



The world agricultural biodiversity
research-for-development centre



Bioversity International's 10-year strategy 2014-2024

Agricultural biodiversity nourishes people and sustains the planet

Bioversity International's 10-year strategy 2014-2024

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Biodiversity International's 10-year strategy 2014-2024

***Our vision: Agricultural biodiversity nourishes people
and sustains the planet***

Over the past millennia, farmers and plant breeders have used genetic diversity to incorporate traits which have increased crop yields and their tolerance to biotic stresses, such as pests and pathogens, and abiotic stresses, such as drought and environmental change. Once identified, beneficial traits were bred into crop varieties that could then be produced on a broad scale with the judicious use of external inputs. Faced with famine in India and China, the Green Revolution replicated this model, breeding improved varieties of three globally important staple crops – rice, wheat and maize – widely grown in developed countries, and consequently adapted to environments in key developing countries.

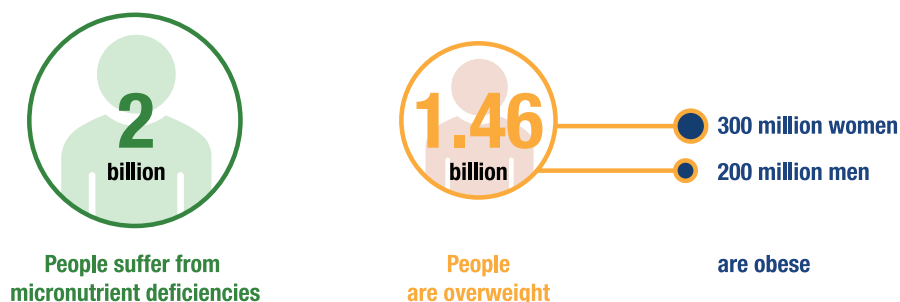
By managing against drought, improving soils and controlling pests and diseases with external inputs – such as irrigation systems, fertilizers and pesticides – yields of these improved varieties were further boosted. The gains achieved were impressive and yields of these staple crops virtually doubled between 1970 and 2000.ⁱ During this same 30-year period, the proportion of the global population classified as undernourished fell by more than 10%.ⁱⁱ Today, these three crops provide more than 50% of the world's plant-derived calories.ⁱⁱⁱ

In order to feed the predicted population of 9 billion people by 2050, food availability (increasing production and reducing losses) needs to expand by 60% globally and up to 100% in developing countries.^{iv} Meeting this challenge will be complicated by further environmental and social constraints.

Investments in research on staple grains to increase their productivity are essential. It is these crops that will continue to provide a large share of global caloric intake. New challenges that must be addressed using complementary approaches include:

- **Double-burden malnutrition:** The double burden of malnutrition includes both undernutrition and overnutrition. Micronutrient deficiencies, also known as 'hidden hunger', affect over two billion people globally. Over 1.4 billion people are overweight, with 300 million women and 200 million men clinically obese.^v

Global malnutrition

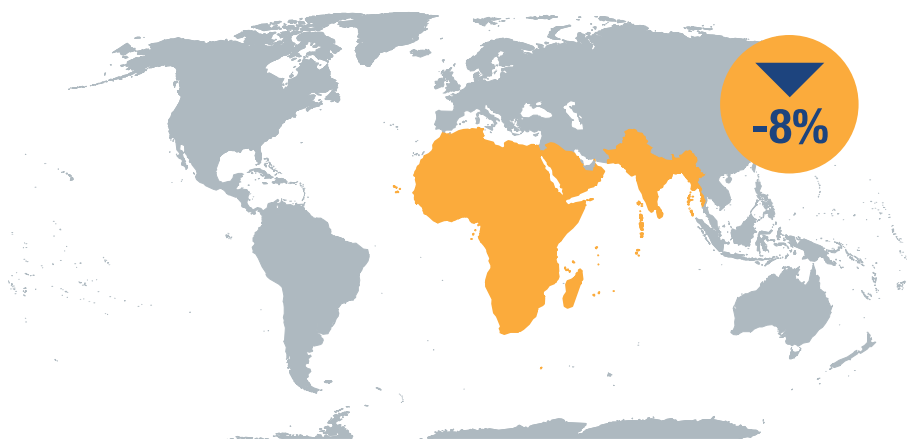


Source: Keats and Wiggins, 2014; WHO, 2014.

