

## Production and productivity trends

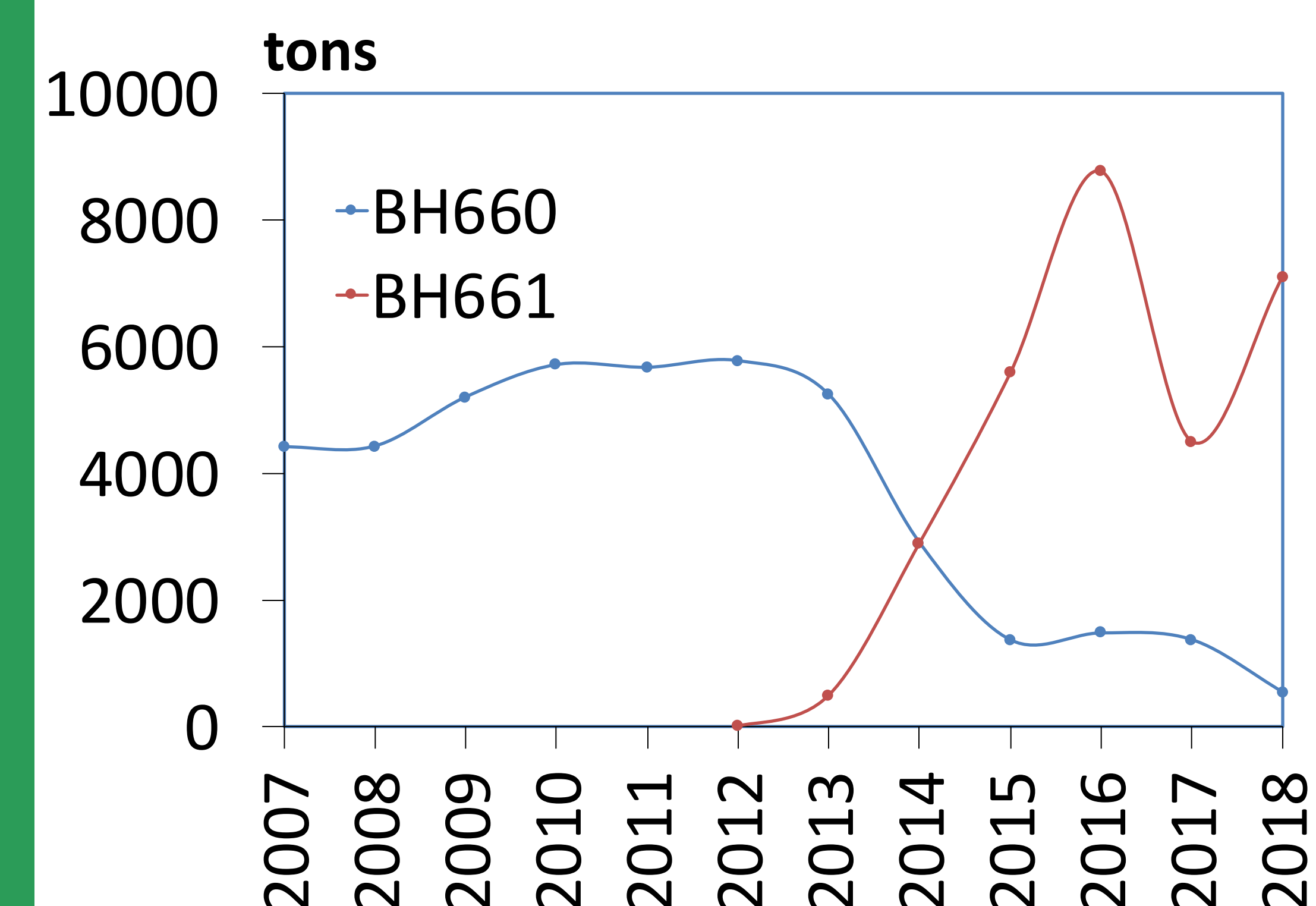


# Maize and Wheat ; Strategic Crops to fill Ethiopia's Food Basket

## Invest in fast breeding and seed systems

Maize and wheat breeding innovations like maize double haploid, identification of wheat rust resistance genes, high throughput phenotyping enable fast and cost-effective development of high yield and stress resilient varieties.

## Farmers' access to better seeds



Ethiopia's food security depends on maize & wheat sector's capacity to respond quickly to new farming challenges like emerging pests or diseases (maize lethal necrosis, fall armyworm, rapidly evolving wheat rusts...), climate change....

**Prevent, Develop, Scale up** : we need to keep investing in scalable early warning systems, fast crop improvement and seed scaling of stress tolerant varieties so that farmers get the right solutions in time.

## Research impacts for sustainable food security

Farmers have access to stress resilient maize and wheat technologies thanks to effective partnerships: 70% and 77% of wheat and maize released varieties respectively are derived from CIMMYT's germplasm.

CGIAR to work with Ethiopia's research & development sector to support national food security priorities [eg towards wheat self-sufficiency].



Old popular **BH660** hybrid replaced by drought tolerant **BH661** after successful demonstration in drought year



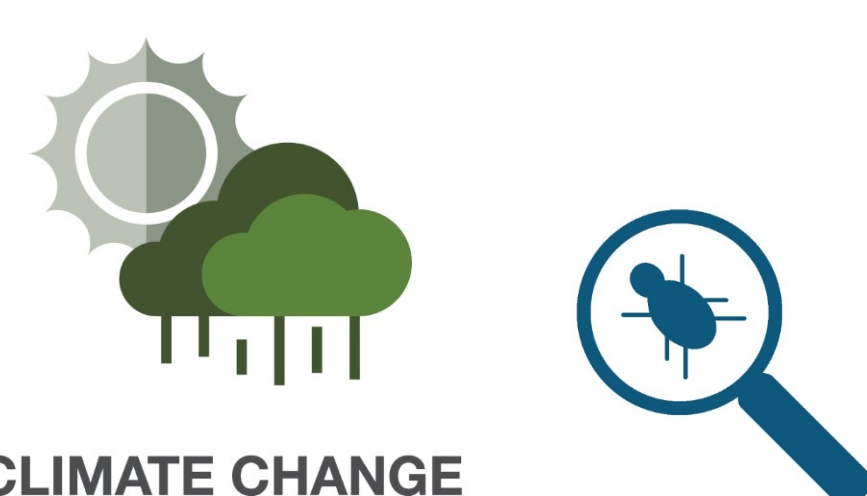
Rust susceptible **Kubsa** is under replacement by resistant wheat varieties like **Kakaba, Danda'a, Kingbird**

## Key partners

MOA.NARS, High Learning Institutions, Seed companies, John Innes Center, FAO, Sasakawa Global, WorldVision-ETH

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Since 1995, maize yields x 3 and wheat yields x 2.5. Ethiopia still imports over 1 million tons of wheat annually.



## Vulnerable staples

CLIMATE CHANGE

With changing climate, maize and wheat farmers deal with increasing risks: emerging pests & diseases, drought, heat waves, declining soil fertility... For instance, popular wheat varieties were wiped out by recent stem and yellow rust outbreaks.

## Smart early warning systems

The Mobile and Real-Time Plant Diseases Diagnostic "lab in suitcase" MARPLE identifies new strains of yellow rust in 2-3 days instead of 3 months. Extension can decide in time for targeted preventive measures.



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Scan to find out more



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