

# Bioeconomy and Production Development Program



## Bioeconomy Business Models In Agriculture And Rural Areas

### BIOENERGY AND BIOMATERIALS

Use of primary or residue biomass (agricultural and agroindustrial residue or waste) to generate bioenergy and other bioproducts (as substitutes for fossil-based products)

Bioenergy - Biofuels (ethanol, biodiesel, biogas, etc.), Bioinputs, Biopolymers, Green chemicals, Food for humans & animals

### INCREASE IN THE EFFICIENCY OF TRADITIONAL VALUE CHAINS

Strategies throughout the value chain to increase total factor productivity, resulting in greater efficiency, reduced loss, and value adding, etc.

Agricultural and livestock products, Food

### ECOINTENSIFICATION

Strategies throughout the value chain to enhance the production efficiency and environmental sustainability of processes.

Organic products, Use of bioinputs, Technology to increase the efficiency and sustainability of water, air, soil energy, waste, biodiversity protection or consumption: precision agriculture, no till, integrated management, etc.

### BIOTECHNOLOGY APPLICATIONS

Biotechnology products, tools and processes to identify and address limitations in biological resources, by providing environmental solutions and developing improved foods

Plant genetic engineering, Biotechnology applications in human and animal health, Environmental biotechnology, Functional Foods

### THE VALUING OF BIODIVERSITY ATTRIBUTES

Identification, domestication and use of the physical and chemical properties of biological resources in rural areas to create intermediate products for other highly specialized industries

Products with quality attributes associated with their origin. Nutraceutical products. Super foods. Biocosmetics

### ENVIRONMENTAL REGULATORY AND SUPPORT SERVICES

Use of regulatory and support services for value chain production systems

Payment for environmental services, Carbon credits, Services for pollination, soil protection and improvement, ecosystem preservation, etc.

## The IICA Bioeconomy and Production Development Program

The guidelines underpinning the **Bioeconomy and Production Development Program of IICA** are to promote a vision, policies and innovations that fuel bioeconomy-based development, while driving production development in bioeconomy chains.

### Work areas of the program

- **Evidence, awareness- and capacity-building:** research, studies, workshops, seminars, and courses to develop the capacities of decision-makers and actors in the agricultural and rural sectors with respect to the new applications of the bioeconomy.
- **Roadmaps:** formulation and implementation of tools for use in developing country-specific roadmaps to capitalize on the bioeconomy.
- **Policy, regulatory and legal frameworks:** support for the management of policies, regulations and market incentives to facilitate and enable new applications of the bioeconomy in production in the agriculture sector and rural areas.
- **Chain investments and strategies:** support for the design and implementation of strategies, projects and investments that facilitate new bioeconomy business models in rural areas and agricultural value chains.

## ACTIVITIES OF THE PROGRAM IN 2019

Area	Evidence, awareness- and capacity-building	Roadmaps	Regulatory and policy frameworks	Value chain investments and strategies
<b>Hemispheric</b>	<ul style="list-style-type: none"> <li>• Methodology to assess the bioeconomy's contribution to development</li> <li>• Online course on the bioeconomy in Latin America and the Caribbean (LAC)</li> <li>• Technical documents on the potential, policies and strategies for the bioeconomy</li> <li>• International Allbiotech Seminar</li> <li>• Online Seminars (live and asynchronous)</li> <li>• Infoagro bioeconomy knowledge platform</li> </ul>	<ul style="list-style-type: none"> <li>• Guide for the development of roadmaps to capitalize on the bioeconomy in agriculture and rural areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Guide for the development of policies and regulations to foster the bioeconomy</li> <li>• Observatories for the LAC bioeconomy</li> </ul>	<ul style="list-style-type: none"> <li>• Guides for the development of bioeconomy business models in chains and territories</li> <li>• Technological research on new applications of the bioeconomy</li> </ul>
<b>Regional &amp; National</b>	<ul style="list-style-type: none"> <li>• Organization of workshops, seminars, online courses and field trips to build awareness and capacities with respect to the use of the bioeconomy in 14 countries in LAC</li> </ul>	<ul style="list-style-type: none"> <li>• Support for the defining of bioeconomy roadmaps in Uruguay, Bolivia, Costa Rica, Mexico, Belize and Ecuador.</li> </ul>	<ul style="list-style-type: none"> <li>• Support for the strengthening of bioeconomy policies and strategies in Argentina, Belize, Costa Rica, Ecuador, Bolivia, Mexico and Uruguay.</li> </ul>	<ul style="list-style-type: none"> <li>• Support for the design of strategies for bioeconomy businesses in the coffee, cocoa, avocado and honey chains in eight LAC countries.</li> </ul>

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