



2nd International Agrobiodiversity Congress

**Using Agrobiodiversity to
Transform Food Systems:
The 2021 Rome Manifesto**



#EatGrowSave

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Statement of Intent

The *2021 Rome Manifesto: Using Agrobiodiversity to Transform Food Systems* (the Rome Manifesto) sets out three urgently needed commitments to help tackle global challenges including climate change, malnutrition, biodiversity loss, and environmental degradation:

1. Consume diverse foods in diets that are nutritious, sustainable, affordable, acceptable, safe, and accessible to all
2. Produce food in diverse, resilient, and sustainable food systems
3. Conserve agrobiodiversity to give people the options they need to sustainably and inclusively transform food systems and improve lives, both now and in the future.

Process

The Rome Manifesto builds on the *Delhi Declaration on Agrobiodiversity Management* adopted at the 1st International Agrobiodiversity Congress in 2016. It is the result of several months of discussion and inputs from partners to the 2nd International Agrobiodiversity Congress and designed to align with actions arising from the UN Food Systems Summit and the Convention on Biological Diversity COP15.

Placeholder for partners' logos

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Preamble

The food we eat and the way we produce, source, handle, and process it, impact both environmental and human health.

Current agricultural practices account for 70% of all freshwater use,¹ contribute to a third of anthropogenic global greenhouse gas emissions,² and are a major driver of biodiversity loss.³

Our food systems are also failing to provide the nutrients we need. In 2020, nearly 2.37 billion people did not have access to adequate food, which represents an increase of 320 million people in a single year.⁴ As the economic fallout of COVID-19 spreads in the poorest parts of the world, more people are becoming poor and food insecure, including those already in a situation of vulnerability, such as Indigenous Peoples.^{5,6} The total number of people living in poverty as a result of the pandemic is expected to rise to 150 million by the end of 2021.⁷

To tackle these global challenges, we have an underused strategic asset in our toolbox – **agrobiodiversity**.

Agrobiodiversity is the wealth of different plants, animals, and micro-organisms that make up our agri-food systems. It provides the menu of different foods we eat, and the species and genetic diversity that supports our food production systems. It is a tool that farmers, Indigenous Peoples, and local communities can use to boost livelihoods, reduce risk, and make our food systems more sustainable, equitable, and resilient.^{8,9}

For agrobiodiversity to bring these benefits and help deliver progress on the 2030 Agenda for Sustainable Development, its use needs to be strengthened in food systems, including in diets and production systems, especially enhancing and revitalizing the role of neglected and underutilized species and traditional foods that have ancient ties to territories and that are suited to local climates and cultures.^{10,11} We also need to conserve it to give future generations the options they will need for a food-secure future. That requires protecting the Indigenous Peoples and cultures that create and sustain diversity through biocultural interactions.

Using and conserving agrobiodiversity delivers on the 2030 Agenda for Sustainable Development by providing:¹²



Healthy, balanced diets from a basket of diverse, safe, and nutritious foods



Healthy and resilient ecosystems that produce diverse foods from quality seeds that are adapted to local conditions



Options to make our food systems sustainable and resilient now and in the future, and to ensure healthy diets



Micronutrient security, particularly when combined with nutrition literacy programs that target the primary caregivers of young children



Inclusive growth and empowerment of women, young people, and Indigenous Peoples



Genetic traits to help us adapt production systems to climate change and new pests and diseases



Protection of traditional food cultures, including Indigenous Peoples, and their associated knowledge



Opportunities to create diverse value chains that stimulate local economies and build knowledge



Recognition of the valuable role of custodian farmers and Indigenous Peoples who safeguard genetic diversity through generations

CONSUME IT + PRODUCE IT + CONSERVE IT

FOOD SYSTEMS TRANSFORMATION

Agrobiodiversity Commitment 1:

Consume diverse foods in diets that are nutritious, sustainable, affordable, acceptable, safe, and accessible to all.

Globally, up to 811 million people faced hunger in 2020.⁴ The prevalence of adult overweight and obesity continues to increase at an alarming rate, and 2 billion people have micronutrient deficiencies, which means they lack essential vitamins and minerals in their diets.¹³

Agrobiodiversity helps deliver safe, nutritious, affordable, and sufficient food all year round in many different parts of the world, in particular to Indigenous Peoples and people put in situations of vulnerability and poverty, and strengthens resilience in the face of global challenges, such as climate change.

