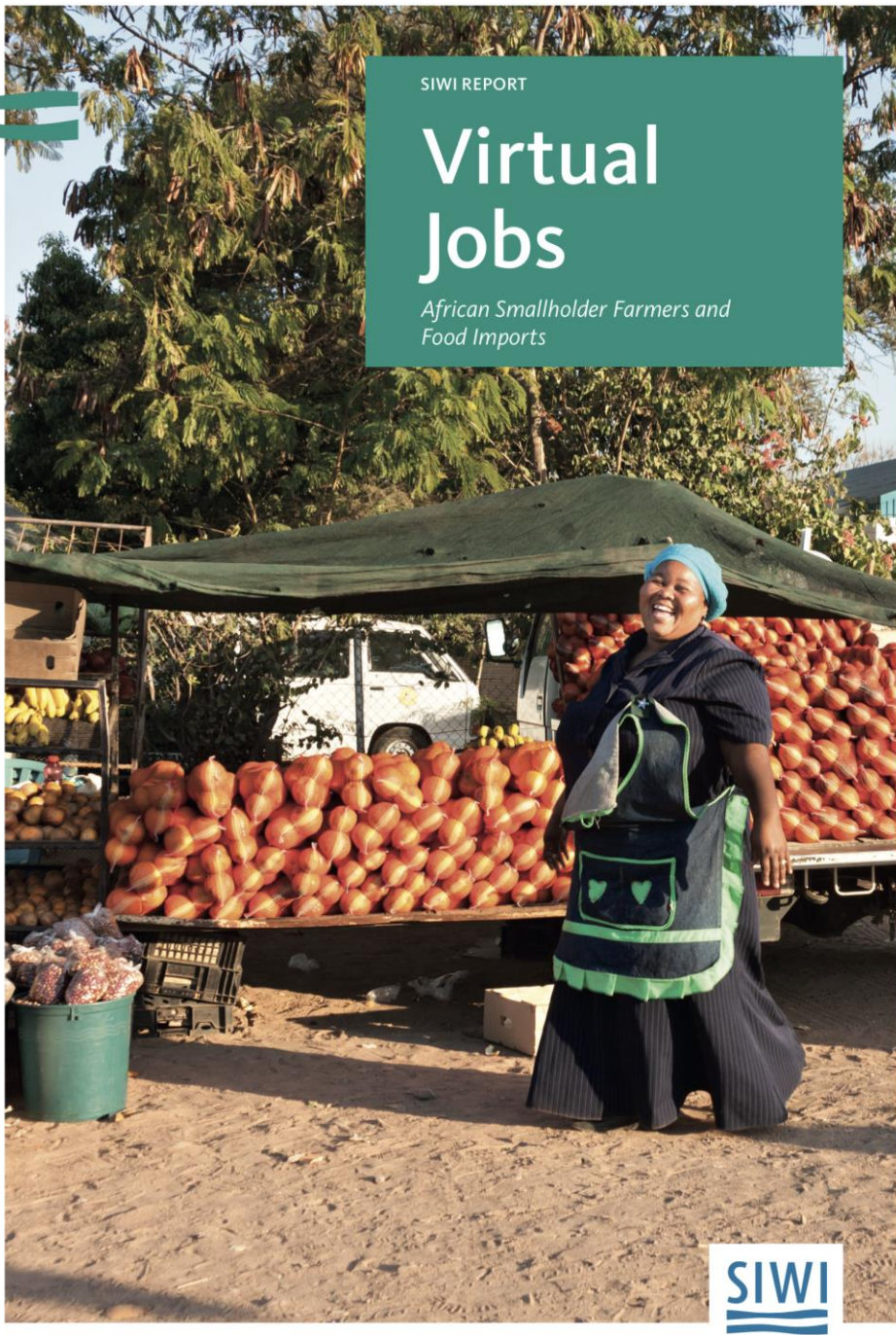


Virtual Jobs

African Smallholder Farmers and Food Imports

SIWI Report Launch – 5 May 2020





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2. Overview of the situation
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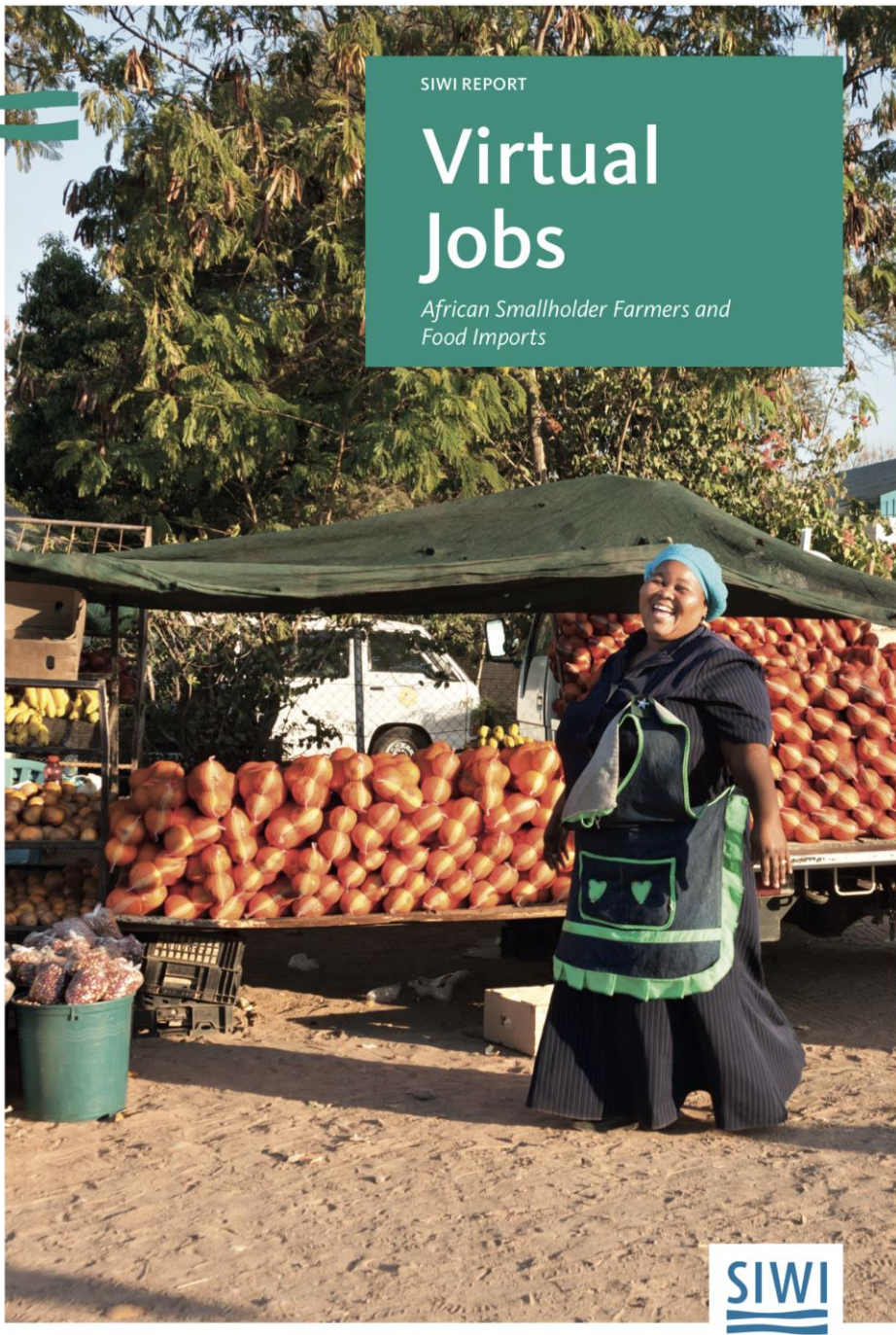
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Introduction

