

Chinese and Indian Agriculture

Two approaches for one goal

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August 29, 2024



- The Swiss roots of Syngenta and its predecessor companies go back 250 years
- 60,000 employees from 123 nationalities across more than 100 countries
- HQ is in Basel, with employees from more than 70 countries



#1
in Crop
Protection
and Biologicals

#1
in crop
nutrition and
farmer services
in China

#3
in Seeds

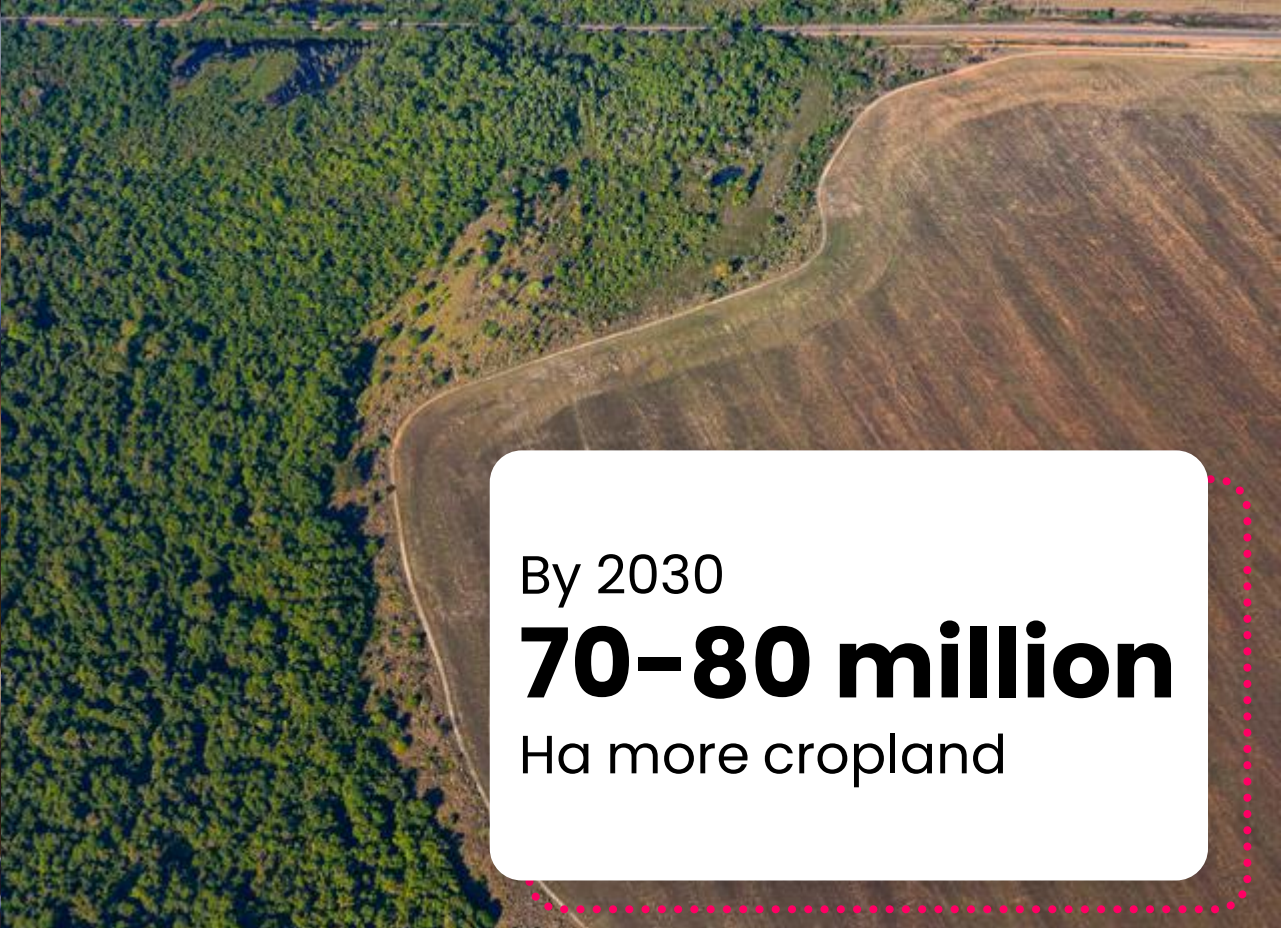
Our food system is a miracle



Global food production must increase



By 2050
10 billion
people



By 2030
70-80 million
Ha more cropland

Even in scenarios where protein consumption is diversified and food loss and waste is cut

