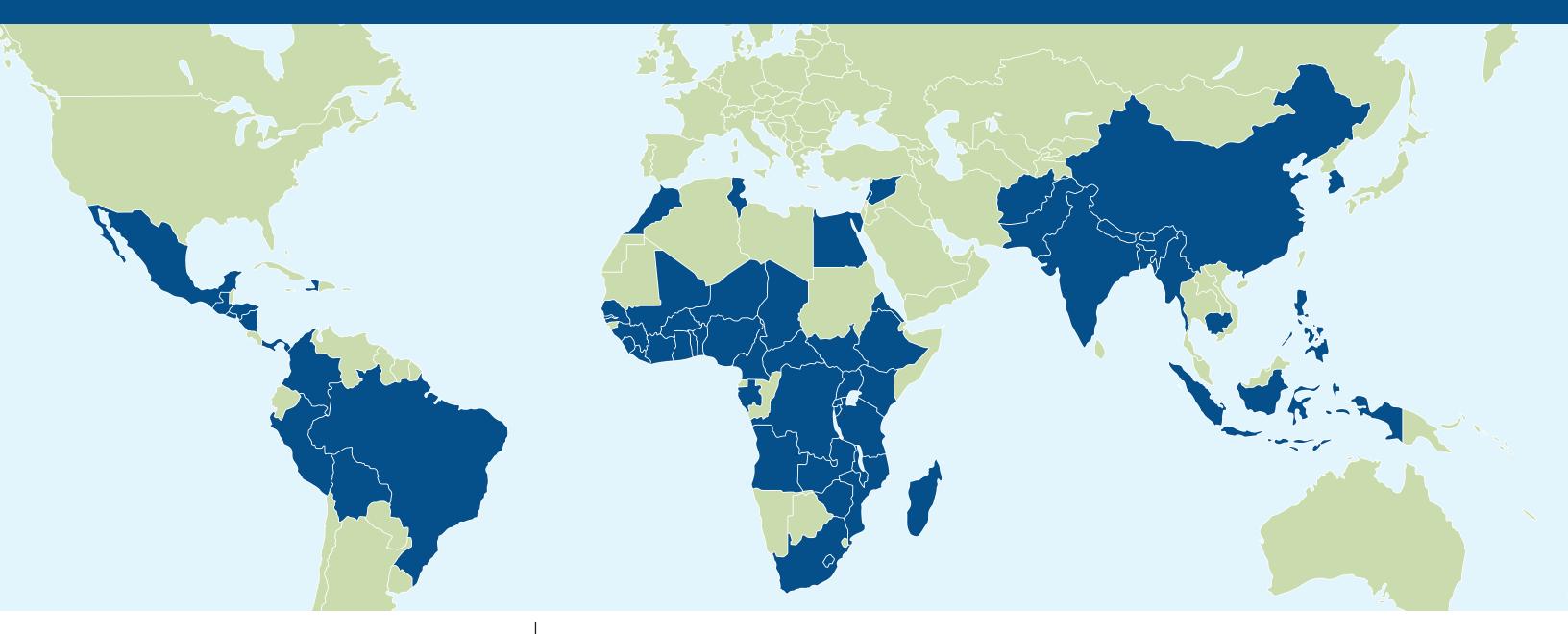
S HarvestPlus Better Crops • Better Nutrition

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, as well as data from the International Potato Center for varieties of vitamin A orange sweet potato and iron/zinc Irish potato. 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 works across CGIAR as part of the International Food Policy Research Institute (IFPRI).





INTERNATIONAL FOOD POLIC RESEARCH





By the end of 2023, over **330 million people** were eating biofortified food, including 103 million on farm who ate what they grew. 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

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

Africa	HIB	IPM	ZIM	ZIR	ZIW	ABP	VAC	VAM	OSP	IZC	IZP	IZL	ZIS
Angola								т	R				
Benin Rep		Т					Т	Т					
Burkina Faso		Т						Т	R				
Burundi	R					R			R				
Cameroon						Т	R	R					
Central African Rep							Т						
Chad							Т						
Côte d'Ivoire						Т	Т		R				
DR Congo	R					R	R	R					
Egypt					Т			Т					
Eritrea		Т							Т				
Ethiopia	Т				Т		Т	R	R		Т	Т	
Gabon							Т						
Gambia		Т					Т						
Ghana		Т					R	R	R				
Guinea						Т	Т						
Kenya	R	Т					Т	Т	R		Т		
Liberia							Т	Т					
Madagascar		Т		Т					R				
Malawi	Т	Т					Т	R	R		Т		
Mali		Т						R	Т				Т
Morocco									Т			Т	
Mozambique							Т	Т	R				
Niger		R					Т	Т	Т				
Nigeria		R	Т			Т	R	R	R	Т			Т
Rwanda	R					Т		R	R		Т		
Senegal		Т					Т	Т	Т				
Sierra Leone							R	Т					
South Africa					Т			Т	R				
South Sudan	Т	Т						Т	Т				Т
Swaziland							Т						
Tanzania	R	Т				Т	Т	R	R				
Тодо		Т						Т					
Tunisia		Т											
Uganda	R	Т				Т	Т	R	R		Т		Т
Zambia	z	Т			Т		Т	R	R				
Zimbabwe	R	Т			Т			R	Т				

HIB = Iron Bean IPM = Iron Pearl Millet	ABP VAC VAN
ZIM = Zinc Maize ZIR = Zinc Rice	OSP
ZIW = Zinc Wheat	Sour

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

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

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P = Vit. A Banana/Plantain C = Vit. A Cassava M = Vit. A Maize P = Vit. A Orange Sweet Potato IZC = Iron/Zinc Cowpea IZP = Iron/Zinc Irish Potato IZL = Iron/Zinc Lentil ZIS = Zinc/Iron Sorghum

rce: HarvestPlus, International Potato Center (2020)

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