- Virtual Jobs document is part of a process undertaken by SIWI focusing on “Green water” as an essential but under-appreciated part of the water cycle
- Water availability and soil moisture management are key determinants of crop yields and agricultural productivity
- 3rd publication on the topic
- Numerous meetings and consultations in Africa & Europe





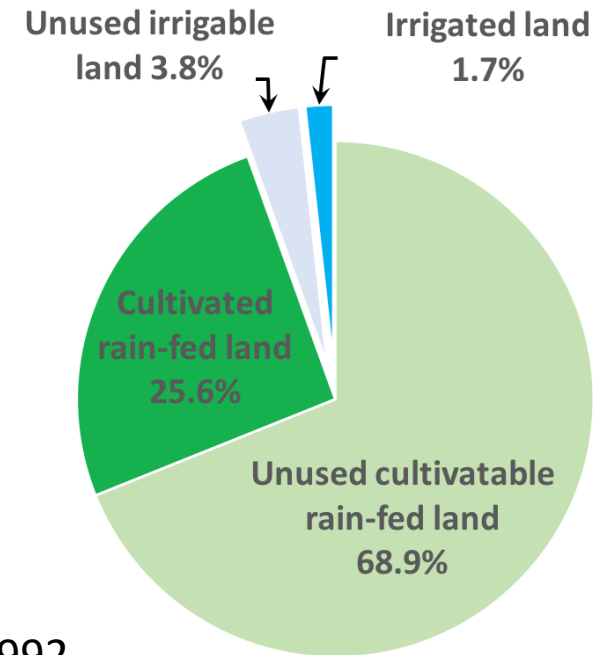
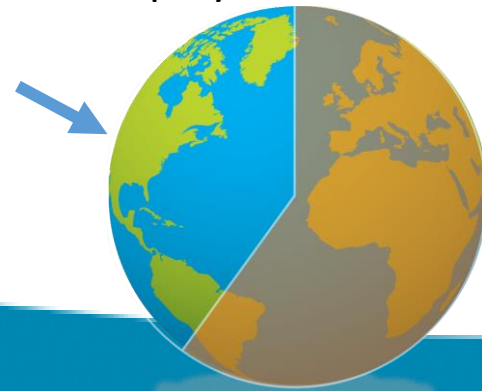
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Over view of the situation

- Only 5.5 per cent of cultivatable land in Africa is irrigable – a natural phenomenon
- 94.5% of cultivatable land is therefore rainfed
- 65% of the population is employed directly or indirectly in agriculture
- 80% of all agricultural activity is on smallholder rainfed farms
- Africa has the lowest crop yields and agricultural productivity in the world
- In 2016 Africa had 218 million undernourished population, up by 44 million from 1992
- 60% of the world's unutilised arable land is in Africa

