



Agriculture STEM Workforce

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FEEDING THE WORLD

The global population is expected to exceed nine billion by 2050. That's two billion more mouths to feed.

We will need almost 70 percent more food, 30 percent more water, and over 50 percent more energy production.

ADVANCING HEALTH

Millions of Americans experience hunger or food insecurity.

Millions more suffer from diet-related diseases such as type 2 diabetes, obesity, hypertension, and certain cancers.

Diet-related diseases are a leading cause of death and disability in the U.S.

The burden is disproportionately impacting communities of color, rural communities, and individuals with disabilities.

AGRICULTURE IS...

Adapting to climate change, which is altering growing patterns, pest and disease challenges.

Striving to preserve natural resources.

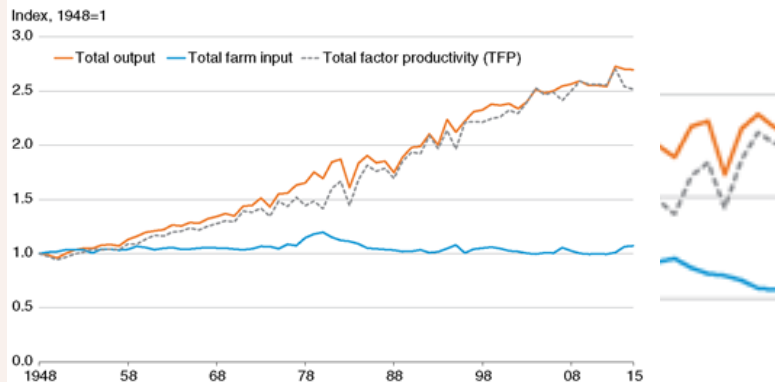
Struggling to remain a profitable enterprise for many, not just a few.

INVESTMENT

U.S. agricultural productivity growth accounts for most output growth between 1948 and 2015

Index, 1948=1
3.0

— Total output — Total farm input --- Total factor productivity (TFP)



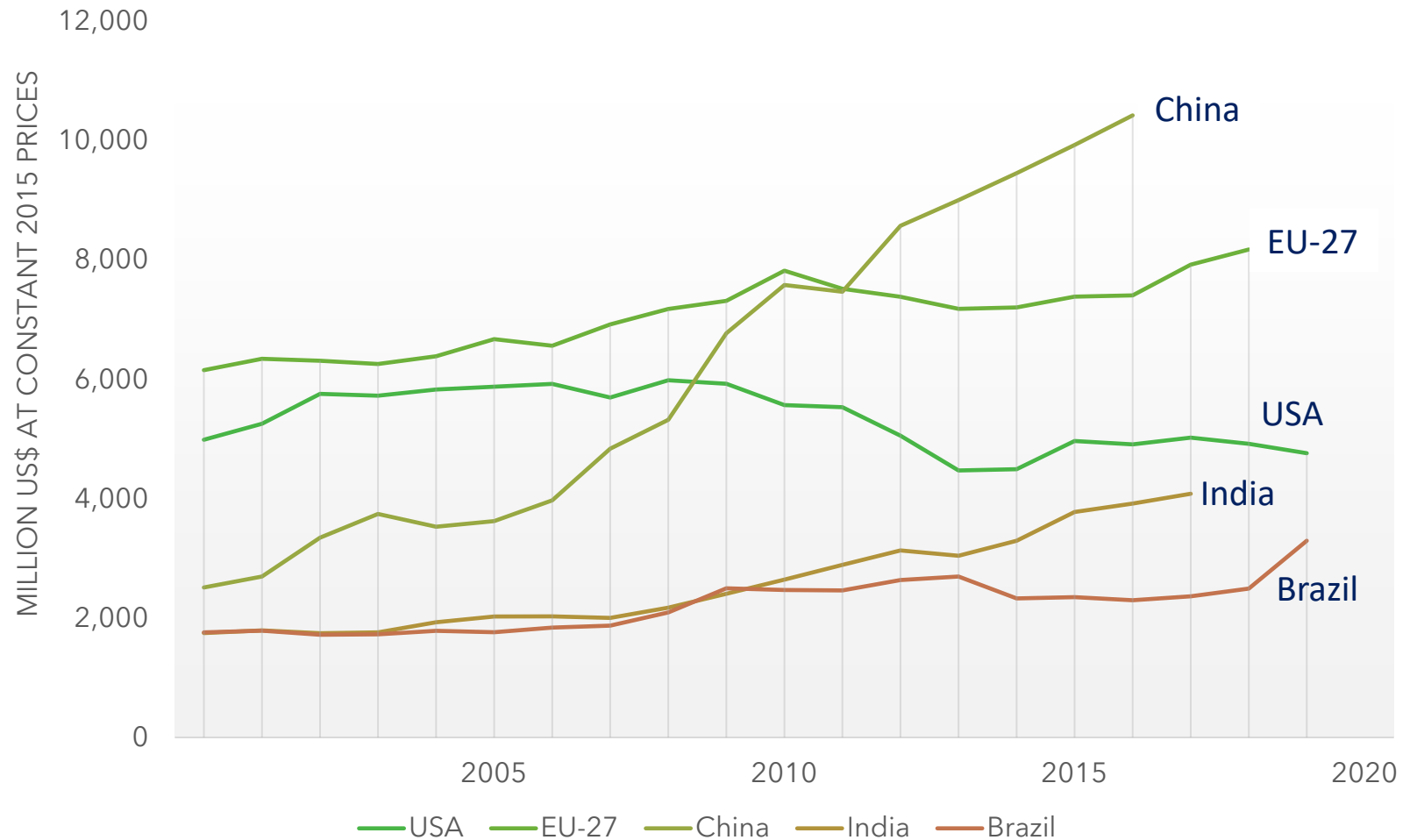
Note: Data are expressed with an index that is calculated relative to the data in 1948, where data in 1948 are set to equal 1.
Source: USDA, Economic Research Service, Agricultural Productivity in the U.S. data series.

