



Food and Agriculture Organization
of the United Nations

VOLUNTARY GUIDELINES FOR AGRO-ENVIRONMENTAL POLICIES



IN LATIN AMERICA AND THE CARIBBEAN

**Strengthening Agro-environmental Policies in Latin America and the Caribbean
through Dialogue and the Exchange of National Experiences**

Brazil-FAO International Cooperation Program

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Food and Agriculture Organization of the United Nations
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CONTENTS

FOREWORD	v
INTRODUCTION	1
Conceptual framework	1
Definitions	1
Objective	3
Nature and scope	3
Principal reference instruments	3
GUIDING PRINCIPLES	5
STRATEGIC GUIDANCE	7
A territorial approach to rural development	7
Inclusive institutionalism	8
Sustainable production and services model	9
Internalizing ecosystem values	9
Equity in the generation and distribution of wealth	11
SECTORAL ACTIONS	11
Economic instruments	11
Measures of environmental management	12
Research	13
Education, training and outreach.....	13
Market and consumption	14
AGRO-ENVIRONMENTAL POLICY GOVERNANCE	15
IMPLEMENTING THE VOLUNTARY GUIDELINES AT THE NATIONAL LEVEL	16
Consensus-building at the national level	17
Defining an implementation plan	17
Building and strengthening capacities	18
APPENDIX	19
Appendix 1: Organizations that participated in national and regional dialogue to develop the Voluntary Guidelines	19

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FOREWORD

In recent years, the Latin America and Caribbean region has stood out for its concrete actions to eradicate hunger and promote food security. It was the first region to work on eradicating hunger through the Hunger-Free Latin America and the Caribbean Initiative 2025, and has also implemented regional initiatives to achieve Zero Hunger.

Furthermore, countries in the region have implemented programs and projects to promote sustainable production practices and the sustainable use of natural resources, carried out on the initiative of governments or civil society organizations, with the support of multilateral organizations and international cooperation.

It is important to highlight the global relevance of Latin America and the Caribbean when it comes to the availability of arable land, forest, fishing resources, water and biodiversity. The region, which represents 15 percent of Earth's surface, receives 30 percent of rainfall and generates 33 percent of the world's water. Of the available land area, 37 percent is used for agriculture and 47 percent is covered with forest, making the region a major global reserve of agricultural land and forest space.

The FAO report on the Panorama of Food and Nutritional Security in Latin America and the Caribbean¹ 2015, for the triennium 2014-2016, indicated that undernourishment has fallen to 5.5% and the total number of undernourished people to 34.3 million. With this, the region has achieved the hunger target set by the Millennium Development Goals (MDGs) and the World Food Summit Goal (WFS). Nonetheless, the MDGs follow-up agenda reports that Latin America and the Caribbean are far from guaranteeing environmental sustainability and shows that the region is falling behind in accomplishing the Seventh Goal.

Regarding its heterogeneity, the countries of the region share common environmental challenges, including climate change, terrestrial and marine biodiversity loss and management of water resources and land. There are at least 200 million hectares of degraded land, mainly as a result of unsustainable agricultural practices and other anthropogenic processes, such as mining. Latin America and the Caribbean is still the region with the largest forest loss after the establishment of the MDGs. In the period between 2000 and 2010, South America had the largest forest loss in the world, estimated at four million hectares a year², whereas CO₂ emissions have continued to increase. While the loss rate substantially decreased between 2010 and 2015, the net change in forest area in the last five years has been on the order of 2.4 million hectares³.

When it comes to fisheries, the depletion of marine resources is reflected in declining catches, which have fallen from 20 million tonnes in 2005 to 12 million in 2010. Therefore, overfishing remains an issue that requires immediate attention in the region, despite the fact that the region has plentiful fishing resources. This situation is further exacerbated by climate change and its effects on ocean temperatures, which makes the overexploited resources even more vulnerable. At the same time, the poorest populations face major disaster risks as they become increasingly vulnerable in the face of climate change and natural threats⁴.

¹ FAO. Panorama of Food and Nutritional Security in Latin America and the Caribbean 2015. Rome: FAO. 2015

² FAO. Global forest resources assessment- 2010. Main report. Rome: FAO. 2010.

³ FAO. Global forest resources assessment- 2015. Rome: FAO. 2015

⁴ United Nations. Sustainable Development in Latin America and the Caribbean. Follow-up to the United Nations Development Agenda beyond 2015 and to Rio+20. March of 2013. United Nations.

With a current population of more than 600 million people and forecast population growth to reach around 800 million by 2050, the region faces growing pressure on its natural resources. The impact of environmental degradation mainly affects the most vulnerable social sectors, such as family and smallholder farming, artisanal fisheries and small-scale forestry, because they depend directly on natural resources for their livelihood and income generation.

In Latin America and the Caribbean, the family farming sector totals around 17 million productive units and encompasses a population of 60 million people⁵. Family farming represents 75% of total productive units in the region, and in some countries, it exceeds 90%. “Family farming” encompasses a wide variety of agreements and production systems, and in many countries, the farming sector also includes indigenous communities that have specific political needs.

In the last decade, overcoming of hunger and poverty and implementing mitigation and adaptation measures to respond to climate change have become top priority on the global agenda. The financial crisis of 2008 and its effects on the food supply and the increasing frequency of extreme climate events have made clear how fragile agriculture is and has shown the urgent necessity of implementing measures to reduce to a minimum its negative effects and maximize its positive effects on the environment. The Copenhagen Accord reached in 2015 set goals to reduce greenhouse gas emissions, which in many developing countries result from deforestation and changes in land-use, favouring the expansion of agriculture and livestock activities, as well as adaptation.

Broadly speaking, Latin America and the Caribbean are still home to unsustainable consumption and production patterns, and the region has not transformed its production model. As to the environment, countries in the region have significantly invested in the formation of institutions and legislative enactment since 1992. Nevertheless, insufficient coordination in public action, low awareness of environmental degradation effects and scarce valuation of ecosystem services hinder the efforts undertaken. In some cases, it is also important to mention the lack of technological opportunities for a shift towards more sustainable production systems.

In addition, rising land concentration and land grabbing in some countries in Latin America might have an impact on poverty, food security and the sustainability of the use of land and water resources in the region.

An improvement in coordination and greater consistency when it comes to public action in matters of sustainable development policies, together with the effective incorporation of incentives, must be carried out through practical measures. This should be the result of a process that involves different sectors and levels of government and that designs public policies with a strategic and guiding vision. Therefore, sustainable development in Latin America and the Caribbean requires that States play a guiding role among the public and private actors involved; it should also be the result of coordination and consistency in public action and involve stakeholders at all levels.

