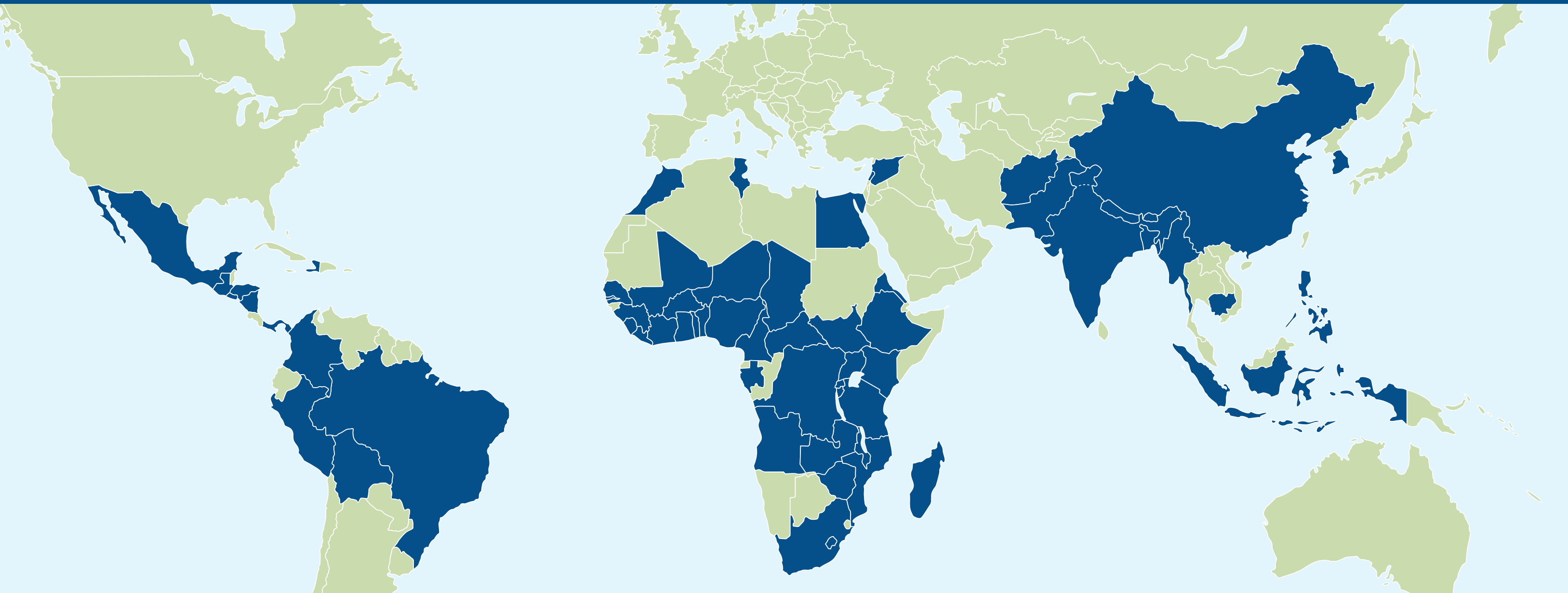


Biofortified Crops Around the World

Biofortified crop varieties have been released and/or are in testing in the countries shaded dark blue on the map. See the table on the reverse for crop details by country.



These biofortified crops are conventionally bred to contain higher levels of essential vitamins and minerals needed for good health. This map and the crop table on the reverse are based on data from HarvestPlus and the International Potato Center.

HarvestPlus improves nutrition and public health by developing and promoting biofortified food crops that are rich in vitamins and minerals, and providing global leadership on biofortification evidence and technology. HarvestPlus is part of the CGIAR Research Program on Agriculture for Nutrition and Health (A4NH) and based at the International Food Policy Research Institute (IFPRI).

HarvestPlus' principal donors are: the UK Government, the Bill & Melinda Gates Foundation, The United States Agency for International Development, and donors to the A4NH program. HarvestPlus is also supported by the John D. and Catherine T. MacArthur Foundation.



RESEARCH
PROGRAM ON
Agriculture for
Nutrition
and Health

LED BY IFPRI

Biofortified Crop Varieties Released (R) or in Testing (T) by Country

More than **42 million people** in smallholder farming households are benefiting from conventionally bred biofortified crops facilitated by HarvestPlus. These crops improve nutrition and health status when eaten regularly.