Once considered solely a high-income country problem, overweight and obesity is on the rise in low- and middle-income countries, particularly in urban areas. More than 30 million overweight children live in developing countries, and obesity and overweight rates are rising sharply. Overall, the number of overweight or obese adults in the developing world more than tripled between 1980 and 2008.^{vi}

- **Climate change:** Climate change will reduce agricultural production by 2% every decade while demand will increase by 14% every decade until 2050. Yields of major crops will face an average decline of 8% for Africa and South Asia by 2050.^{vii} Major staple grains have already experienced significant climate change-related yield reductions of 40 million tonnes per year from 1981 to 2002.^{viii} Up to 40% of the world's land surface will develop novel climates^{ix} often with new pest and weed complexes.

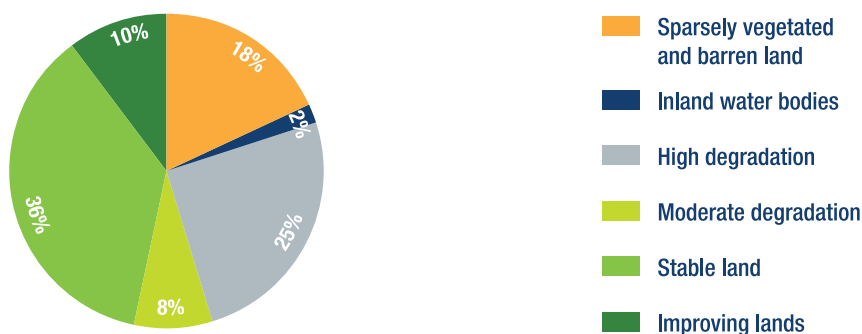
Average decline in yields for eight major crops across Africa and South Asia by 2050



Source: IPCC, 2014.

- **Vulnerability:** In developing countries, increased food production will be achieved by cultivating marginal and fragile lands. Degraded lands, from moderate to highly degraded status, make up to 50% of the world's land.^x Land degradation, desertification and drought affect more than 1.5 billion people in 110 countries, 90% of whom live in low-income areas.^{xi} The majority of agricultural land in developing countries is low-productivity land. Much of this land faces the additional challenges of salinity, drought, poor soils, and continuous pest and disease pressure as well as the added hindrance of remoteness from markets. Production on these marginal and degraded lands is therefore highly variable and highly vulnerable.^{xii}

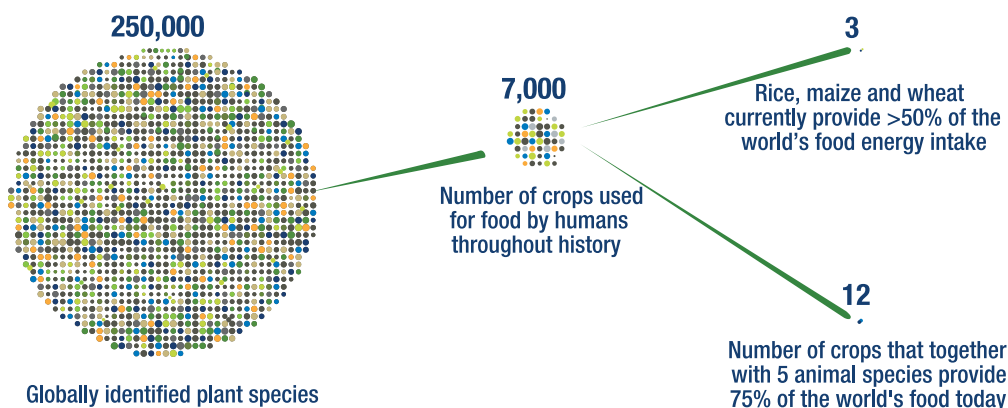
Status and trends in global land degradation



Source: FAO, 2011.

- **Reduction of agricultural biodiversity in global food systems:** The reduction of agricultural biodiversity in global food systems is of increasing concern. From a total of 250,000 known plant species, approximately 7,000 have been used for human food since the origin of agriculture. Out of these, just three – rice, wheat and maize – provide more than 50% of the world's plant-derived calories. Only 12 crops and 5 animal species provide 75% of the world's food today.^{xiii}

Shrinking diversity



Source: FAO, 1997.

In order to feed the predicted population of 9 billion people by 2050, there is a growing consensus that increasing the sustainable use of agricultural biodiversity in production and consumption systems – in both landscapes and in diets – will be an important part of the solution to these challenges.^{xiv} In particular, the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture and the Intergovernmental Panel on Biodiversity and Ecosystem Services have all recognized the importance of agricultural biodiversity in achieving global food and nutrition security. According to the Food and Agriculture Organization of the UN (FAO),^{xv} agricultural biodiversity includes: “the variety and variability of animals, plants and micro-organisms that are used directly or indirectly for food and agriculture, including crops, livestock, forestry and fisheries.” Biodiversity International's focus is on crops, crop wild relatives and tree biodiversity.