It is essential to contribute to the understanding of policies with an agro-environmental guiding perspective and current and potential inter-sectoral linkages, which should be integrated into the improvement of governance, the implementation of current sectoral policies and the design and implementation of incentives in agro-environmental systems.

⁵ FAO. 2014. Family Farming in Latin America and the Caribbean. Policy recommendations. Santiago, Chile: FAO. 2014.

Issues that are also a fundamental part of the agro-environmental analysis are, for example, food production, from the perspective of food security and sovereignty; environmental protection; climate change; environmental, economic and social sustainability criteria; promotion of sustainable agriculture, such as organic and ecological farming; sustainable forest management and sustainable fisheries; and strategies to improve the well-being of the population through hunger and food insecurity reduction. Nevertheless, in most countries, the conceptual, operational and instrumental integrity of sectoral policies needs to be clarified and improved, creating spaces for dialogue and concrete proposals for harmonization and coordination, in order to head towards an agro-environmental approach that contributes to reducing food insecurity, poverty and environmental degradation.

This document containing the FAO's Voluntary Guidelines on agro-environmental policies is mainly directed at people in charge of making and implementing policies on agriculture, livestock, forestry, fisheries and aquaculture in Latin America and the Caribbean. The guidelines are the result of an extensive consultation process and debates carried out through the project "Strengthening Agro-environmental policies in Latin America and the Caribbean Through Dialogue and Exchange of National Experiences," implemented by Brazil between 2012 and 2015 in the framework of South-South Cooperation, with the collaboration of Brazil, Chile, Colombia, Mexico and Nicaragua in the first stage, and Costa Rica, Cuba, Panama and Paraguay in the second stage.

One fundamental goal of FAO and Brazil is to support countries to develop strategies, methods and tools aimed at improving food security and overcoming poverty in the framework of sustainable development. The formulation of Guidelines is one of the mechanisms adopted to provide such support. This document of Voluntary Guidelines on agro-environmental policies proposes a set of principles and strategic guidelines for the implementation of sectoral actions through a governance system that strengthens local ownership and social participation. In this sense, these Guidelines are presented as an instrumental framework meant to contribute to and achieve the goals of the Global Agenda Post-2015.

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Brazil: Secretary of Extractivism and Sustainable Rural Development, Ministry of Environment (MMA), Brazil, and Brazilian Cooperation Agency (ABC).

Colombia: Department of International Affairs of the Ministry of Environment and Sustainable Development (MADS), in coordination with the Ministry of Agriculture and Rural Development.

Costa Rica: Executive Secretary for Sectoral Agriculture Planning, of the Ministry of Agriculture and Livestock.

Cuba: Ministry of Agriculture (MINAG) and Ministry of Foreign Trade (MINCEX).

Mexico: National Commission for the Knowledge and Use of Biodiversity (CONABIO).

Panama: Ministry of Agricultural Development (MIDA).

Paraguay: General Directorate of Planning, of the Ministry of Agriculture and Livestock.

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1. INTRODUCTION

1.1. Conceptual framework

The concept of agro-environmental policy began to be used in the 1980s in Europe, initially to designate isolated measures taken in response to specific environmental problems caused by agricultural activity. Later on, in view of a worsening environmental crisis, the challenges posed by climate change and rural poverty (which in Latin America and the Caribbean are still central problems), it became necessary to adopt approaches that reflect a more comprehensive vision of public policies and that consider the synergies among different development sectors: agriculture, forestry, fisheries and aquaculture, all of which depend on the services provided by ecosystems. Therein emerged the need to come up with sustainable production models to reduce to a minimum the negative environmental impact and at the same time optimize production, conserving and using natural resources in an efficient way within a framework of commitment to reducing rural poverty and guaranteeing food security. In other words, it has become evident that a shift towards sustainable development requires recognizing and understanding the interactions between the economy, society and natural ecosystems, and acting in accordance with them, developing measures with a wider scope in view of the challenges presented by situations such as changing production patterns and consumption, natural resource scarcity, technological innovation, eradication of extreme poverty, climate change, burgeoning inequality and rising food insecurity in an ever-growing population.

The concept of agro-environmental policies used in this document implies a sustainable vision of the production systems of food, goods and services in agriculture, forestry, fisheries and aquaculture. The definition of agro-environmental policy differs from common agricultural policy in that it incorporates a systemic and holistic approach and multiple goals, founded on the economic, socio-cultural and environmental dimensions of sustainability. Furthermore, it is not conceived of as a series of isolated measures, but rather as an articulated set of different strategic instruments for planning and governance adopted by governments. Seen this way, the concept includes explicit sustainability principles for agriculture, forestry, fishery and aquaculture production, and aims at extending the potential environmental benefits of these activities and at reducing the negative impact generated for ecosystems and food and nutrition security in a scenario of climate change.

In this way, agro-environmental policies should be conceived of and established in order to reconcile the economic viability of food and tradable goods production with environmental conservation and the sustainable management of natural resources. Moreover, the main objective of these policies must continue to be overcoming rural poverty and ensuring food and nutrition security.

1.2. Definitions

According to this conceptual framework, the following definitions will be considered in this document:

- **Climate change:** According to the United Nations Framework Convention on Climate Change, climate change means “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.”
- **Governability:** In general, this term refers to the ability to govern, namely, the existence of conditions for the exercise of political, economic and administrative authority to manage the

affairs of a country at all levels. In this document, the term is used to refer to the measures that should be taken by the Governments in order to advance towards the implementation of agro-environmental policies.