Yet just nine species account for over 66% of global crop production, only a handful of animal species provide the vast majority of the world's meat, eggs, and milk,⁹ and 50% of global aquaculture production is made up of just ten species.¹⁴ This means we are neglecting thousands of nutritious plants and animal-source foods that underpin countries' cuisine and cultures.



Actions to diversify diets include:

Strengthen efforts to build knowledge about the nutrient content of the thousands of different plant and animal species that can be used for food.

The nutrient content between different species, or different breeds, strains, and varieties, can vary greatly, as can their cost and availability throughout the seasons. It also varies depending on the part of the plant or animal eaten, and how it is prepared and cooked. More scientific and participatory research is needed on these differences so that nutrition gaps can be filled all year round. This is particularly important for vulnerable groups such as infants, who need adequate nutrition in their early years for life-long healthy development.

Increase consumer awareness on why healthy, diverse diets matter and devise policy interventions that stimulate the sustainability, accessibility, and affordability of diverse foods.

There is evidence on the link between nutrition literacy programs that target primary caregivers and the voluntary adoption of dietary and other nutrition-related behaviors conducive to health and well-being. Messages can target specific populations through a variety of channels – media campaigns, celebrity chefs, community radio, teachers, seasonal food calendars, health workers – to get the message out about why healthy diverse diets matter. They are even more effective when coupled with policy interventions that increase the sustainability, accessibility, and affordability of diverse foods, including neglected and underutilized species, by integrating locally available agrobiodiversity into national dietary guidelines. These educational programs and policy interventions must be culturally appropriate and respect the principle of self-determination of Indigenous Peoples.

Celebrate and integrate different cuisines, food cultures, and traditions from around the world into locally adapted nutrition strategies that make healthy, diverse diets accessible to all.

Cooking and eating a variety of local foods adapted to a particular region, protects cultural heritage and natural resources, while increasing nutrition and resilience in sustainable production systems – for example, adaptation to climate change.¹¹ Nutrition strategies that are inclusive of food cultures, languages, rituals, and traditional knowledge, and engage Indigenous Peoples, can provide holistic solutions.





Agrobiodiversity Commitment 2:

Produce food in
diverse, resilient, and
sustainable food systems.

Agrobiodiversity is a critical component of crop, livestock and aquatic production systems worldwide. It is used in time-tested practices that increase production and resilience on farms, in aquaculture systems, and in landscapes. It contributes to healthy ecosystems, underpins nature-positive approaches, and improves livelihoods, for example, by reducing yield loss from pest and disease outbreaks, strengthening resilience to climate change, halting and reversing biodiversity loss, and diversifying income opportunities.^{8,9,15}

Yet market demand and government subsidies can incentivize producers to rely on a narrow portfolio of common high-yielding plant and animal species, breeds, and varieties, which are displacing rich agrobiodiversity from food systems.

Actions to diversify production systems include:

Use agrobiodiversity to support productive and resilient agricultural ecosystems and increase knowledge about its benefits.