**AND Africa is importing food @ \$35 billion per year
which is expected to increase to \$110 billion**

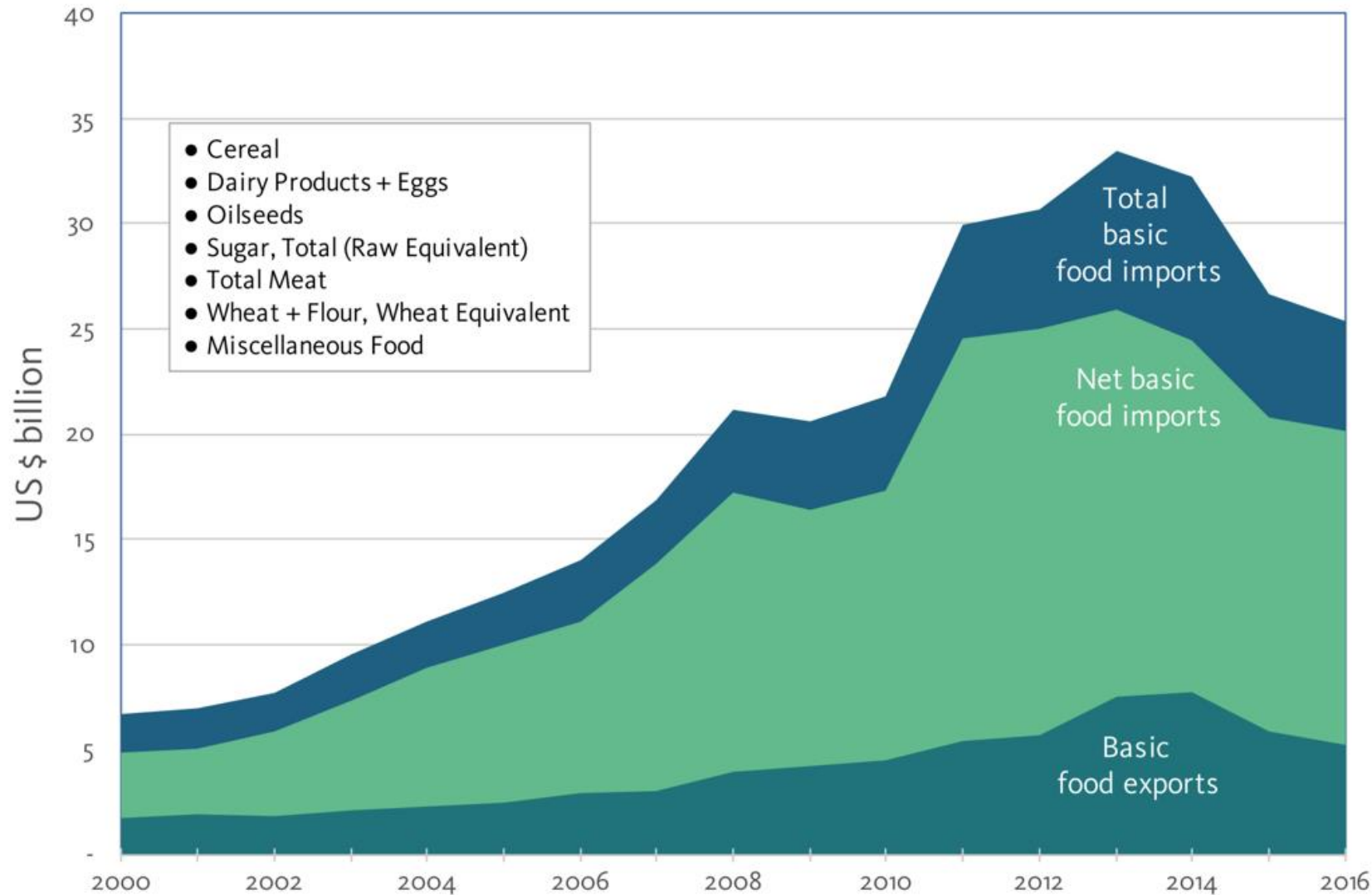




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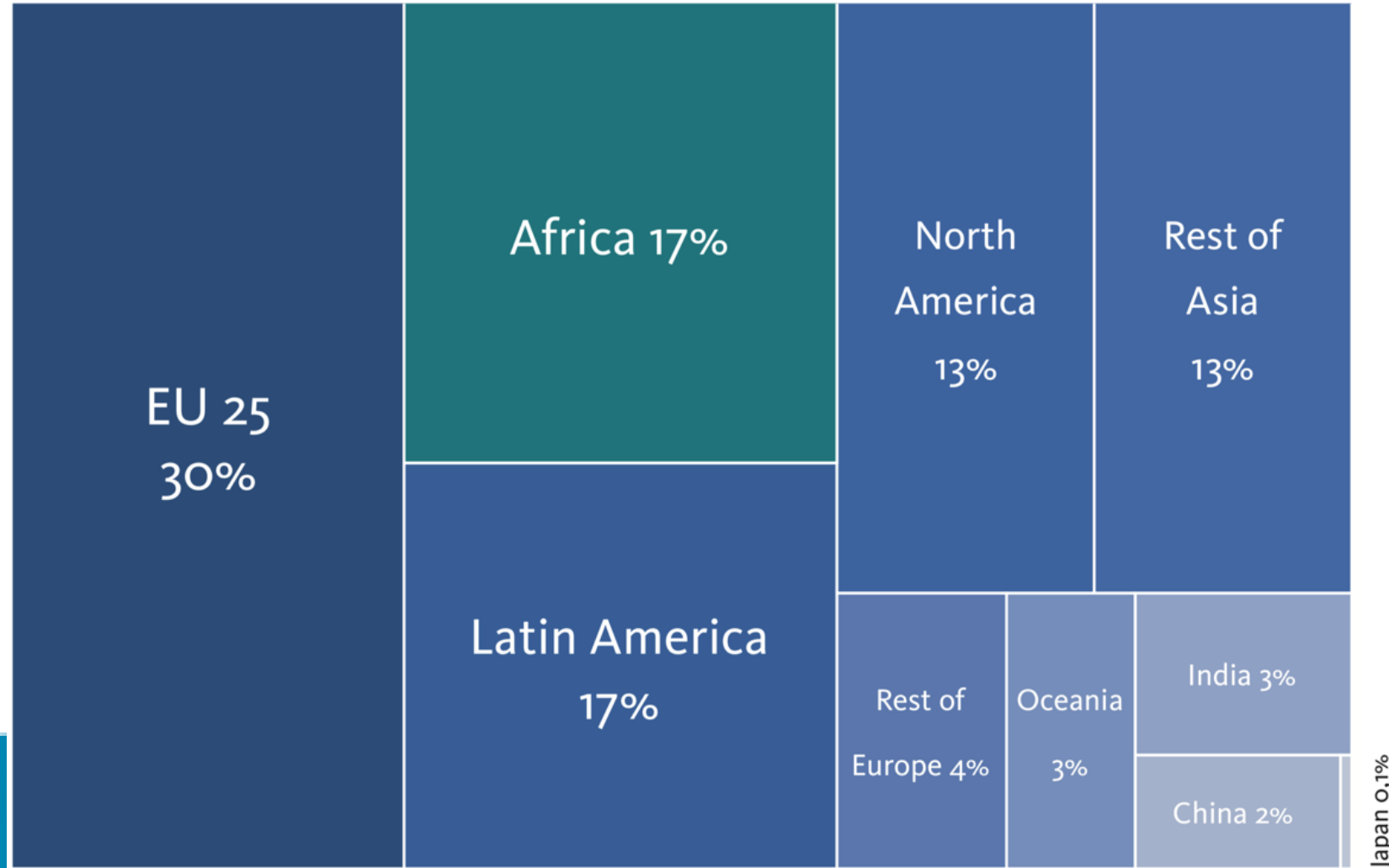
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Africa and global food trade