- **Governance:** Refers to the manner, method and system of governing. In this document, the term is understood as a set of institutional arrangements, instruments and processes that include public, private and civil society institutions for making decisions on the development, implementation and monitoring of agro-environmental policies.
- **Agro-ecological production:** Productive system that harnesses local resources and the synergy of processes at an agro-ecosystem level to the maximum in order to optimize the integration of productive capacity, use and conservation of biodiversity and natural resources, ecological balance, economic efficiency and social justice.
- **Risk:** In this document, the term risk is understood as a real or potential threat in the sense that some damage might occur as a consequence of a certain land-use system or because of the use of a given input, technology or management method in food and goods production. The term is used broadly and, depending on the context, it might mean environmental risk and/or risk to human and/or animal health.
- **Food and nutrition security:** The realization of the human right to physical and affordable access to sufficient, nutritious, safe and culturally-acceptable food that meets dietary needs and food preferences for an active and healthy life, without jeopardizing access to other basic needs.
- **Food sovereignty:** The right of each country to define its own sustainable policies and strategies of food distribution, consumption and production that guarantee the right to food for the entire population, respecting their own cultures and different production methods.
- **Sustainability:** A development system that takes into account ecological, economic and social processes, such as intra- and interregional equity, on different temporal, spatial and institutional scales, aiming at meeting the needs of present generations without putting at risk the capacity of future generations to meet their own needs.
- **Subsidiarity:** The term means to share responsibilities and respect competencies, understanding that actions should be taken at the closest possible level to citizens. In this regard, the national sphere of government should only intervene in those areas which are not of its exclusive competence, in the case that, and as long as, the goals of the pursued action cannot be reached entirely at a local, municipal or provincial level.
- **Territory:** Refers to a geographically-defined physical space and the multidimensionality that constitutes it, which includes environmental, socioeconomic, cultural, political and institutional dimensions shaped throughout history and where social relationships take place.
- **Climate variability:** Refers to climate variations (such as temperature and rainfall) in average values on all spatial and temporal scales.

1.3 Objective

The aim of this document containing Voluntary Guidelines is to provide States with guidance for improving their policies using an agro-environmental approach that links together society, territory, environment and economy in a more integrated and harmonious manner and for developing such policies in collaboration with different social actors. In addition, these policies should aim at moving towards sustainable development and achieving food and nutritional security, in view of a changing global scenario.

Furthermore, the document is designed to contribute to:

- i. Establishing agreed principles that promote a favourable political, legal and institutional framework and favourable initial conditions that facilitate the development and implementation of agro-environmental policies.
- ii. Providing guiding elements for policies with an agro-environmental perspective, considering their inter-sectoral linkages in order to improve the planning, governance and implementation of different instruments involved in current sectoral policies.
- iii. Offering a framework to governments and citizens to evaluate the progress of actions undertaken in terms of agro-environmental policies.

1.4 Nature and scope

- i. The following Guidelines for Latin America and the Caribbean are voluntary in nature.
- ii. They should be interpreted in accordance with the obligations established in national and international law, considering the voluntary agreements established in the framework of regional and international instruments.
- iii. They can be used mainly by States, enforcement agencies, judicial authorities and local governments.
- iv. They can also be considered by agriculture organizations, fishers, forest user groups, shepherds, indigenous peoples, afro-descendent communities, civil society, the private sector, academic institutions and people interested in the governance of policies related to agriculture, livestock, forestry, fisheries and aquaculture.

1.5 Principal reference instruments

These Guidelines are based on international rules and agreements and in no case stand in opposition to the rights, jurisdiction and duties of governments guaranteed by international agreements, nor to their sovereign rights over their resources and territory.

The legally binding international instruments related to agro-environmental policies that served as a reference for these Guidelines are as follows:

- i. Ramsar Convention on Wetlands (RAMSAR, 1971), intergovernmental agreement that provides a framework for national action and international cooperation for the conservation and use of wetlands and their resources.
- ii. United Nations Convention on the Law of the Sea (UNCLOS, 1982), intergovernmental agreement that establishes the fundamental principle that States should cooperate to promote the conservation and wise use of fishery resources in and out of the exclusive economic zone.
- iii. ILO Convention 1969 Concerning Indigenous and Tribal Peoples in Independent Countries (ILO 1989), intergovernmental agreement that contains the international standards for the protection of rights of indigenous and tribal peoples.
- iv. Convention on Biological Diversity (CBD, 1992), intergovernmental treaty that defines the principles that govern the conservation of biological diversity, and the sustainable use and fair and equitable sharing of benefits.
- v. United Nations Framework Convention on Climate Change (UNFCCC, 1992), intergovernmental treaty that proposes stabilizing greenhouse gas concentrations in the atmosphere.
- vi. United Nations Convention to Combat Desertification (UNCCD, 1994), intergovernmental treaty that recognizes the need for the sustainable management of natural resources in fragile arid and semi-arid ecosystems.
- vii. Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (United Nations Environment Program - UNEP and FAO, 1998), treaty that promotes shared responsibility and cooperation in order to regulate the international trade of chemicals and pesticides.
- viii. Cartagena Protocol on Biosafety of the Convention on Biological Diversity (SCBD, 2000), agreement that promotes the precautionary principle and biosafety through norms and procedures for safe transfer, handling and use of living modified organisms resulting from biotechnology (genetically modified organisms), focusing specially on trans-boundary movements.
- ix. International Treaty on Plant Genetic Resources for Food and Agriculture (FAO, 2006), treaty that establishes conservation standards and the sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of benefits arising from their use, according to the Convention on Biological Diversity.
- x. Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity (ABS/CBD, 2010).

The following non-legally binding international documents also served as a reference for these Guidelines:

- i. Universal Declaration of Human Rights (UN, 1948).
- ii. United Nations Declaration on the Rights of Indigenous Peoples (UN, 2007).

- iii. World Soil Charter (FAO, 1982).
- iv. Code of Conduct for Responsible Fisheries (FAO, 1995).
- v. Guidelines for Integrated Coastal Management and Agriculture, Forestry and Fishery (FAO, 1998).
- vi. Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security (FAO, 2005).
- vii. Voluntary Guidelines on Responsible Management of Planted Forests (FAO, 2006).
- viii. Fire Management Voluntary Guidelines (FAO, 2007).
- ix. Voluntary Guidelines on Responsible Governance of Land, Fishery and Forest Tenure (FAO, 2012).
- x. Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Eradication of Poverty (FAO, 2014).