Using agricultural biodiversity is not a new approach. Farm households and rural communities have long managed a diverse set of plant resources, both within and beyond their farm systems, to tackle stresses and diversify their diets. In the past, however, these agroecological approaches were considered economically uncompetitive. More recently, scientific evidence has demonstrated that agricultural biodiversity, used in combination with novel technologies and approaches, has much to offer. Knowledge of crop and tree genetic diversity needs to be integrated with knowledge of the ecology of agricultural systems and landscapes to deliver multiple solutions within specific ecological and socioeconomic contexts. While there is growing evidence that using agricultural biodiversity can stabilize yields, improve pest and disease management, increase ecosystem services and improve nutrition, much of this evidence is site-specific. Consequently, little is known about how to implement these approaches at scales relevant to the end user, in an economically and environmentally viable manner.

Bioversity International's mission is to deliver scientific evidence, management practices and policy options to use and safeguard agricultural biodiversity to attain sustainable global food and nutrition security.

Bioversity International's Theory of Change

Our strategy recognizes that food and agricultural consumption and production decisions are interlinked through a series of value chains that spans consumers, retailers, processors, producers and input suppliers. Our strategy recognizes that decisions about consumption and production are mutually reinforcing, and that increasingly demand is driving supply rather than the contrary. That is, consumer demands for more affordable, sustainably-sourced and nutritious products coincide with producer needs for more productive, sustainable and resilient management strategies on farms and across agroecological landscapes.

In light of this, our first two strategic objectives are (1) to expand access for low-income consumers to diverse, affordable and nutritious diets and (2) for rural communities to increase productivity, ecosystem services and resilience of farming systems, forests and landscapes.

The third strategic objective, that farm households and rural communities have access to a diverse selection of high quality seeds and planting materials, is essential if consumers' demands and producers' needs are to be met. Seed availability through both formal and informal seed systems will determine what crops can be produced and what trees grown, which in turn will be influenced by consumer demand.

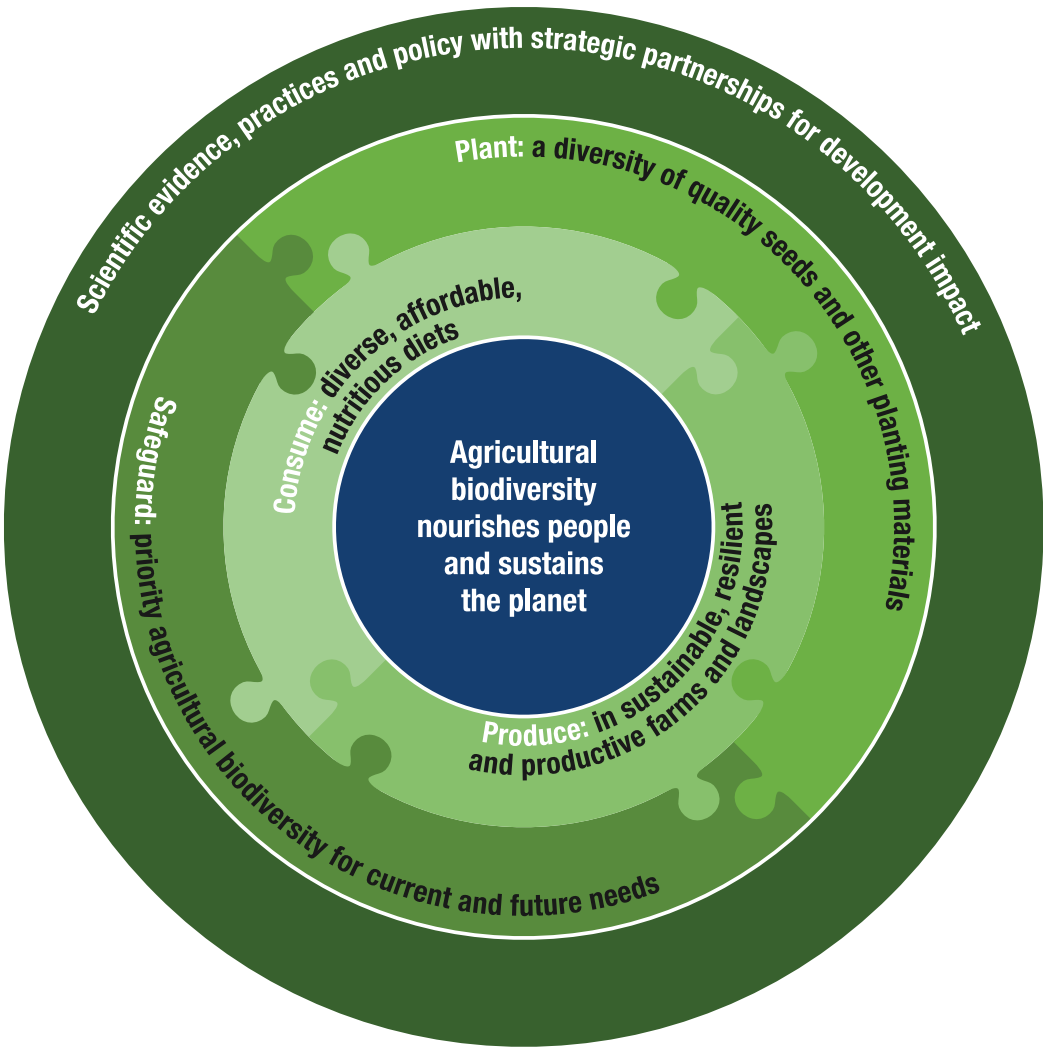
Finally, the fourth strategic objective recognizes that unless priority crop and tree biodiversity is safeguarded – *in situ*, on farm and *ex situ* – options for using agricultural biodiversity to achieve more nutritious, resilient and productive food and agricultural systems, now and in the future, will be undermined.