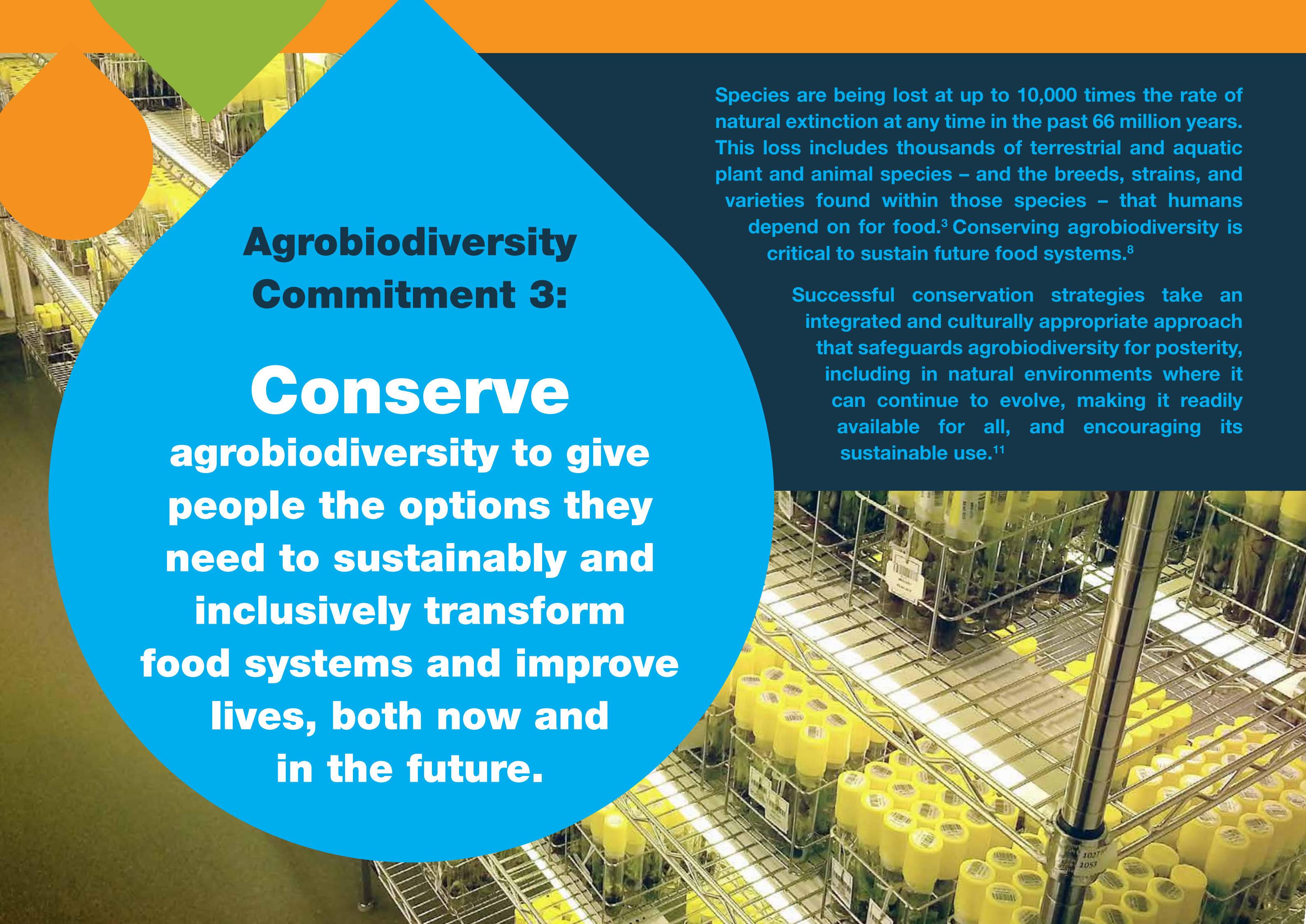
Agrobiodiversity is a critical component in sustainable food systems. For example, planting different species and varieties of crops together can reduce pest and disease damage, which in turn, increases yields and boosts farmer incomes. Yet there are still knowledge gaps that could be filled by increased funding that targets the thousands of species, breeds, strains, and varieties that remain largely overlooked by agricultural research and development efforts. Funding should also encourage participatory research methods, where scientists, farmers, and Indigenous Peoples work side by side, to ensure that both scientific and Indigenous Peoples' traditional knowledge about local agrobiodiversity can be exchanged and used.

Create incentives and markets for diversified production.

Markets for diverse food products are essential to stimulate sustainable production through increased consumer demand. Market demand can be stimulated through public procurement programs, subsidies, and promotional campaigns. Investment along the entire value chain is also essential for food systems transformation. Young people and women, for example, can be empowered and attracted to become entrepreneurs and develop biodiverse products such as snacks from neglected grains, through interventions like mechanical equipment that remove drudgery from processing. Programs can be implemented with Indigenous Peoples willing to reach the market to sell products rooted in their values.

Increase access to and exchange of quality reproductive materials through resilient and efficient systems that meet Indigenous Peoples' and rural producers' needs and build capacity in using sustainable management practices.