2. GUIDING PRINCIPLES

The Guidelines in this document are based on the following guiding principles:

- i. **Food sovereignty:** All countries have the right to define their own sustainable food production, distribution and consumption policies and strategies that guarantee the right to healthy and nutritious food for all people, respecting their culture, and the different production and trading systems and management of rural areas.
- ii. **Sustainability:** Production activities should remain within the limits of the carrying capacity of ecosystems and not exceed it. Furthermore, the conservation of available natural resources should be guaranteed, such as biodiversity, soil fertility, water availability and carbon capture.
- iii. **Respect for nature:** Nature, where life is created and carried out, has the right to full respect, concerning its existence, maintenance and the regeneration of its life cycles, structure, functions and developmental processes.
- iv. **Respect for the common good:** Water, air and land are natural collective goods; therefore, the grabbing, destruction or misuse of these should be prevented. Moreover, the universal right to have an environment that is balanced and free of pollution should be respected.
- v. **Precautionary principle:** The lack of full scientific certainty should not be used as a reason to postpone the adoption of efficient measures aimed at preventing the overexploitation of natural resources and its negative consequences on the environment, economy and society. Moreover, the security of people and the environment should be prioritized in view of the existence of technology proposals that are not safe or might have adverse impacts.

vi. **Respect for cultural diversity:** Ethnic diversity and multiculturalism are intrinsic characteristics of Latin America and the Caribbean. Therefore, policies should recognize and value this diversity, respecting traditional knowledge and different types of social organization and territorial governance of peoples.

vii. **Social participation:** Social participation is a key factor for the success of public policies. It is therefore essential to ensure participation mechanisms that include all social actors in the planning, development, monitoring and assessment of decisions that concern them.

viii. **Prior, informed and consensual consultation:** As established in the United Nations Declaration on the Rights of Indigenous Peoples and in the ILO Convention 1969, this guiding principle is based on the right to prior consultation as a political instrument directly related to the participation of indigenous peoples and traditional communities in decisions that involve their territory and way of life.

ix. **Equity and social integration:** Sustainable development is not viable without equity. This implies to recognize the need of adopting differentiated policies that enable social inclusion and the protection of values and customs of peasant communities, indigenous and afro-descendant peoples, artisanal fishers and other communities.

x. **Gender equality and equity:** Women are key actors in achieving sustainable agriculture, and food and nutritional security. Nevertheless, recognition of what women contribute or might contribute to development is still limited. In this sense, it is necessary to adopt specific measures that promote women's access to the benefits, resources and opportunities that development offers and ensure equitable participation in public decisions. Gender equity is a transversal element in development, and as such, it should be present in social, business development and agro-environmental policies.

xi. **Rural youth inclusion:** Rural youth play an important role in the present and future sustainability of agriculture, forestry, fishery and aquaculture production. Their needs and conditions are specific. Therefore, differentiated public policy measures are required to guarantee the economic inclusion of youth and their participation in development processes.

xii. **Territorial approach:** Countries consist of different territories with ecological, socio-productive and cultural specificities. Territories with similar characteristics can be grouped into macro-zones. Agro-environmental policies should adapt to and take into account the characteristics of each territory or macro-zone as a fundamental condition to succeed.

xiii. **Ecosystem approach:** The implementation of effective agro-environmental policies requires a holistic vision of ecosystems, based on the integrated management of land, water, seas, forests and living resources, and recognizes that human beings, with their cultural and socioeconomic diversity, are a component of ecosystems and their interactions.

xiv. **Adaptive management:** The process of change from sectoral measures to integrated agro-environmental policies is gradual and entails continuous improvement, by learning from the outcomes of previously implemented policies and procedures.

xv. **Subsidiarity:** The decentralization of decision-making processes and empowerment of local governments, social organizations and community initiatives contribute to making public policies more effective. In this regard, it is necessary to consider mechanisms that enable the development, implementation, monitoring and assessment of agro-environmental policies as processes close to citizens.

xvi. **Transparency:** Transparency is a key element of public policy management, as it facilitates citizen participation in the development process through the establishment of public trust between citizens and governments.

3. STRATEGIC GUIDANCE

The socioeconomic and environmental sustainability of agriculture, forestry, fishing and aquaculture activities requires structuring actions that create the necessary conditions for sectoral measures to be effective. In this sense, States are advised to consider the following strategic guidance in agro-environmental policies.

3.1 A territorial approach to regional development

Promote rural development with a territorial approach and in accordance with the principles of conservation and the sustainable management of natural resources through the following priority actions:

- i. Promote land-use planning in accordance with the principle of conservation of natural resources in the production of food, goods and ecosystem services. Also, promote the right of access to land and territory, especially for the most vulnerable groups. There should be regulations on land tenure and demarcation of the indigenous territories and protected areas managed by traditional and peasant peoples and communities. This should be done according to the Voluntary Guidelines on the Responsible Governance of Tenure of Land and through the implementation of reference frameworks that guarantee proper protection against abuse.
- ii. Develop strategies for land-use planning in collaboration with all different social actors in order to strengthen co-management processes on land, and in coastal and maritime territories.
- iii. Adopt environmental criteria in land-use planning, taking into account the sustainable planning and management of drainage basins, in order to minimize adverse effects on areas of groundwater recharge, springs, protected zones, forest reserves and other natural resources. In addition, zones surrounding protected areas or other zones relevant for the conservation of biodiversity and natural resources should be safeguarded against the use of pesticides and products for veterinary and fishing purposes that might be harmful to the environment, to human and animal health and to genetically modified organisms.
- iv. Promote agro-environmental management strategies that aim at preserving biodiversity and promoting land sparing⁶ and land sharing⁷, according to the specific ecosystem, social and economic situation and conditions of the territories, and in accordance with the multiplicity of goals of the agro-environmental policies.

- v. Privilege the exercise of rights to the use of resources in highly vulnerable fishing communities, in accordance with the Guidelines for Securing Sustainable Small-Scale Fisheries.
- vi. Implement protection measures in areas where native species and their wild relatives live, relevant to the diet and culture of each country, with special care for the centres of genetic origin and diversity, considering them a public asset.
- vii. Promote measures for fisheries and aquaculture management, considering the limits on the exploitation of different species and sustainable water use.
- viii. Generate guarantees in the regulatory framework and in institutional arrangements in order to ensure the creation and management of Natural Protected Areas, as part of a proactive strategy of biodiversity conservation, and not only as an environmental mitigation, reparation or compensation measure for environmental projects and activities.
- ix. Promote regulations and guidelines aimed at regulating the market for land and water, in an effort to control rentier speculation and guarantee the rights to territory and access to land and natural resources for indigenous peoples, peasant communities and artisanal fishers.
- x. Improve the land registration system, by integrating environmental and fiscal data through the use of technologies that promote integrated management and easy access to information.

3.2 Inclusive institutionalism

Encourage inclusive institutionalism between the private and public sector, and civil society, by promoting synergies through the following priority actions:

- i. Create mechanisms that encourage the operability of inter-sectorality between the different areas of government responsible for the formulation and implementation of agro-environmental policies.
- ii. Pursuant to the principle of subsidiarity, promote synergies among various national, territorial or local bodies in order to generate knowledge about the territory that serves as a basis for the implementation of real policies developed from a local to a national level.
- iii. Encourage adjustments within the institutional structure, for the bodies responsible for the implementation of policies to be able to assist and include all productive sectors, especially family and peasant farmers, indigenous people, small-scale fishers and aquaculture farmers with limited resources.
- iv. Create and strengthen government management capacities to formulate, implement and manage agro-environmental policies.
- v. Strengthen the institutional capacity to guarantee the implementation of the necessary control mechanisms for the protection of the environment.
- vi. Boost programs and projects that have sufficient and stable resources, at all government levels, and that promote and create the necessary conditions to achieve systems of agriculture, forestry, livestock farming, fishing and aquaculture that are sustainable and ecological.

vii. Enhance legislative frameworks that acknowledge and favour social participation within the governance system of the agro-environmental policies.