0.0
1948 58 68 78

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International Public Agricultural R&D Spending Since 2000



every \$1 invested

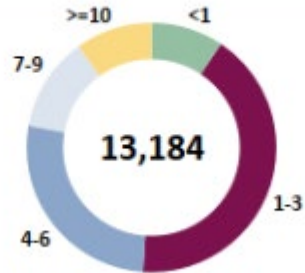
YET...

Ag research spending in the
USA is falling behind

AN AGING AG WORKFORCE

Federal (USDA) Producers

CURRENTLY ELIGIBLE EMPLOYEES BY YRS ELIGIBLE*



RUNNING HEADCOUNT OF EMPLOYEES BECOMING ELIGIBLE*



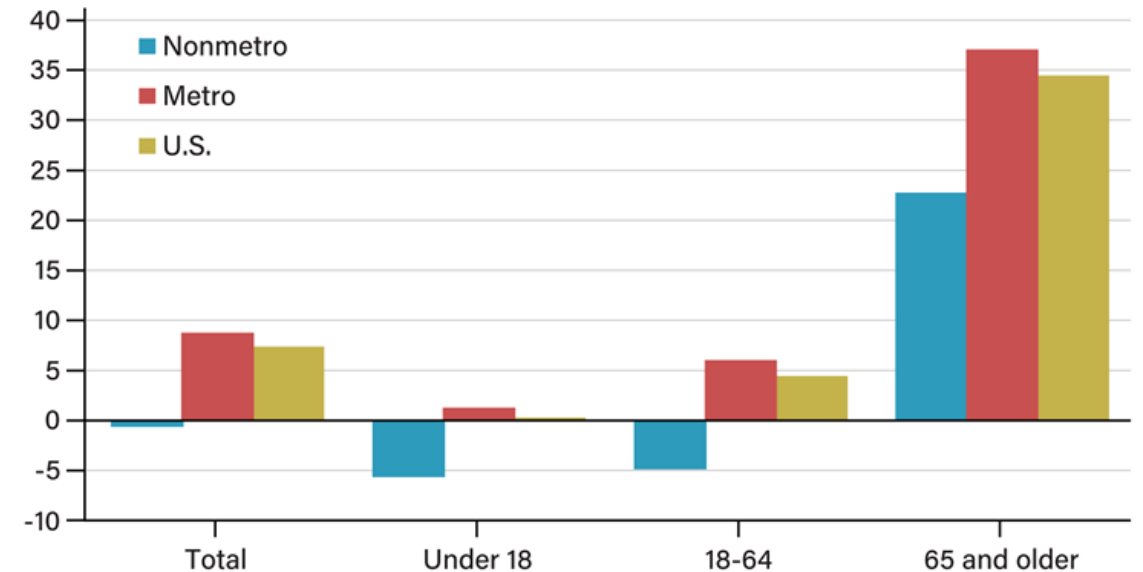
Top Position Types (out of 13,184)

- Contracting (1,423)
- Inspectors (943)
- HR Specialists (933)
- Bio Science (767)
- Forest Service Technicians (437)

Nonmetro working-age (18-64) population declined 2010-20

USDA Economic Research Service
U.S. DEPARTMENT OF AGRICULTURE

Percent change



34 percent of farmers are 65 years old and above.