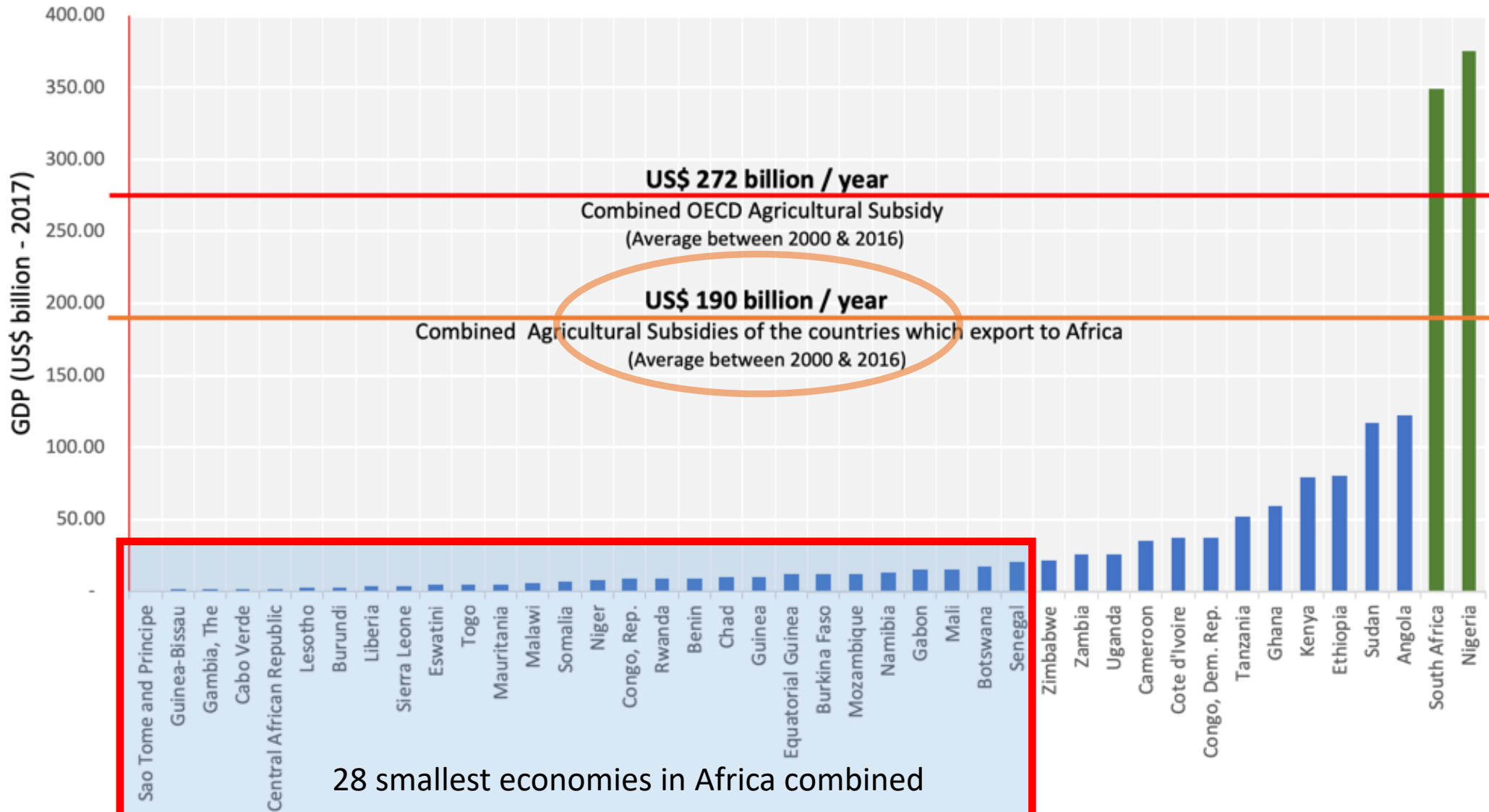
Basic food imports into SSA (FAOSTAT)

Africa and global food trade



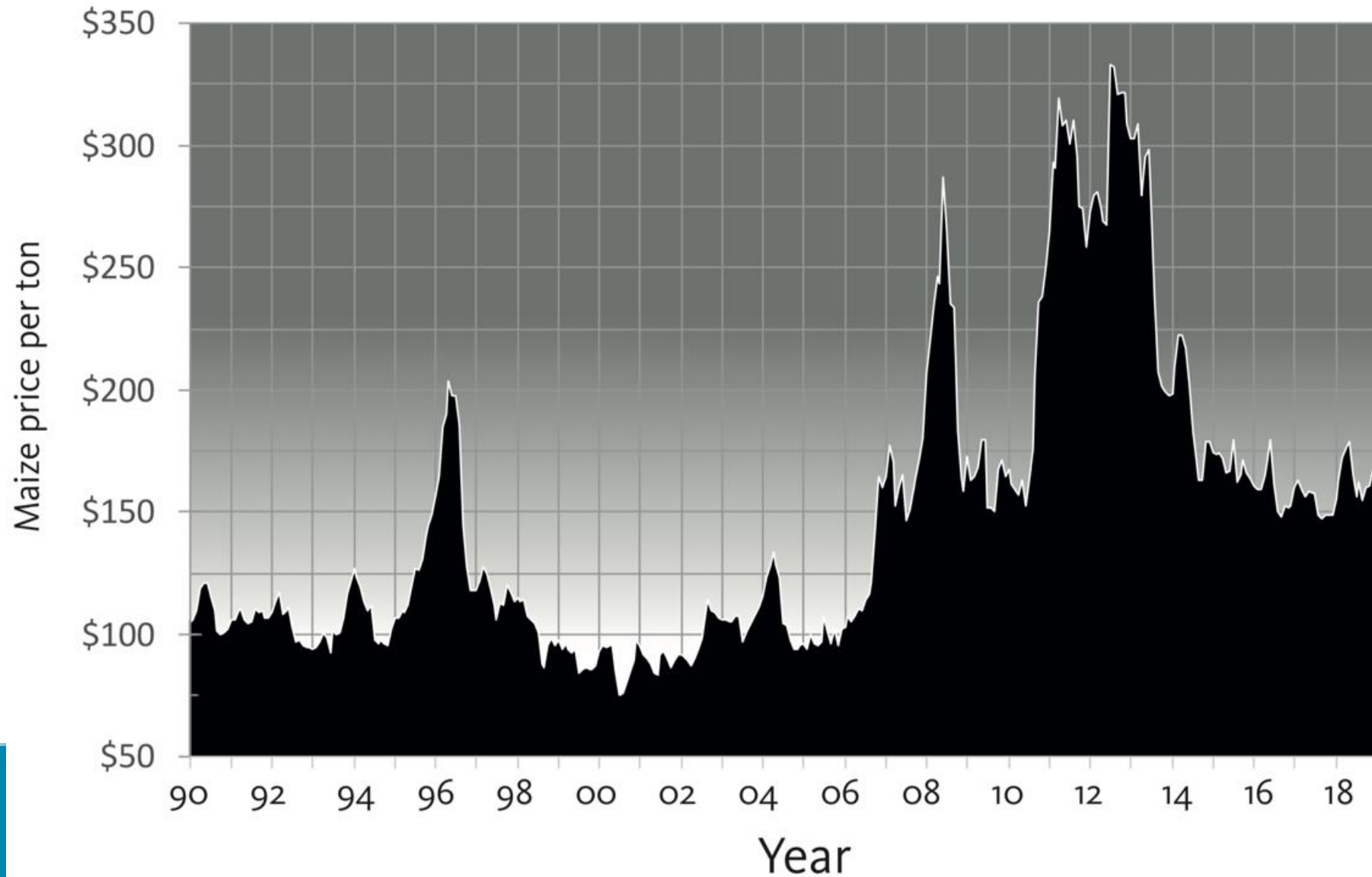
Agricultural imports by country of origin