3.3 Sustainable production and services model

In view of the scenario of climate change, transform the agricultural practices commonly adopted by a production model based on the intensive use of consumables and natural resources into a model of sustainable production and services through the following priority actions.

- i. Draft and include environmental criteria in the process of decision-making at different levels and in different areas of government, taking into account the conservation of biological and cultural diversity as part of the pillars of the national strategies for sustainable development and the promotion of practices oriented towards environmental protection.
- ii. Take into account the formulation of political instruments that encourage a reduction in the use of pesticides, synthetic fertilizers, and of water and energy in agriculture, forestry, fishing and aquaculture activities.
- iii. Enhance the regulatory framework aimed at promoting and guaranteeing a shift towards sustainable production systems that eliminate the use of synthetic pesticides, and evaluate the use of GMOs according to specific conditions, within the framework of the principle of precaution.
- iv. Adjust regulations on the use of pesticides and agrochemicals in general to international standards, taking into account the progressive elimination of products toxic to the environment and human health that are prohibited in other countries.
- v. Develop climate change adaptation plans in the areas of agriculture, livestock farming, forestry production, fishing and aquaculture, based on a territorial and participatory approach.
- vi. Develop plans for prevention, response, and mitigation in view of potential environmental disasters, in an effort to overcome the threats of climate change.

3.4 Internalizing ecosystem values

Internalize the value of natural resources and ecosystem services in the policies and models for sustainable production in the agriculture, forestry, fisheries and aquaculture sectors through the following priority actions:

- i. Promote the progressive elimination of subsidies, and of economic and non-economic incentives to technologies and models of land occupation and use, which jeopardize the environmental and socioeconomic sustainability of the territory.
- ii. Strengthen the regulations on the protection of the environment, by adopting mechanisms that inhibit crimes against the environment and that establish integrated follow-up and control methods.
- iii. Adjust the regulations on land and water use to guarantee their conservation, productivity and ecosystem services.

iv. Advance in the adoption and application of the Ecosystem Approach to Fisheries (EAF) by emphasizing the social, cultural, political and institutional processes and factors.

v. Implement mechanisms that penalize the environmental impact caused by production activities by establishing regulations that penalize those who pollute the environment, according to the polluter-pays principle.

vi. Encourage compensation program for agents responsible for the conservation of environmental goods and services, according to the supplier-recipient principle. For example, promote compensations for conditional income transfer programs or to programs that bear part of the costs of the adoption of soil and water conservation practices.

vii. Develop legal arbitration systems and services and other mechanisms that facilitate conflict mediation and resolution over matters that have an impact on the sustainability of natural resources.

viii. Strengthen the regulatory framework that orients and supports the agro-ecosystem restoration and recovery processes.

3.5 Equity in the generation and distribution of wealth

Boost conditions for productivity in the territories through the implementation of equitable wealth generation and distribution strategies through the following priority actions:

i. Align agro-environmental policies with other policies on social inclusion and reduction of poverty, food and nutrition security, health and nutrition, environmental protection, and mitigation and adaptation to climate change.

ii. Boost the adjustments within the legal framework that are necessary for the development of structuring agro-environmental policies that are accessible to all social sectors, considering the different producers' typologies and patterns as the basis for the design and application of regulation and promotion programs.

iii. Promote investment in infrastructure to improve the living and production conditions in rural zones, especially in remote areas, in order to ensure proper access to healthcare, education, basic sanitation, communication, access routes and to processing and storing equipment for production and trading.

iv. Adequate tax laws in order to address the specific features and needs of different social sectors, promoting sustainable ventures at the local level.

v. Adequate regulations on seeds and seedlings to guarantee the right of farmers to access plant and animal genetic resources (land and aquatic), in accordance with the International Treaty on Plant and Animal Genetic Resources for Food and Agriculture.

vi. Adequate regulations on the health and safety of products, considering the specific characteristics of the productive sectors and of the local, regional, national and international trading channels, guaranteeing the economic inclusion of small ventures.

- vii. Adequate agro-industry regulations, so that they favour the economic inclusion of small ventures and the improvement of short trading circuits through the direct sale of fresh or seasonal products, minimizing the intermediation between family farmers and consumers.

4. SECTORAL ACTIONS

Implementing efficient agro-environmental policies requires a set of sectoral actions that favour a shift towards sustainable or agro-ecological production systems over those that make intense use of agrochemicals and harm the environment.

Agro-environmental policy instruments should promote the integration of production systems into landscape management efforts in order to address ecosystem degradation and biodiversity loss caused by deforestation, among other factors. At the same time, they should encourage programs for soil conservation and rehabilitation of degraded land that seek to reduce the stress on natural forests and protected areas caused by agriculture activities. They should also foster sustainable coastal and inland fishing systems, which do not exceed the carrying capacity of ecosystems and that seek to eliminate fishing methods that over-exploit fishing resources and harm sensitive species.

Accordingly, States are encouraged to consider implementing the following sectoral actions:

4.1 Economic instruments

- i. Unbind the approval and granting of credits from the compulsory use of specific technological packages and input products that cause negative impacts on the environment, and on human and animal health.
- ii. Consider the inclusion of environmental risk management plans in agricultural credit granting projects, and establish resilience evaluation measures that consider the costs involved with vulnerability and risk, both in risk management premiums and in the assessment of interest rates.
- iii. Increase and strengthen credit lines that aim at propelling agro-ecological production, sustainable fishing and the sustainable management of forests, under conditions that are in accordance with each productive sector's ability to pay. Moreover, favour the production of local and native species, varieties, and breeds, and set annual goals for the performance of the allocated resources.
- iv. Implement and bolster mechanisms for agricultural insurance against environmental risks or catastrophes, allowing producers to continue with their production activities, earn an income and improve their quality of life.
- v. Implement plans that eliminate tax exemptions and other economic incentives for practices, technologies and input products that have a negative impact on the environment and on human and animal health.
- vi. Adopt economic incentive mechanisms that prompt development for forest conservation, degraded area restoration, water resource conservation, the efficient use and management of water, and soil conservation practices.

vii. Consider the possibility of adopting mechanisms for ecosystem and environmental services compensation to raise public and private funds to value environmental services and encourage the producers to adhere to proposals for the sustainable administration and management of natural resources.

viii. Review, strengthen and restructure pricing tools related to the use of water through the application of differential rates in accordance with the production system or process.

ix. Consider using funds to prevent, mitigate, or re-establish production areas in case of natural or anthropogenic (due to human mishandling) disasters.

x. Implement mechanisms for environmental certification, which would be accessible and appropriate for all productive sectors.