Our food systems have a significant footprint



of greenhouse gas emissions



of all freshwater used



of planet's deforestation

AGRICULTURE

FOOD SYSTEMS

Farmers are on the frontline



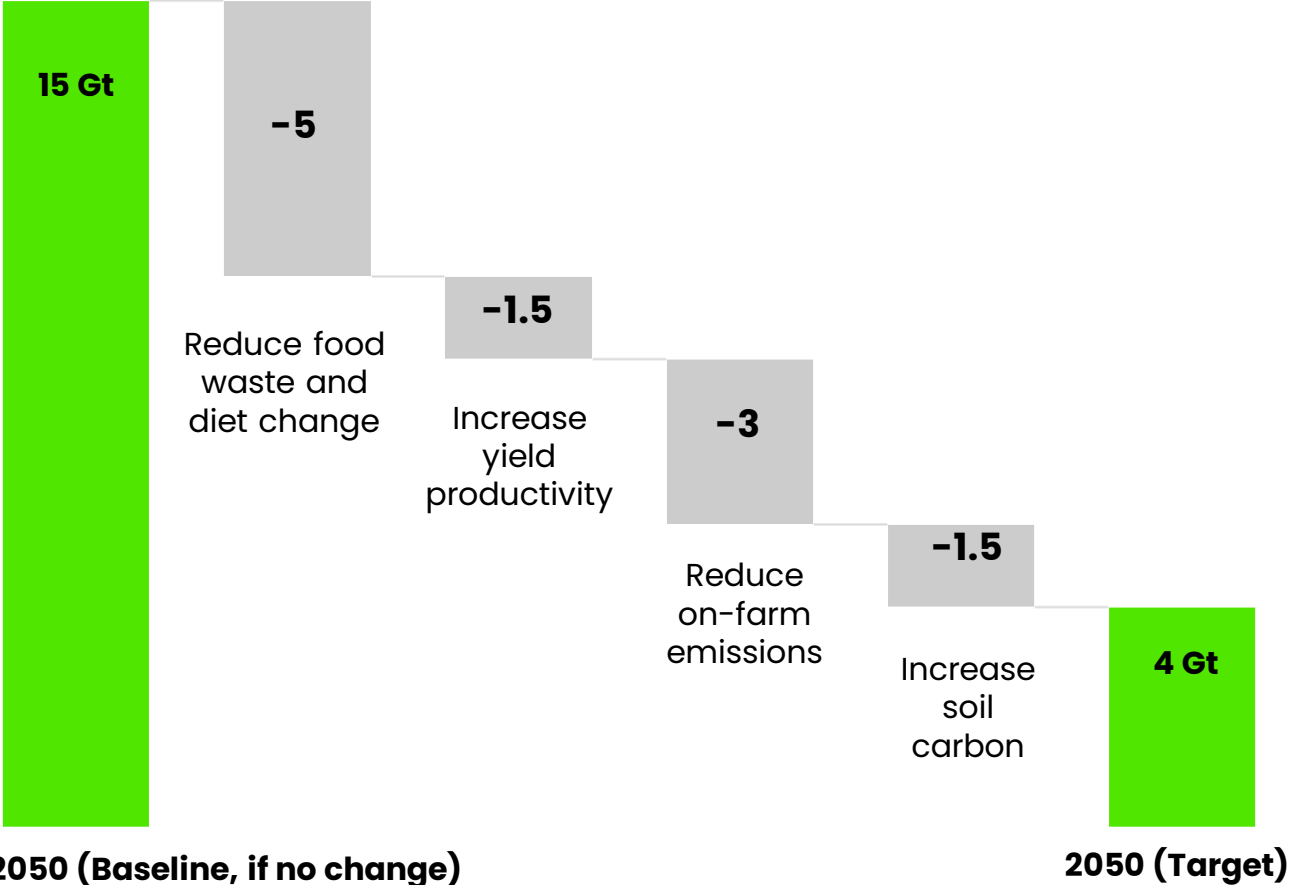
There is a need to produce enough food under **changing agronomic conditions**

Farmers protect and regenerate land for future generations while running businesses

Millions of farmers are smallholders and have challenges accessing modern inputs, finance and markets