Agricultural biodiversity, and information on how to use it, must be readily available across various sectors – including governments, intergovernmental bodies, plant breeders, the agri-food sector, farm households and rural communities. In this way, priority agricultural biodiversity can be monitored and safeguarded, seed systems can operate effectively, production systems can adapt to rapidly changing circumstances and consumers can have more diverse and nutritious diets.

At the same time, the potential costs and benefits of using agricultural biodiversity at the landscape, rural community, farm household, agri-food sector and consumer level need to be evaluated and understood to provide solutions to global challenges.

These four objectives are beyond what Bioversity International can achieve alone, and will require us to work with mission-driven, strategic partners. Bioversity International will concentrate its research on agricultural biodiversity within and between species, at field, farm and landscape levels. We will integrate research across the four objectives, across a limited number of strategic target locations, generating agricultural biodiversity-based solutions that can contribute to sustainable global food and nutrition security.

Bioversity International's Theory of Change



Strategic objectives

Strategic Objective 1

SO-1: Low-income consumers have expanded access to and use of diverse, affordable, nutritious diets

- **Farm households and rural communities manage nutrition-sensitive landscapes**
- **Agri-food sectors mainstream nutrition-sensitive value chains**
- **Households improve their dietary quality through a whole-of-diet approach**

Micronutrient deficiencies, also known as 'hidden hunger', undermine the growth, development, health and productivity of over 2 billion people globally, affecting national economic and social growth. The World Bank estimates that malnourished children are at risk of losing more than 10% of their lifetime earning potential, costing developing countries up to 3% of their yearly GDP.^{xvi}

Over 1.4 billion are overweight worldwide, with 300 million women and 200 million men clinically obese.^{xvii} Although there are no comprehensive studies on the economic impact of obesity in developing countries, non-communicable diseases such as diabetes and heart disease have been recognized by the World Health Organization and the World Bank as representing a rising economic burden.^{xviii,xix}

The double burden of malnutrition – which includes both undernutrition and overnutrition – can be partly addressed either directly by improving diets and healthcare practices, or indirectly by improving incomes and livelihoods. The lack of available dietary diversity is a crucial factor, particularly in the developing world, where diets often consist of starchy staples with not enough nutrient-rich sources of food, such as animal proteins, fruit and vegetables.

The global initiative of the Global Environment Facility, 'Mainstreaming Biodiversity for Nutrition and Health', led by Brazil, Kenya, Sri Lanka and Turkey, promotes the conservation and use of local crop and tree biodiversity as a cost-effective solution to malnutrition, building marketing opportunities, value chains, policies and nutrition strategies. The initiative is coordinated by Biodiversity International. The United Nations Environment Programme and FAO are the implementation agencies.

Diversifying the diets of populations can reduce micronutrient deficiencies – other approaches include supplementation, biofortification and food fortification. Agricultural biodiversity provides a rich source of naturally available nutrients which can improve dietary diversity. To achieve such diversified, nutrient-rich diets, farm households and rural communities need to manage landscapes taking into account nutritional perspectives; agri-food sectors need to mainstream the marketing of a diversity of nutritious products in their value chains; and households have improved dietary quality through a 'whole-of-diet' approach.

Bioversity International will investigate how agricultural and tree biodiversity can be better used within food production systems to improve access to nutritionally-rich food sources and increase dietary diversity. Bioversity International will identify effective and equitable policies to improve diets in order to close nutritional gaps, especially for women of reproductive age and children under two.