4.2 Measures of environmental management

i. Strengthen institutional capacity to monitor compliance with regulations on environmental protection through information management systems and technologies that harness available materials and human resources.

ii. Guarantee human and budgetary resources for the effective management of protected land and marine areas, and ensure the necessary environmental services for sustainable production.

iii. Implement plans to gradually reduce the use of pesticides in animal and vegetable production by promoting agro-ecological principles.

iv. Consider regulations within the environmental licensing schemes that acknowledge and promote sustainable traditional practices for production, fishing and native forest management; and at the same time, enable the most vulnerable social groups to comply with environmental liability regulations.

v. Regulate and monitor the activities of large agriculture, fishing and forest companies so that they produce healthy foodstuff and that the degradation of soil, forest and water resources is prevented.

vi. Adopting the ecosystem approach, regulate fishing activities in accordance with past and present hydrological and maritime conditions and apply fishing regulations based on the natural production of the maritime and aquatic system, and on the bionomic and ecological characteristics of the species.

vii. Articulate the follow-up and monitoring actions conducted by health and environmental authorities, guaranteeing the institutional structure and means necessary at all levels of government to effectively enforce environmental sanctions.

viii. Develop and implement control measures against terrestrial and aquatic invasive species to protect local biodiversity.

4.3 Research

- i. Revive ancestral knowledge and develop the capacity to innovate by encouraging collaborative research networks that combine traditional and scientific knowledge.
- ii. Increase the number of research programs addressing agro-environmental issues and sustainable development at universities, research centres and institutes.
- iii. Promote research programs on ecosystem goods and services valuation to provide additional tools for formulating agro-environmental policies.
- iv. In an effort to reduce carbon emissions, promote research programs on the reconversion towards sustainable production systems, including agro-ecological systems.
- v. Promote research on the mitigation of and adaptation to changes associated with climate variability in general. Identify and quantify possible consequences at the local, regional and national level.
- vi. Promote research oriented toward the development of management and production systems that reduce water demand in agriculture, livestock farming, forest production, fishing and aquaculture.
- vii. Promote research in order to develop native species management plans in the forestry, fisheries and aquaculture sectors.
- viii. Promote research on issues related to the management, production and processing of species, varieties and breeds representative of local biodiversity.
- ix. Promote collaborative networks that allow for knowledge creation and management based on the social practice of territorial development. Also, create and implement efficient mechanisms and tools for information and communication between actors in the territories, including centres for the participatory management of knowledge in the territories, observatories and national information systems, regional networks and also links with global networks.

4.4 Education, training and outreach

- i. Implement training programs for farmers, fishers and aquaculture farmers, at all production levels, with content and methodologies that emphasize local knowledge and cover topics related to the conservation of natural resources, production, processing, trading and management.
- ii. Implement permanent training programs for public administrators, and public and private financial agents, about the specificities of sustainable production and public agro-environmental policies.
- iii. Promote the inclusion of content related to biological and cultural diversity, and the conservation of natural resources as part of formal education programs addressing the urban and rural public, and place emphasis on teaching methods that value traditional and popular knowledge.

- iv. Promote the spread of information about climate change adaptation with due consideration of the gender approach and the cultural diversity of territories.
- v. Encourage programs designed to educate and pass on knowledge, values, customs and respectful behaviour, and enhance the value of natural resources in the sphere of formal and informal education.
- vi. Improve public programs to provide technical assistance oriented towards sustainable production systems, agro-ecology, and the application of an ecosystem approach in fishing and aquaculture, which address the different productive sectors.
- vii. Reinforce the system of outreach and technical assistance designed to help develop the fisheries and aquaculture sector, and prioritize services for artisanal fishers and small-scale farmers.
- viii. Reinforce the outreach system and technical assistance targeting the agro-forestry sector, with a special focus on communities that depend on the management and harvesting of timber and non-timber forest products.
- ix. Strengthen technology dissemination systems and work to spread sustainable methods and practices for production and natural resources management, by using appropriate information and communication tools.

4.5. Market and consumption

- i. Encourage the development of small-scale agro-industries in order to add value to the products of biological and cultural diversity.
- ii. Strengthen culturally-appropriate national policies on food and nutritional security with the purpose of meeting the needs of the population and favouring short production circuits, transformation, trading and consumption, and production for family self-consumption through the revitalization of domestic and/or community farms and vegetable gardens in rural, urban and suburban zones. In order to do so, special emphasis should be placed on adopting business development mechanisms accessible to women.
- iii. Encourage the economic organization of producers and fishers within associations and cooperatives, considering the specificities and diversity of organizational arrangements, in accordance with social and cultural conditions.
- iv. Strengthen organizational initiatives for the community management of forestry and fishing areas.
- v. Enhance local markets by promoting fairs and other types of direct producer-to-consumer sales which allow for efficient coordination between productive areas and consumer demand, and prioritize the creation of trade spaces for the agro-ecological and organic produce of family farming, artisanal fishing and aquaculture of limited resources.

vi. Consider the inclusion of food and non-food products stemming from sustainable production systems in the public purchases made at different levels and in different areas of government, especially in the purchases of foodstuff to supply school feeding programs and other programs related to food and nutritional security.

vii. Strengthen the institutional framework aiming at promoting a shift towards environmental sustainability in production and consumption patterns, by encouraging a solidary market system and responsible consumption among public institutions, enterprises and consumers.

viii. Promote more information and education campaigns on the nutritional, environmental and cultural values of foodstuff stemming from sustainable production and local biodiversity.

ix. Develop and implement certification and environmental labelling systems that encourage local development, integrating innovation themes according to systems of traceability and designation of origin.

x. Engage supermarkets and private supply networks in the adoption of sustainability criteria for purchases, giving priority to products that meet environmental and social standards.