Clear pathway to produce more food with less climate impact

Actions to reduce greenhouse gas emissions from agriculture by 2050

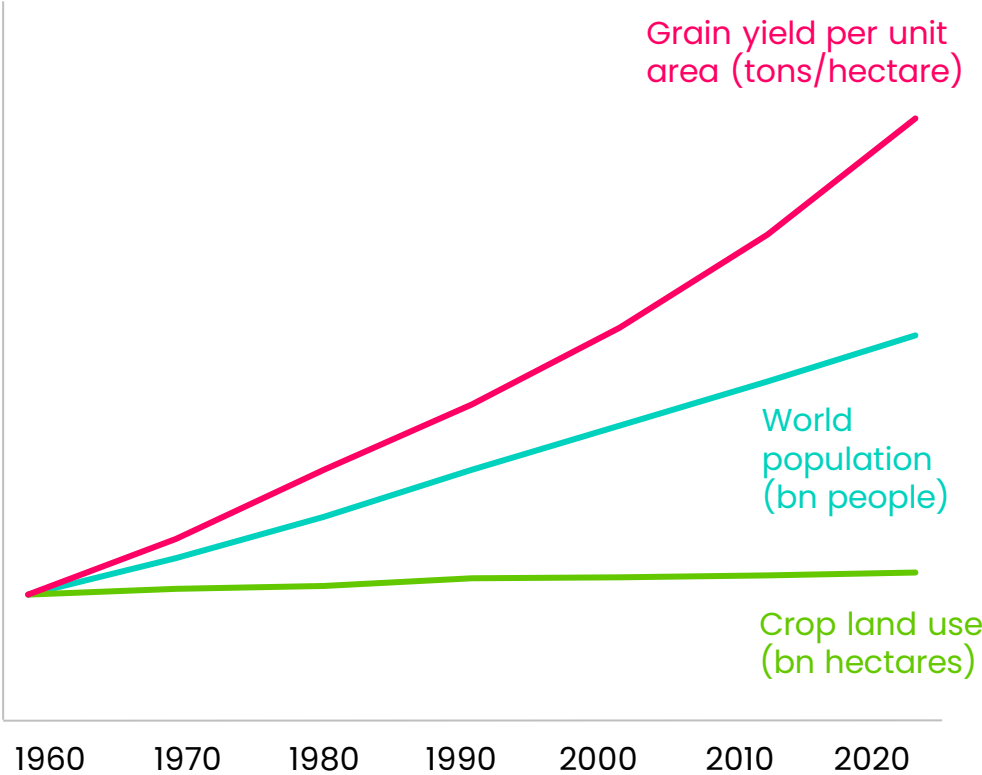


While at the same time regenerate soil and nature



There is reason for optimism

Efficiency improvement in the last 60 years



289%

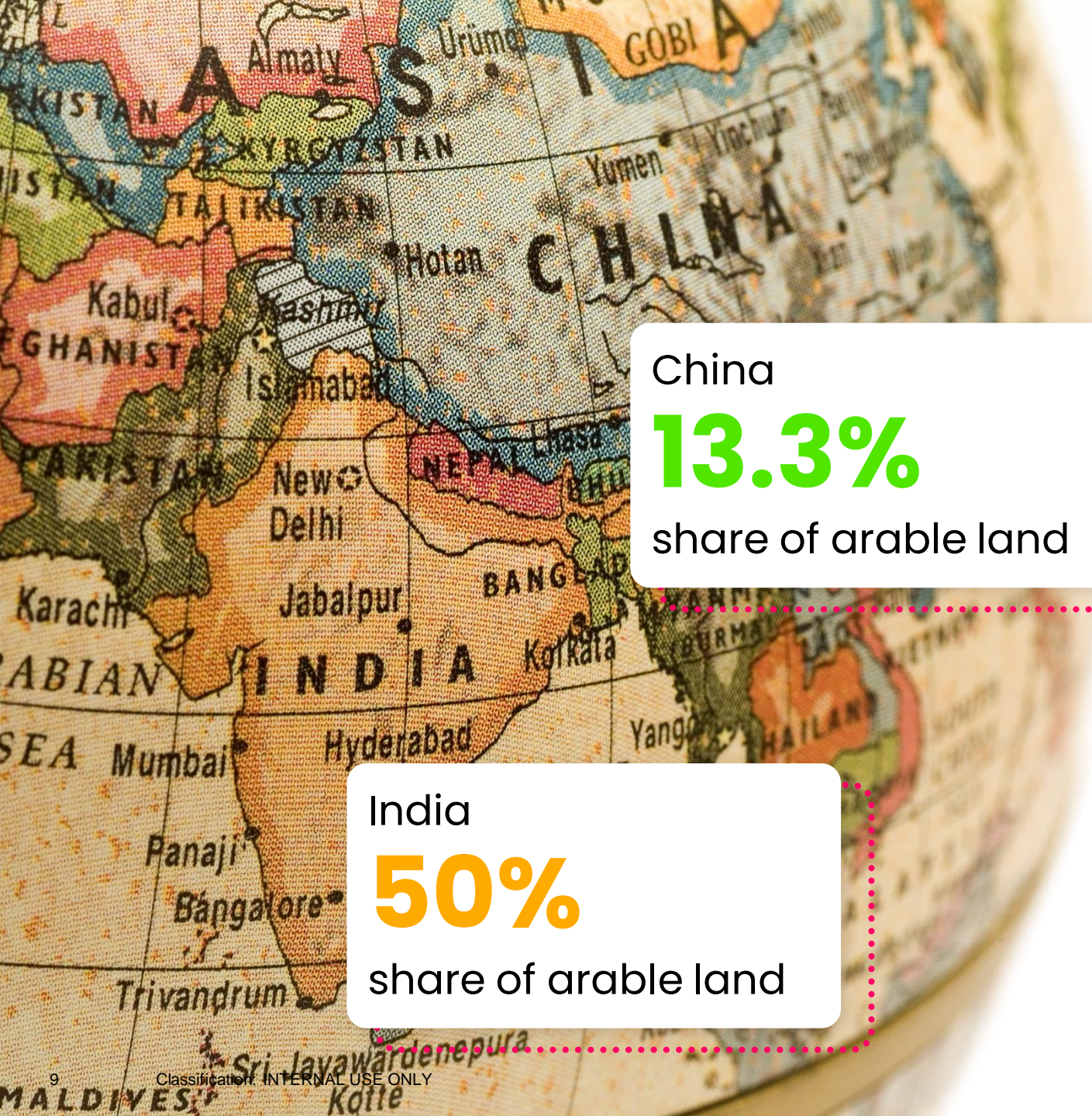
increase of grain yield per unit area

157%

increase of population

25%

increase of arable land only



China

13.3%

share of arable land

India

50%

share of arable land

Together

35%

of the global
population

Food self-sufficiency

An aerial photograph of a large-scale agricultural or food processing facility. The foreground and middle ground are dominated by hundreds of circular, cylindrical tanks or silos, arranged in neat, parallel rows. The tanks have light-colored, possibly metallic, tops. In the background, there are green fields, some industrial buildings, and a road. The sky is clear and blue.

China 2033 target
92%
Self-sufficiency

A photograph of the interior of a large warehouse. The space is filled with high stacks of white, rectangular bags or sacks, likely containing food or agricultural products. The bags are stacked on wooden pallets, which are placed on blue metal shelving units. The shelving units are arranged in long