.

Given the wealth and diversity of natural resources in the region, the potential of the bioeconomy is increasingly important, given its transformative impact on society, through its use of resources to create economic and social wealth and its contribution to resilience and sustainable development. This trend, rather than slowing down, promises to intensify in the future, provided that the technological base of the bioeconomy becomes more easily accessible, while consumer demand and the global markets for biological products continue to grow.

- 1. What are the main transformative trends in the bioeconomy field, bearing in mind the types and availability of resources in the region?
- 2. What are the most disruptive trends and the most important conflicts that you foresee with respect to traditional activities?
- 3. How should we go about investing to fund the R+D and production that are required?
- 4. What economic transformations in rural areas do you foresee, stemming from the development of the bioeconomy?
- 5. What major limitations will affect our ability to capitalize on the opportunities of the bioeconomy?

Panel 8. Gender equality in agrifood systems

Agriculture is fundamental to society, given that it makes a significant contribution to food security, economic growth, rural development and environmental sustainability. However, it faces structural challenges that limit equality and sustainability in agrifood systems. Rural women, particularly in Latin America and the Caribbean, are affected the most, due to their limited access to productive and financial resources and various services. Although they play a crucial role in food security, many women lack their own income. They also face significant obstacles; for instance, their participation in agriculture has little visibility; the burden of caring for children, people with disabilities, the elderly or dependents falls heavily on them; and they are also affected by climate change.

The international community is calling to transform social structures to guarantee women's rights and, in turn, increase social well-being. Furthermore, bridging the gender gap could significantly increase the global gross domestic product. Therefore, it is crucial to foster generational integration, empowerment and substantive equality as pillars for the sustainable and inclusive development of agrifood systems. The purpose of this panel is to identify the actions required to advance towards greater equality, sustainability and inclusivity in agrifood systems.

- 1. What measures should be adopted in the agriculture sector to make progress in bridging gaps and, in turn, achieve greater food security?
- 2. In our hemisphere, rural women contribute to food security in various ways, such as through care work for which, unlike men, they receive no recognition or remuneration. What roadmap should be implemented in the agriculture sector to eliminate this disparity?
- 3. In 30 to 50 years, how will the digital transformation influence women's participation in agriculture?
- 4. What opportunities and benefits would bridging the gender gap afford in agrifood systems of the Americas?