Bioversity International has built the second-largest team of nutritionists within CGIAR with the highest concentration of experts in food systems and dietary analysis, uniquely addressing the interface of ecosystems, sustainable food systems and health research. Our researchers have skills in systems and nutrition analysis, dietary assessment and expertise in approaches that link consumers to producers. The organization is well-placed both geographically and technically to engage with global partners working on nutrition, such as the UN Rome-based food agencies (the Food and Agriculture Organization, the International Fund for Agricultural Development and the World Food Programme), donor agencies, international non-governmental organizations and the private sector.

Strategic Objective 2

SO-2: Rural communities have increased the productivity, ecosystem services and resilience of farming systems, forests and landscapes

- **Farm households use agricultural biodiversity to sustainably intensify their systems, reduce enterprise risk and increase profitability**
- **Rural communities benefit from managing diversity in forests**
- **Rural communities integrate agricultural biodiversity into landscape management practices for enhanced ecosystem services**

Many farming communities depend on agricultural biodiversity and ecosystem services for their livelihoods. Nevertheless, the focus of markets, policies and research has been on specialization and economies of scale where biodiversity is often viewed as an impediment to increasing individual crop productivity and farm income. The value of ecosystem services provided by agricultural and tree biodiversity is not widely recognized by researchers, extension agencies, the agri-food system or policymakers. Nevertheless, scientific understanding of ecosystem processes for agriculture and human well-being is increasing, complemented by new insights from traditional knowledge regarding varieties and production practices.

Incorporating agricultural biodiversity into existing production and consumption systems can present trade-offs and synergies, which need to be evaluated at the farm, household and landscape levels. Gains in productivity may simultaneously be possible with an increase in diversity and generation of ecosystem services. For example, the use of agricultural biodiversity can increase long-term productivity by reducing risks from pests and diseases, helping systems adapt to climate change, and supporting pollination, water cycling and soil improvement.

The benefits of agricultural biodiversity for farm households and rural communities in developing countries may be especially great because these often have a limited capacity to absorb shocks, and to recover quickly from these shocks, while maintaining productivity. Managing diversity – of systems, crops, varieties and trees – can support resilient food production at both household and community levels.

Using a systems approach, Biodiversity International will explore how the use of agricultural and tree biodiversity within the broader landscape can improve productivity, deliver ecosystem services, improve rural livelihoods and enhance resilience, paying particular attention to differentiated gender and social roles.

Our Bridging Agriculture and Conservation Initiative, supported by the Christensen Fund, the Brazilian Foundation for Sustainable Agriculture and the CGIAR Research Program on Water, Land and Ecosystems, brings together thought leaders and global experts to develop policy and management options to sustainably feed a growing population while ensuring ecosystem function and long-term conservation of biodiversity within agricultural landscapes.

Biodiversity International brings together many years of expertise on: crop genetic resources and plant biodiversity; the role of crop diversity in pest and disease management; community crop diversity management; the productive and profitable use of neglected and underutilized species; the agroecological intensification of smallholder banana systems; and the conservation, management and use of tree genetic diversity to increase adaptation and productivity. Biodiversity International is one of the few organizations that analyzes ecosystem services in the context of agricultural intensification and landscape management in developing countries.

Strategic Objective 3

SO-3: Farm households and rural communities have increased access to a diversity of quality seeds and other planting materials

- **Farm households and rural communities use a diversity of planting materials to enhance productivity, nutrition and adaptation to environmental change**
- **Formal and informal seed systems deliver the high quality, diverse planting material required by farm households and rural communities**

Of the many challenges facing developing countries, climate change is one of the most significant. Ranges of temperature and precipitation are becoming increasingly unpredictable, with extreme climatic events becoming more frequent and intense. Climate-related disasters could affect 375 million people every year by 2015, an increase of more than 100 million people since 2010.^{xx} Pest and disease patterns are also changing as a result of global climate change. A diversity of quality seeds and planting material has to be available to farm households and rural communities to adjust to these changes.

While the availability of commercially-improved varieties is increasing, 80-90% of farmers still save their own seeds or get them from informal networks.^{xxi} Farmer varieties have been improved by processes such as natural selection or through managed seed selection and breeding done by farmers, either alone or in cooperation with researchers. These processes need to be harnessed to accelerate adaptation, especially for climate change.

Wild trees provide foods, fuel-wood and other resources for rural people in developing countries. Selecting seed sources with desirable traits and domesticating these trees – as has been done over millennia for agricultural crops – offers huge potential benefits. However, evaluation of the diversity within and among tree populations will be required to make available the best planting materials.