5. AGRO-ENVIRONMENTAL POLICY GOVERNANCE

To guarantee the effectiveness of agro-environmental policies, the policy governance system should reflect the following aspects:

- Agro-environmental policies grounded in an appropriate institutional and legal-judicial framework.
- Decentralized policies tailored to different local realities.
- Tools for comprehensive land-use planning with short and long-term goals.
- Inter-sectoral coordination at all levels (state, departmental, provincial and municipal) to implement harmonized agro-environmental policies.
- Community organization in order to succeed in implementing agro-environmental policies.
- Defined criteria for formulating, implementing, monitoring and assessing public agro-environmental policy.
- A definition of agro-environmental indicators with sustainability threshold values that allow for continuous monitoring of the progress made in implementing these policies.

In view of the characteristics described above and the principles of social participation and subsidiarity, States are encouraged to consider the following aspects in agro-environmental policy governance:

i. Support participatory councils or committees, local or municipal councils on sustainable development and councils of indigenous peoples to highlight the importance of the local in the formulating, tracking, and evaluating agro-environmental policies.

This should be done by supporting the development of their capacities and reinforcing their

orientation towards an agro-environmental approach. If these bodies do not exist, promote the creation of analogous inter-municipal or territorial bodies, and promote inclusive collaboration with the national councils.

ii. When appropriate, consider creating a national council with advisory and deliberative status for formulating and tracking agro-environmental policies with representation from the public and private sector, civil society, indigenous peoples and traditional communities.

iii. Encourage the participation and empowerment of the private sector and of civil organizations in the policy-making process to preserve the environment and advance towards sustainable production systems by making use of citizen consultation mechanisms.

iv. Adopt governance methods and mechanisms that help, in the long run, overcome sectoral fragmentation in the public sector, and that favour the establishment of objectives by the different spheres and levels of government responsible for agro-environmental policies.

v. Promote the decentralization and de-concentration of functions and responsibilities, taking into account the principle of subsidiarity. Build up management capacity and leadership at organizations and in communities throughout the territory by increasing their participation in practices related to the sustainable management of environmental and natural resources.

vi. Promote continuous and permanent training for council members, as well as for other members of participatory governance bodies.

vii. In partnership with universities, research institutes and civil society, create participatory observatories to continuously and permanently monitor the results and impacts of agro-environmental policies, drawing on quantitative and qualitative criteria and indicators and information management systems that are accessible to decision-makers and society.

viii. Improve or develop an agro-environmental information system for the monitoring and evaluation of policies, which ensures quality, timely and accessible information for government and civil agents.

ix. When appropriate, adopt mechanisms of governance between countries for the agro-environmental management in border areas through the creation of multilateral platforms and the establishment of collaborative relationships.

At the governmental level, improve the governance conditions for implementing agro-environmental policies, considering the following measures:

i. Establish an inclusive platform for the Guidelines, with political convening and scrutiny capacity.

ii. Encourage the establishment of strategic alliances and strengthen the synergies between the private and public sector for the adoption and implementation of agro-environmental policies.

6. IMPLEMENTING THE VOLUNTARY GUIDELINES AT THE NATIONAL LEVEL

Although these Guidelines are voluntary and non-binding in nature, States are encouraged to define an implementation strategy that takes into account the following elements:

- i. Form an inter-institutional working group that ensures the necessary conditions for the dissemination and internalization of the Guidelines and that defines an implementation strategy that includes the allocation of the necessary human, technical and economic resources.
- ii. Promote a consultation process that engages civil society and the public and private sector and that serves as a starting point to agree on an implementation strategy for the Guidelines.
- iii. In collaboration with international bodies and regional collaboration platforms, coordinate the adoption of the Guidelines by the countries and establish a mechanism to track and evaluate progress and results.

2.1 Consensus-building at the national level

- i. Disseminate the sustainable production initiatives implemented in some regions, areas and territories and promote the exchange of experiences through technical cooperation between countries.
- ii. Identify and disseminate the interfaces and convergences between the suggested Guidelines and the national ongoing programs.
- iii. Link discussion processes within the national agenda related to agro-environmental policies; for example, the legal framework of payments for environmental services, national agro-ecology and organic agriculture policies, among others.

2.2 Defining an implementation plan

Implementing a strategy involves different actors and realities in each country. Therefore, States are encouraged to consider the following measures:

- i. Conduct a quick diagnosis of the national situation in relation to the suggested Guidelines and identify the strategic and most important aspects in order to advance towards a sustainable agriculture, forest, fishing and aquaculture production.
- ii. Define measures that contribute to internalizing the elements of the Guidelines on land governance, the right to food, fishing and agro-environmental policies, identifying complementarities.
- iii. Develop an implementation plan for the agro-environmental guidelines that sets goals, milestones, measurable and feasible objectives, and a schedule of activities, taking into consideration the capacities of each country, and in accordance with the established international agreements.
- iv. Ensure the necessary resources for the implementation plan of the agro-environmental guidelines in the short, medium and long run.

v. Extend, strengthen and integrate the current agro-environmental measures to the implementation plan of the new Guidelines.

2.3 Building and strengthening capacities

States are encouraged to consider the following measures:

- i. Identify institutional development needs at different levels of government and in key social sectors, and adopt measures for meeting these needs and including these sectors in the process.
- ii. Enhance existing platforms and networks.
- iii. Consider implementing training activities for public administrators at different levels of government and in different social sectors who can help promote the agro-environmental policies.
- iv. Coordinate the necessary financial, human and operational resources so that key sectors can engage in the process.

ANNEX

Annex 1

List by country of the organizations that participated in the national and regional dialogues to develop the Voluntary Guidelines.

Brazil:

ABC/MRE – Brazilian Cooperation Agency, Ministry of External Relations.

ANA – Brazilian National Articulation of Agroecology.

ANA/MMA – National Water Agency, Ministry of Environment.

ASA – Brazilian Semiarid Articulation.

ASBRAER – Brazilian Association of State Entities for Technical Support and Rural Extension.

ASIBAMA – Association of Environment Civil Servants of the Brazilian Institute of Environment and Renewable Natural Resources.

CDS/UnB – Center for Sustainable Development, University of Brasilia.

CNAPO – National Commission of Agroecology and Organic Production.

COAGRE/MAPA – Agroecology Coordination; Ministry of Agriculture, Livestock and Food Supply.

CONDRAF – National Council on Sustainable Rural Development.

CONSEA – National Council on Food and Nutrition Security.

CONTAG – National Confederation of Agricultural Workers.

EMBRAPA – Brazilian Agricultural Research Corporation.

FETRAF – National Federation of Family Farming Workers.

INCRA – National Institute for Colonization and Agrarian Reform.