aisles, creating a sense of depth. The ceiling is high and industrial, with visible structural beams and lighting fixtures. The overall atmosphere is one of a well-organized and large-scale storage facility.

India
High-degree
of self-sufficiency



China

250 million

Smallholder farmers



India

126 million

Smallholder farmers

Weather extremes



China Modern Agriculture Platform



- **650+ MAP centers**
- **300,000 Digital platform users**

MAP digital solutions

- Remote sensing
- Precise meteorology
- Disease and pest warnings
- Precision planting

Higher yield, lower impact

- 8-15% Yield increase
- 14% Income increase per MU
- 13% Water saving
- 13% Lower carbon emissions

Digital solutions in India



AGROMONY

CROP DOCTOR

FARM LOAN

WEATHER

LOYALTY PROGRAM

MANDI PRICES

PRODUCT SCAN

SPRAY SERVICE

FARM AREA

Cropwise Grower

State-of-the-art input technologies

TYMIRIUM® technology:
nematicide & fungicide with
application rate of 1/100 per
hectare vs previous products

Hi-Edit genome editing to
accelerate breeding
Herbicide tolerant GMOs

PLINAZOLIN® technology:
insecticide with longer spray
intervals and fewer applications

High-yielding hybrid rice
varieties

Promoting sustainable agriculture



China

RUN TIAN

Project



India

**Climate
Smart Rice**

Date

The path forward



