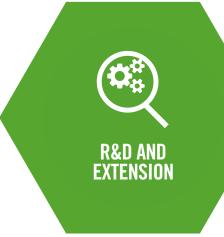
Policies and Investments for Productive Sustainable Agriculture

he right public policies and investments foster productive sustainable agriculture. The Global Harvest Initiative and its partners have identified five strategic policy goals that are essential to stimulating growth and resiliency in the agricultural value chain while helping farmers manage risks during challenging agricultural business cycles.

These policy goals are also aimed at reducing waste and loss in the agricultural value chain and helping mitigate climate change while creating opportunities for economic growth and innovation.



Invest in Public Agricultural Research, Development and Extension

The agriculture sector is heavily reliant on research and development (R&D) and extension programs to deliver innovation to farmers and others throughout the agricultural value chain. Agricultural R&D and extension programs are essential public goods and the principal drivers of Total Factor Productivity (TFP). Producers need access to proven techniques such as conservation agriculture and animal care practices to improve the sustainability and resilience of their operations.

Public R&D provides foundational results that the private sector can further develop to improve specific crops, livestock, machinery or food manufacturing industries. R&D and extension services help producers control costs, reduce loss and waste and become resilient to climate change while conserving natural resources. Public-private research partnerships leverage funds to tackle environmental, nutritional and economic challenges faced by producers and consumers.



Embrace, Customize and Disseminate Science-Based and Information Technologies

Science-based and information technologies help producers manage the ever-present risks in agriculture while improving sustainability and competitiveness. Advanced plant breeding through biotechnology and gene-editing enhances drought tolerance and yields, while disease management practices keep livestock healthy and productive. Efficient irrigation and cultivation technologies improve water productivity and reduce labor burdens. Innovative storage and cold-chain technologies ensure that more agricultural products reach markets rather than landfills.

Farmers use information technology to access vital information on market prices, weather, pests and soil health, while precision agriculture and data management tools help reduce costs and conserve scarce resources. Public policies that support the development, customization and dissemination of these technologies throughout the entire value chain are essential to nearly doubling global productivity in agriculture by 2050.



Enhance Private-Sector Involvement in Agriculture and Infrastructure Development

Policies that incentivize privatesector investment in physical and human infrastructures are crucial to increasing the productivity and sustainability of agriculture. Publicprivate partnerships to develop road, water, rail and airport infrastructures open new markets and reduce transaction costs for producers and retailers. Reliable and affordable electricity and cold-chain systems as well as access to high-speed broadband make farmers more efficient and competitive, while reducing loss and waste in the value chain.

Collaborative efforts between government, industry and communities to develop an educated and entrepreneuriallyminded workforce stimulate off-farm employment and reduce rural poverty.



CULTIVATE Partnerships

Cultivate Partnerships for Sustainable Agriculture and Improved Nutrition

In striving to develop their agricultural economies and reduce malnutrition, governments often leverage partnerships with local and international private businesses, non-governmental organizations, foundations, multilateral institutions and development agencies.

Development assistance programs are moving beyond a "project" approach to embrace integrated, market-driven strategies that generate inclusive benefits for farmers, processors, retailers and consumers, while striving to increase gender equity and improve nutrition. Developing technical and administrative skills of local populations, businesses and institutions sets the stage for successful long-term development.



TRADE

Foster Capacity for Regional and Global Agricultural Trade

An enabling policy environment for regional and global trade includes transparent policies and consistently enforced laws and regulations, as well as coherent trade rules across countries. Forward-looking trade agreements efficiently move products to markets that need them, benefitting both producers and consumers.

Since many countries do not have the human or financial capacity to effectively manage complex regional and global trade opportunities, policies can start by building country capacity to facilitate local agricultural trade, with an eye toward helping small and medium-scale farmers access larger markets, increase their incomes and expand their businesses. Improvements in trade policies and infrastructure will enable consumers around the world to access a wider variety of foods, as well as staple foods at competitive prices.