Diversification of crops, forages, trees, livestock, fish, and aquatic organisms – including their genetic diversity – gives Indigenous Peoples and rural producers more options in times of need. However, they should also be given access to the right information about which options best suit their needs. This can be done through actions to establish community-based approaches, such as seedbanks, that strengthen local seed systems including open-source approaches, running participatory improvement programs, and engaging rural producers in evaluation trials. These programs should facilitate access by women, and in particular Indigenous women, who are traditional guardians of biodiversity and seed keepers.¹⁶ This, in turn, contributes to food sovereignty, strengthens food traditions, and increases food security. Government policies that facilitate the registration of seed varieties, local breeds and strains, and ensure market access for traditional and locally adapted varieties and other products are also critical.



**Agrobiodiversity
Commitment 3:
Conserve
agrobiodiversity to give
people the options they
need to sustainably and
inclusively transform
food systems and improve
lives, both now and
in the future.**

Species are being lost at up to 10,000 times the rate of natural extinction at any time in the past 66 million years. This loss includes thousands of terrestrial and aquatic plant and animal species – and the breeds, strains, and varieties found within those species – that humans depend on for food.³ Conserving agrobiodiversity is critical to sustain future food systems.⁸

Successful conservation strategies take an integrated and culturally appropriate approach that safeguards agrobiodiversity for posterity, including in natural environments where it can continue to evolve, making it readily available for all, and encouraging its sustainable use.¹¹

Actions to conserve agrobiodiversity include:

Expand and better support *ex situ* conservation efforts.

Ex situ collections provide a secure off-site backup of the genetic diversity that we depend on for a food-secure future. Each sample of genetic material could hold the key to solve a current or future challenge like drought resilience, or a novel pest or disease. To function successfully, collections need appropriate legal, institutional, and funding mechanisms to operate sustainably in the long term and expand to include under-represented species and varieties, like crop wild relatives. It is also critical to step up work to characterize the genetic diversity held in collections, including through molecular characterization approaches, to ensure that Indigenous Peoples, farmers, breeders, and researchers can access the genetic diversity they need when they need it. At a local level, opening and maintaining more community seedbanks, particularly in remote rural locations, would help to strengthen links between *in situ* and *ex situ* collections and increase the number of seeds, cultivated plants, farmed and domesticated animals, and their related wild species held in collections.

Expand and better support *in situ* and on-farm conservation efforts.

Food production systems, including farms, livestock, agroforestry, and aquatic areas, are home to a rich array of genetic diversity that includes traditional species, breeds, strains, and varieties that evolve with, and adapt to, changing environmental conditions. This agrobiodiversity is often maintained for home consumption or cultural reasons rather than commercial ones. It is critical to recognize and reward the role of farmers and Indigenous Peoples as providing an essential conservation service for the wider public good. Incentives could include developing markets and value chains for a wider diversity of plant- and animal-based food products and expanding current Payment for Agrobiodiversity Conservation Schemes that reward communities and Indigenous Peoples for maintaining traditional species, breeds, strains, and varieties that currently have no market value.

Agrobiodiversity found in wild areas, for example crop wild relatives, and wild harvested foods, provides food and livelihood security to local communities and Indigenous Peoples. Conservation strategies to safeguard these areas should be developed and implemented with and by these peoples, including management plans for the sustainable use of the site's resources.

Conserve through marketing and use, and ensure that benefits arising from its use are fair and equitable.

Using agrobiodiversity sustainably can be a pathway to its conservation. Market incentives

and government programs can stimulate the production and consumption of agrobiodiverse foods that are accessible, acceptable, and affordable to everyone. At the same time, it is critical to support the development of small agribusinesses and cooperatives, alongside multiple value chains, through investment and capacity-strengthening programs that can empower its custodians – farmers, pastoralists, fisherfolk, Indigenous Peoples, and rural communities – to benefit equitably from its use, and provide opportunities for entrepreneurship, attracting young people back into agriculture. The development of these businesses must be done with respect for the principle of self-determination of Indigenous Peoples and with their Free, Prior and Informed Consent.



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Images

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