Improved capacity of existing seed supply systems is essential. Seed systems must capture farmer demand for seed diversity, supply a more diverse range of seeds and other planting materials, and include a broader range of seed producers who can supply this diversity. Policy revision and re-alignment is required to increase the availability of diverse, adapted planting materials in smallholder production and consumption systems. Such policies must also recognize the different priorities, skills and access to resources and knowledge by men and women.

Bioversity International will work with diverse stakeholders to develop smart seed systems which are responsive to abiotic and biotic stresses. These systems will improve the productivity and resilience of food production systems, and the diversity and quality of diets.

Our 'Seeds for Needs Initiative', with support from the CGIAR Research Program on Climate Change, Agriculture and Food Security, works with farmers and national partners in 11 countries worldwide to identify crop varieties and species that are better suited to current and future climatic conditions. The concept is simple – if farmers have more information and access to a wide range of crop species and varieties, they are more likely and able to choose what best suits their conditions. The initiative, as of May 2014, involves over 8,000 farmers worldwide via crowdsourcing.

Bioversity International brings together expertise on genetic diversity and local seed systems that goes beyond specific commodities. Over the past ten years, Bioversity International has worked with national partners to conduct research and provide tools to enhance access to diverse quality seeds. With our partners, Bioversity International has developed interventions that include community seedbanks, biodiversity registries, diversity fairs, diversity plots and diversity kits. We have supported farmers in the management and domestication of wild fruit tree and vegetable materials and under the framework of community-based biodiversity management, introduced participatory plant breeding and crop varietal (genetic) mixtures.

Strategic Objective 4

SO-4: Policymakers, scientists and rural communities have safeguarded, assessed and are monitoring priority agricultural biodiversity

- **Global treaties and conventions use a shared mechanism for monitoring status and trends**
- **National policymakers adopt mechanisms for safeguarding agricultural biodiversity and associated knowledge**
- **Farm households, rural communities, scientists, breeders and policymakers have information on priority traits**

Intensification of agricultural systems has led to a substantial reduction in the genetic diversity of domesticated plants and animals. Some on-farm losses of genetic diversity have been offset by conservation in genebanks (*ex situ* conservation), but genebanks have mainly conserved major crops – over 40% of the accessions in the world's major genebanks are rice, wheat and maize^{xxii} – even though many minor crops supply vital micronutrients and can provide options in the face of climate change. Equally, many of the thousands of wild tree species and wild resources from forests, which are important to the health, nutritional needs and incomes of 80% of people in developing countries, are becoming scarce.^{xxiii}

Until recently, the focus of policymakers and scientists has been on *ex situ* conservation. During the last two decades, the complementary roles of conservation in genebanks, as well as on farm and in the wild (*in situ*), to safeguard vital agricultural biodiversity has been recognized. *In situ* conservation and on-farm management are particularly important for species that are difficult to conserve *ex situ*, such as vegetatively-propagated crops, neglected and underutilized species, crop wild relatives and trees, of which the seeds cannot be stored using conventional methods. Furthermore, *in situ* conservation allows for evolutionary adaptation as plants are exposed to changing environmental and management conditions.

Biodiversity International will provide farm households and rural communities, scientists, breeders and policymakers with information on priority traits of useful crop and tree species, particularly those important to women. We will promote global actions for monitoring and safeguarding priority agricultural biodiversity to increase current and future options for improved productivity, nutrition and adaptation to environmental change.

With support from the Government of the Netherlands, our 'Genetic Resources Policy Initiative' is assisting national multi-stakeholder research teams from Nepal, Bhutan, Rwanda, Uganda, Côte d'Ivoire, Burkina Faso, Costa Rica and Guatemala to implement the multilateral system of access and benefit-sharing under the International Treaty on Plant Genetic Resources for Food and Agriculture. Under the Treaty's framework, the countries can participate in internationally coordinated systems of conserving and sharing plant genetic resources. As part of this initiative, Biodiversity International is working to strengthen the capacity of national partners to combine climate data, data on crop suitability, geographic information and genebank collection coordinates to identify potentially adapted materials from collections around the world.

Biodiversity International's expertise and partnerships are rooted in the institution's long history of work on the conservation and use of plant genetic resources. It is also the leading global research organization focused on *in situ* conservation and management of the genetic diversity of trees. Biodiversity International has a standing commitment to the long-term conservation of the global banana and plantain collection held at the International Transit Centre. During the last 40 years, Biodiversity International has played a pivotal role in defining international priorities for the sustainable conservation and use of agricultural biodiversity and helped shape national and international dialogues by recommending policy options based on scientific evidence. Biodiversity International has led pioneer conservation efforts based on a networking approach for banana, cocoa and coconut.