Africa and global food trade - not a level playing field



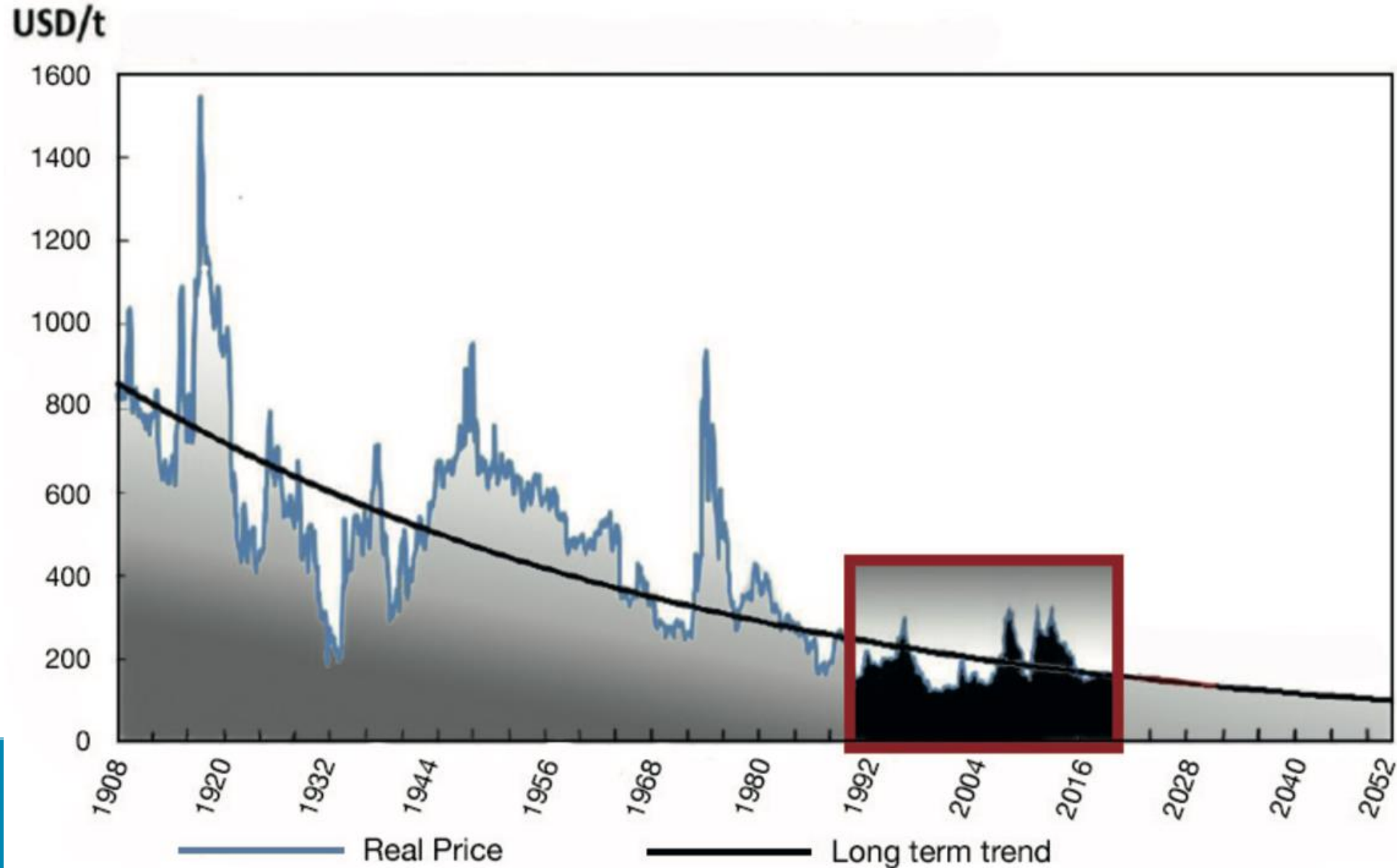
OECD Agricultural subsidy levels

Africa and global food trade



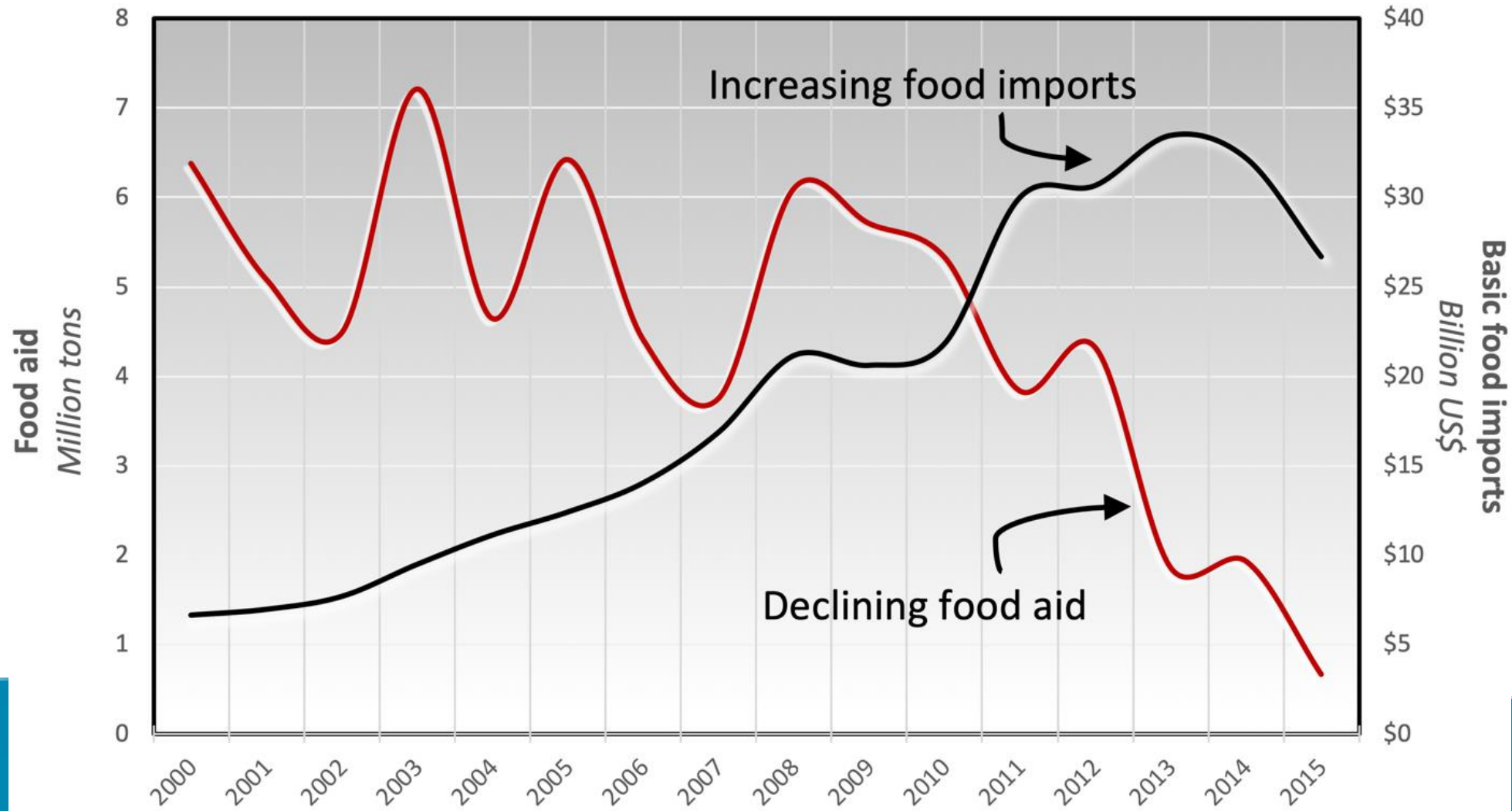
Recent maize price fluctuations

Africa and global food trade

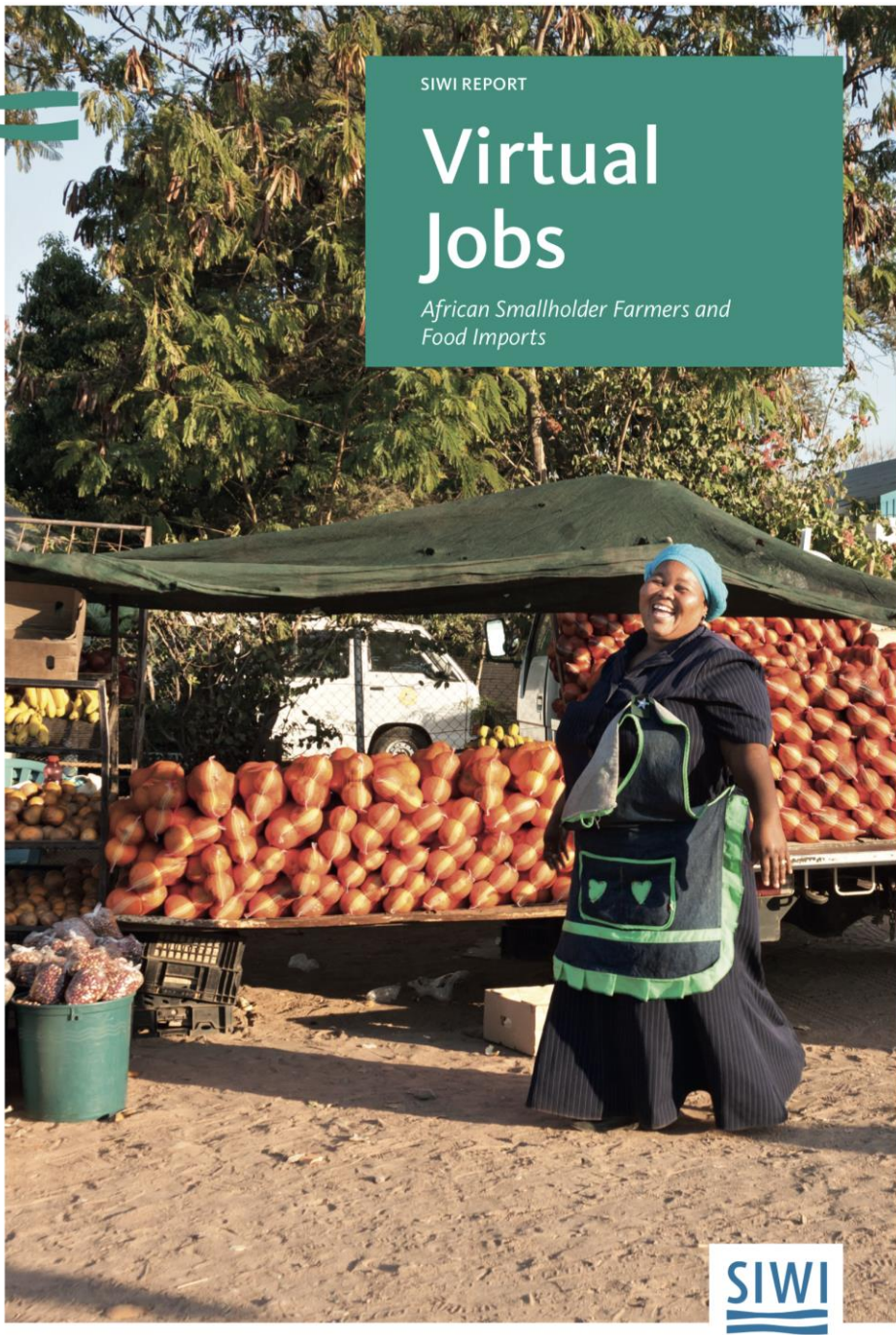


Long-term maize price fluctuations

Africa and global food trade



Food aid versus food imports



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Virtual Jobs Concept

- When food is exported from one country to another, all the benefits of employment and growth accrue to the country of origin rather than the importing country. (Jobs, infrastructure, value chain, revenue base etc.)
- **Virtual jobs describes the equivalent income and livelihoods that would be earned & supported if the food imported into SSA were cultivated, processed and marketed in SSA, instead of being imported.**
- This represents the on-farm and off-farm opportunity cost to SSA, primarily borne by the rural poor, of importing food from the distorted global market.
- It is not only jobs which are lost, it is all the benefits of an active rural economy and the contribution of vast human capital to the national good.

Virtual Jobs Concept

The equivalent value of imports in terms of household incomes

- Average rural farm household income = \$ 2,989 / year
- \$1 agriculture growth results in 0.3-0.5\$ growth in off farm sectors
- Average off-farm household income = \$ 4,991 / year
- 2 working adults per household + 3 dependents = 5 livelihoods

35\$ billion food imports \cong 58m on-farm & 17.5m off-farm livelihoods

Virtual Jobs Concept

currently



35 billion USD of food
is currently imported

2025 (predicted)