MAPA – Ministry of Agriculture, Livestock and Food Supply.

MDA – Ministry of Agrarian Development.

MPA – Small Farmers Movement of Brazil.

MST – Landless Workers Movement of Brazil.

PGDR/ UFRGS – Post-Graduate Program in Rural Development, Federal University of Rio Grande do Sul.

SAF – Secretariat of Family Farming.

SEDR/MMA – Secretariat of Exploitation and Sustainable Rural Development, Ministry of Environment.

SESAN/MDS – National Secretariat for Food and Nutrition Security, Ministry of Social Development and Fight against Hunger.

SFB/MMA – Brazilian Forest Service, Ministry of Environment.

SG-PR – General Secretariat of the Republic Presidency.

SPE/MF – Secretariat of Economic Policy of the Ministry of Finance.

SEAPEC – State Secretariat of Agriculture and Livestock, Rio Rural Program.

Colombia:

MADS – Ministry of Environment and Sustainable Development.

MADR – Ministry of Agriculture and Rural Development.

FEDEPALMA – National Federation of Palm Oil Growers of Colombia.

FEDEFIQUE – National Federation of Fique Growers of Colombia.

CVC – Regional Autonomous Corporation of Valle del Cauca.

CAS – Regional Autonomous Corporation of Santander.

CRQ – Regional Autonomous Corporation of Quindío.

CORPONARIÑO – Regional Autonomous Corporation of Nariño.

CORPOBOYACA – Regional Autonomous Corporation of Boyacá.

CORTOLIMA – Regional Autonomous Corporation of Tolima.

Humboldt Institute of Colombia.

ASOPORCICULTORES – FNP – Colombian Association of Pig Farmers, National Fund for Pig Farming.

Orgánicos PEC.

Agrovereda.

ASOPROGOT – Agronomists Association of Giradot.

UPRA-MADR – Rural Agricultural Planning Unit.

MADR – Environmental Sustainability and Climate Change Group.

UNILLANOS – University of the Llanos.

SIRAP CARIBE – Regional System of Protected Areas of the Caribbean.

SINCHI – Amazon Institute of Scientific Research.

PNUD – Colombian Low Carbon Development Strategy (CLCDS).

University of Antioquia.

REDD+ – GIZ Program.

National Natural Parks of Colombia.

Costa Rica:

MIDEPLAN – Ministry of Planning and Economic Policy.

MAG – Ministry of Agriculture and Livestock.

Ministry of Environment and Energy.

SEPSA – Executive Secretariat for Sectoral Agricultural Planning.

National Chamber of Pineapple Producers and Exporters.

National Seeds Office.

University of Costa Rica.

INTA – National Institute of Agricultural Technology.

ICAFFE – Costa Rican Coffee Institute.

SENASA – National Animal Health Service.

CNAA – National Chamber of Agriculture and Agribusiness.

CONAGEBIO – National Commission for Biodiversity Management.

Empresa Agronorte.

State of the Nation Program.

National Platform for the Responsible Production and Trade of Pineapple.

Livestock Development Corporation.

Cuba:

CITMA – Ministry of Science, Technology and Environment.

MINCEX – Ministry of Foreign Trade and Investment.

MINAG – Ministry of Agriculture.

National Directorate of Soils and Fertilizers, Ministry of Agriculture.

National Directorate of Forestry, Ministry of Agriculture.

DCIT – National Directorate of Science and Technological Innovation, Ministry of Agriculture.

CPDB/IIP – Biogas Promotion and Development Centre, Swine Research Institute.

Food Industry Research Institute, Ministry of Food Industry.

ENPFF – National Enterprise for the Protection of Flora and Fauna.

Tobacco Research Institute.

National Grain Research Institute.

MINAL – Ministry of Food Industry. Central Body.

INISAV – Vegetable Health Research Institute.

IPF – Institute for Physical Planning.

IAGRIC – Research Institute of Agricultural Engineering.

INIVIT – Research Institute of Tropical Root and Tuber Crops.

ICA – Institute of Animal Science. Ministry of Higher Education.

INCA – National Institute of Agricultural Sciences, Ministry of Higher Education.

CENSA – National Center for Animal and Plant Health, Ministry of Higher Education.

INHAL – Institute of Nutrition and Food Hygiene.

IHLHD – Horticultural Research Institute ‘Liliana Dimitrova,’ Ministry of Agriculture.

IIFT – Research Institute of Tropical Fruit Crops.

UPR – University of Pinar del Río, Faculty of Forestry and Agronomy.

UCLV – Central University of Villa Clara.

CIM – Center for Marine Research, University of Havana.

ACTAF – Cuban Association of Agricultural and Forestry Technicians.

GEAM – Cuban Mountain Agriculture Business Group.

DMA – Environmental Directorate; Ministry of Science, Technology and Environment.

INHEM – National Institute of Hygiene, Epidemiology and Microbiology.

Mexico:

CONABIO – National Commission for the Knowledge and Use of Biodiversity.

UNORCA – National Union of Autonomous Regional Peasant Organizations.

SERMANAT – Secretariat of Environment and Natural Resources.

SAGARPA – Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food.

MOCAF – Mexican Network of Peasant Forestry Organizations.

IICA – Inter-American Institute for Cooperation on Agriculture.

INAES – National Institute of Social Economy.

Subregional Headquarters of the Economic Commission for Latin America and the Caribbean (ECLAC) in Mexico.

INECC – National Institute of Ecology and Climate Change.

Panel of Experts on Environmental Management.

COLPOS – College of Postgraduates.

Ibero-American University Puebla.

SRE – Mexican Secretariat of Foreign Affairs.

Headquarters in Mexico of the United Nations Environment Programme (UNEP).

Panama:

MINAMBIENTE – Ministry of Environment.

MIDA – Ministry of Agricultural Development.

APAO – Association of Organic Producers of Panama.

ANAGAN – Panamanian Association of Livestock Farmers.

APEDE – Panamanian Association of Business Executives.

CONADES – National Council on Sustainable Development.

CATIE in Panama – Tropical Agricultural Research and Higher Education Center.

DPI-MEF – Department of Planning and Investment, Ministry of Economy and Finance.

IDIAP – Agricultural Research Institute of Panama.

Natura Foundation.

MIMSA – Ministry of Health.

FUNDICCEP – Foundation for Integral Community Development and Conservation of Ecosystems in Panama.

BDA – Agricultural Development Bank.

Paraguay:

MAG – General Directorate of Planning of the Ministry of Agriculture and Livestock.



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