Focus

The recent foresight study conducted by the Independent Science and Partnership Council acknowledges that “urbanization and economic development have made global agriculture increasingly differentiated...Research priorities for the CGIAR must be increasingly tailored to this diversity, helping to spread agricultural dynamism while lifting the productivity of lagging farmers.”^{xxiv} Bioversity International's strategy takes account of these trends.

People: In the past, Bioversity International has focused exclusively on smallholder farmers. The new strategy follows the recommendation of the ISPC and focuses our work on farmers who practise “farming as a business”. These farmers are mainly smallholders in most of Africa and Asia. In Asia, farm sizes will increase as rural populations decline; in sub-Saharan Africa, farm sizes will continue decreasing into the next decades.^{xxv} As such, we will focus on farm sizes representative of the majority of farms in each region.

We focus our research on farm households, rural communities and landscapes. We will take into account both men and women, who have different responsibilities and roles, different perceptions of their roles, and different costs and benefits. There are invisible and visible differences between men and women in: resource management knowledge, skills and strategies; communication channels and information sources; and social roles including decision-making, power and conflict management. Bioversity International will integrate critical overarching research questions across the strategic objectives to enhance the gender-responsiveness of our research. In addition, our work to improve dietary diversity of the poor will focus on women and children, and rural value chains. Where urbanization progresses, the role of value chains in providing affordable and nutritious diets to urban consumers will become more important as an impact pathway.

Markets: The globally growing demand for food and fuel, as well as the expanding road and communications infrastructure, enable many marginal areas to become increasingly market-oriented. In these marginal lands, particularly relevant to consider are: the choice of crops better adapted to the constraints; restoration of degraded lands, diversification through the payment for environmental services and the role of these systems in *in situ* conservation.

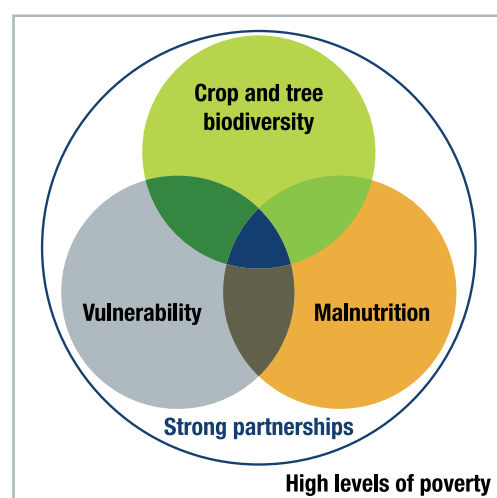
The approaches to improve dietary diversity and nutrition will also vary by system. In commercial and pre-commercial systems, the entry points will be largely market-driven, while in more marginal and remote regions, approaches will pay particular attention to influencing the diversity of crops grown and wild species available, as well as to the interplay of nutrition-oriented interventions with social policies.

Partners: Bioversity International will partner with national research systems and advanced research institutes to identify innovative solutions. To deliver these solutions, we will partner with development organizations and international bodies. In the countries where we work, we will expand our partnerships to include local, national and global agri-food value chain actors, timber concessionaries and conservation organizations. Focusing our work in select countries in different regions will enable us to build, create and maintain long-term partnerships. We will work through key partners to integrate agricultural biodiversity into research, development and education programmes.

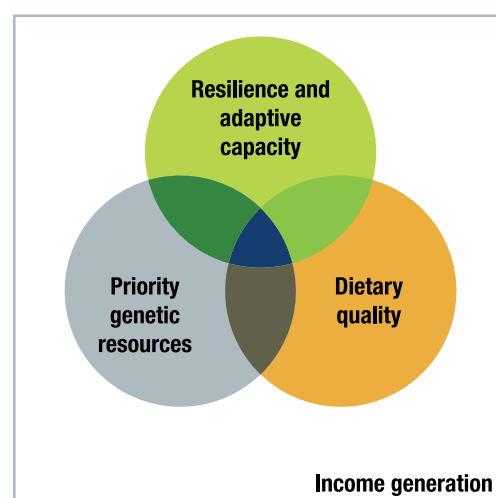
CGIAR: The CGIAR Consortium and centers are Biodiversity International's most important partners. We will seek to deepen our engagement with CGIAR Centers and Research Programs in the areas of nutrition (Agriculture for Nutrition and Health); climate change (Climate Change, Agriculture and Food Security); productivity, resilience and sustainability of agroecological systems (Water, Land and Ecosystems; Humidtropics; Drylands; Aquatic Agricultural Systems); policy (Policy, Institutions and Markets); and tree and crop genetic resources (Forests, Trees and Agroforestry; Genebanks). We will continue to play a lead role in the CGIAR Research Program on Roots, Tubers and Bananas.