HarvestPlus Focus Crops

Iron Bean

For Nutrition: Provides up to 80% of daily iron needs
For Farmers: High yielding, virus resistant, heat and drought tolerant
CGIAR Partner: Bioversity/CIAT

Iron Pearl Millet

For Nutrition: Provides up to 80% of daily iron needs
For Farmers: High yielding, mildew resistant, drought tolerant
CGIAR Partner: ICRISAT

Zinc Maize

For Nutrition: Provides up to 70% of daily zinc needs
For Farmers: High yielding, virus resistant
CGIAR Partner: CIMMYT and IITA

Zinc Rice

For Nutrition: Provides up to 40% of daily zinc needs
For Farmers: High yielding, disease and pest resistant
CGIAR Partner: IRRI and Bioversity/CIAT

Zinc Wheat

For Nutrition: Provides up to 50% of daily zinc needs
For Farmers: High yielding, disease resistant
CGIAR Partner: CIMMYT

Vitamin A Cassava

For Nutrition: Provides up to 100% of daily vitamin A needs
For Farmers: High yielding, virus resistant
CGIAR Partner: IITA and Bioversity/CIAT

Vitamin A Maize

For Nutrition: Provides up to 50% of daily vitamin A needs
For Farmers: High yielding, disease and virus resistant, drought tolerant
CGIAR Partner: CIMMYT and IITA

Vitamin A Orange Sweet Potato

For Nutrition: Provides up to 100% of daily vitamin A needs
For Farmers: High yielding, virus resistant, drought tolerant
CGIAR Partner: CIP

Africa	HIB	IPM	ZIM	ZIR	ZIW	ABP	VAC	VAM	OSP	IZC	IZP	IZL	ZIS
Angola								T	R				
Benin Rep		T					T	T					
Burkina Faso		T						T	R				
Burundi	R					R			R				
Cameroon						T	R	R					
Central African Rep							T						
Chad							T						
Côte d'Ivoire						T	T		R				
DR Congo	R					R	R	R					
Egypt					T			T					
Eritrea		T							T				
Ethiopia			T		T		T	T	R		T	R	
Gabon							T						
Gambia		T					T						
Ghana		T					R	R	R				
Guinea						T	T						
Kenya	T	T					T	T	R		T		
Liberia							T	T					
Madagascar		T		T					R				
Malawi	T	T					T	R	R				
Mali		T						R	T				T
Morocco									T			T	
Mozambique							T	T	R				
Niger		R					T	T	T				
Nigeria		T	T			T	R	R	R	T			T
Rwanda	R					T		R	R		T		
Senegal		T		T			T	T	T				
Sierra Leone							R	T					
South Africa								T	R				
South Sudan		T						T	T				T
Swaziland							T						
Tanzania	R	T				T	T	R	R				
Togo		T						T					
Tunisia		T											
Uganda	R	T				T	T	T	R		T		T
Zambia		T			T		T	R	R				
Zimbabwe	R	T			T			R	T				

HIB = Iron Beans
 IPM = Iron Pearl Millet

ZIM = Zinc Maize
 ZIR = Zinc Rice
 ZIW = Zinc Wheat

ABP = Vit. A Banana/Plantain
 VAC = Vit. A Cassava
 VAM = Vit. A Maize
 OSP = Vit. A Orange Sweet Potato

IZC = Iron/Zinc Cowpea
 IZP = Iron/Zinc Irish Potato
 IZL = Iron/Zinc Lentils
 ZIS = Zinc/Iron Sorghum

Source: HarvestPlus, International Potato Center (2019)

Asia	HIB	IPM	ZIM	ZIR	ZIW	ABP	VAC	VAM	OSP	IZC	IZP	IZL	ZIS
Afghanistan					T								
Bangladesh				R	R				R				R
Bhutan					T						T		
Cambodia				T									
China				T	T			T	R		T		
East Timor									R				
India		R		R	R			T	R	R	T	R	R
Indonesia				R					R				
Lebanon												T	
Myanmar				T									
Nepal					T			T			T	R	
Pakistan				R				T				T	
Philippines					T								
South Korea									R				
Syria													R

LatAm/Caribbean	HIB	IPM	ZIM	ZIR	ZIW	ABP	VAC	VAM	OSP	IZC	IZP	IZL	ZIS
Bolivia	R		R		R						T		
Brazil	R			T	T		R	R	R	R			
Colombia	R		R	T			T	T	R				
El Salvador	R		T	R									
Guatemala	R		R	T			T		R				
Haiti	T		T	T				T	T				
Honduras	R		R						T				
Mexico			T		R			T					
Nicaragua	R		R	T					R				
Panama	R			T	T		T	T	R				
Peru									R		T		

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