110 billion USD of food
is predicted to be
imported by 2025

If food was produced in Africa instead of imported

76 million

1/10th of the rural population of SSA

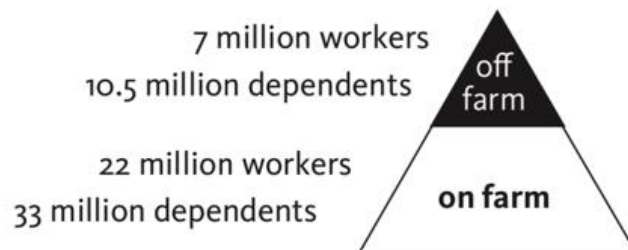


workers dependants

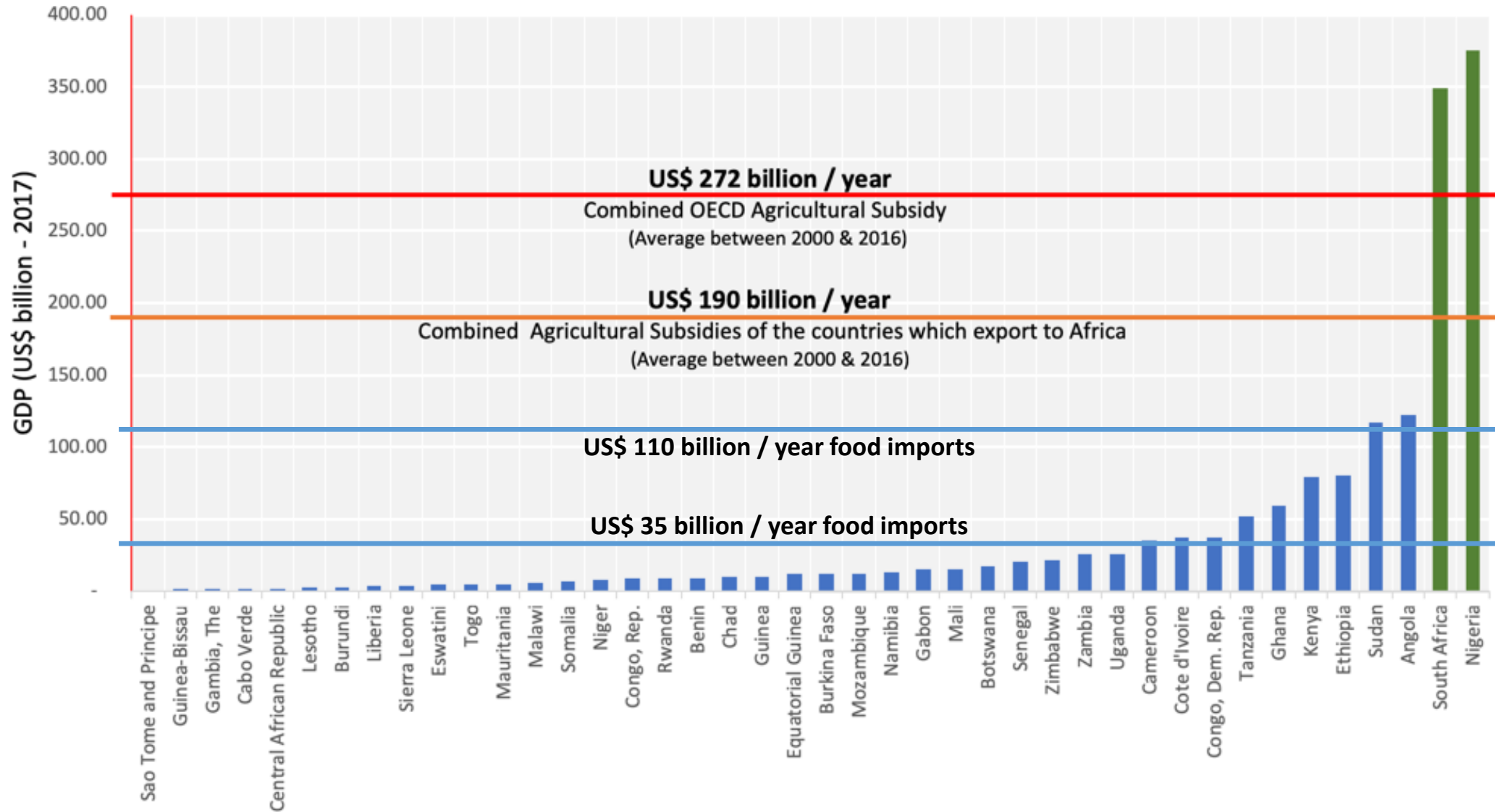