Geography: Biodiversity International will work in a select number of low-income countries in different regions characterized by high levels of poverty and combinations of: crop and tree biodiversity of significance to use and/or conserve, high vulnerability to climate change, and high levels of 'hidden hunger' co-existing with rising levels of obesity. Other criteria will include countries in different regions where Biodiversity International can capitalize on long-standing partnerships or CGIAR Research Programs to deliver impact and where countries have a positive enabling environment. Locations will be selected where the potential for wider application of lessons learned and the production of global public goods can be taken into account. We will seek to consolidate activities in a limited number of countries in different regions to both enhance programmatic synergies across the Biodiversity International portfolio and improve the efficiency and effectiveness of our operations.

Geographic focus



Crop and tree focus



Crops and trees: Biodiversity International will work on cropping systems, woodlands and forests that generate household income, with a focus on neglected and underutilized species, nutritionally and economically useful trees and vegetatively-propagated crops. At the same time, our focus will be on enhanced resilience and the adaptive capacity of production systems, improved dietary quality and priority genetic resources which are important to safeguard for future use. We will integrate across the four strategic objectives our work on bananas, cacao and coconut genetic resources and production systems, and forest genetic resources.

Why Bioversity International?

Bioversity International offers a combination of skillsets which is unique among international research-for-development organizations, enabling it to exercise thought leadership with an agricultural biodiversity-related lens on complex issues facing the world, such as the adaptation of food systems to climate change, rural transformation, provision of environmental services and dietary transitions.

Over the last decade, Bioversity International has evolved from its initial focus on plant genetic resources and their *ex situ* conservation to a broader understanding of the role of biodiversity in food systems. Bioversity International has expertise in: value chains, nutrition, ecology, environmental services, information management, bioinformatics, genomics, agronomy, forestry, population genetics, plant breeding, integrated pest and disease management, conservation biology, law and policy analysis, economics and social sciences.

This range of expertise combined with a research approach connecting practical field-level work with broader systems and policy analysis, in addition to strong partnerships with the national agricultural research institutes and international research organizations enables Bioversity International to act as a global resource for intergovernmental bodies, governments, non-governmental organizations, farmer organizations, plant breeders and the agri-business sector seeking to address issues related to the effective deployment of agricultural and tree biodiversity for development.

Why has Bioversity International sharpened its strategy?

The importance of nutrition, climate change adaptation, resilience and sustainability have risen on the global agenda as demonstrated by new movements and initiatives such as the Scaling Up Nutrition movement, Climate-Smart Agriculture and the Rio+20 Declaration on “The Future We Want”. Sustainable agricultural systems and biodiversity also figure prominently in the emerging UN Sustainable Development Goals.

CGIAR reforms, which were nascent when Bioversity International's earlier strategy was devised, are being implemented, and the CGIAR Research Programs will be entering their second phase during 2017. Commodity-focused research accounts for a substantial share of the CGIAR budget, but there have been important investments in climate change; water, land and ecosystems; nutrition and health; forests, trees and agroforestry; and integrated systems, which are aligned with Bioversity International's strategy and competency.

Bioversity International is sharpening its strategy to enable it to respond to these new trends and developments. As part of this enhanced strategy, we will be able to deepen our impact, as well as capitalize on the growing global momentum surrounding these issues. Going forward, our research investment decisions – what, where, how and with whom – will be guided by our strategy. We will align our human resources and partnerships to ensure that our research reaches our target groups and contributes to global public goods.

Where we were

Focus on smallholder farmers

Geographically-unconnected portfolio

Large number of small projects

Multiple objectives with no common indicators for clear accountability and evaluation

Project-by-project funding

Project-by-project partnerships

Research disconnected from impact pathway

Driven by programmes and themes

Opportunity-driven

Where we are now

Dynamic focus on farm households, rural communities, poor rural and urban consumers

Focused set of locations, based on clearly-structured criteria

Limited number of larger, synergistic initiatives

Four clearly-defined strategic objectives with common language of indicators and evaluation

Nurturing long-term resource partnerships

Nurturing long-term, strategic partnerships for development impact

Demand-driven research-for-development impact

Driven by strategic objectives

Key thematic and geographical focus on agricultural biodiversity

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Cover Photos:

Top left: Diversity of fruits and vegetables in market, Cuba.
Credit: Bioversity International / P.Bordoni

Top right: Farmer overlooking landscape mosaic in Kenya.
Credit: Bioversity International / Y.Morimoto

Bottom left: Wheat varieties grown as part of Seeds for Needs trial.
Credit: Bioversity International / T.Rastogi

Bottom right: A selection of quinoa.
Credit: Bioversity International / D. Astudillo

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