239 million

1/3rd of the rural population of SSA

**rural livelihoods could
potentially be enhanced**



Virtual Jobs Concept

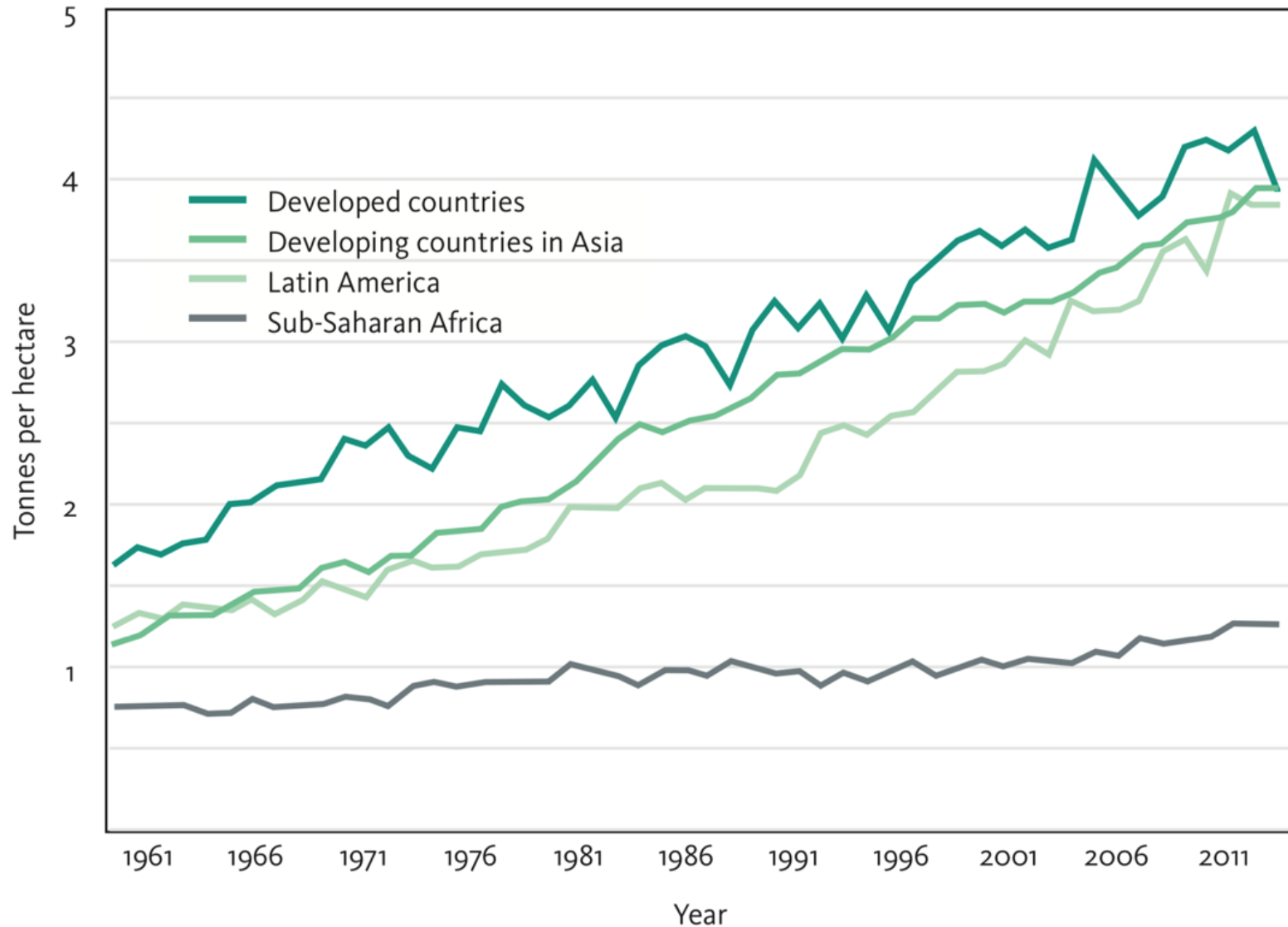




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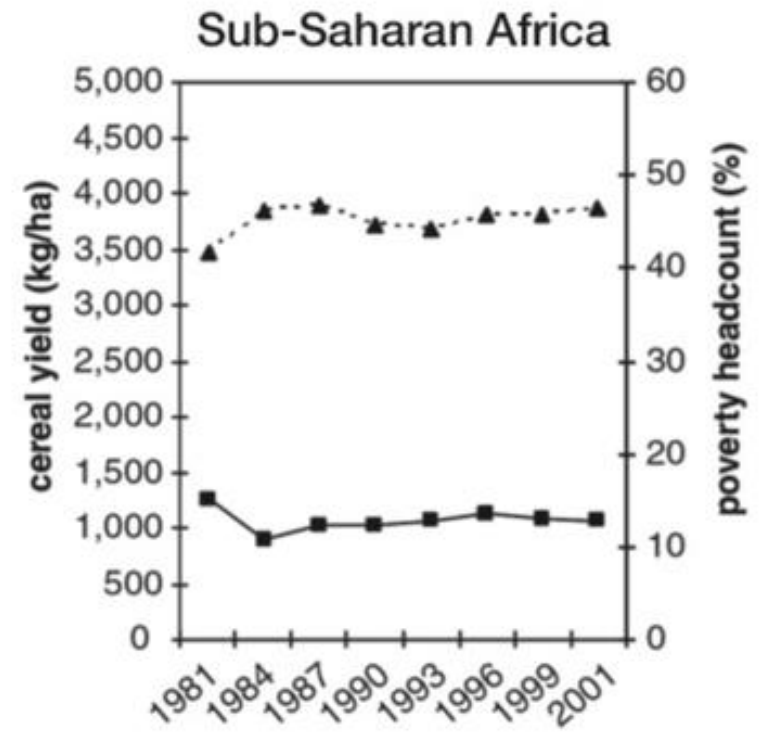
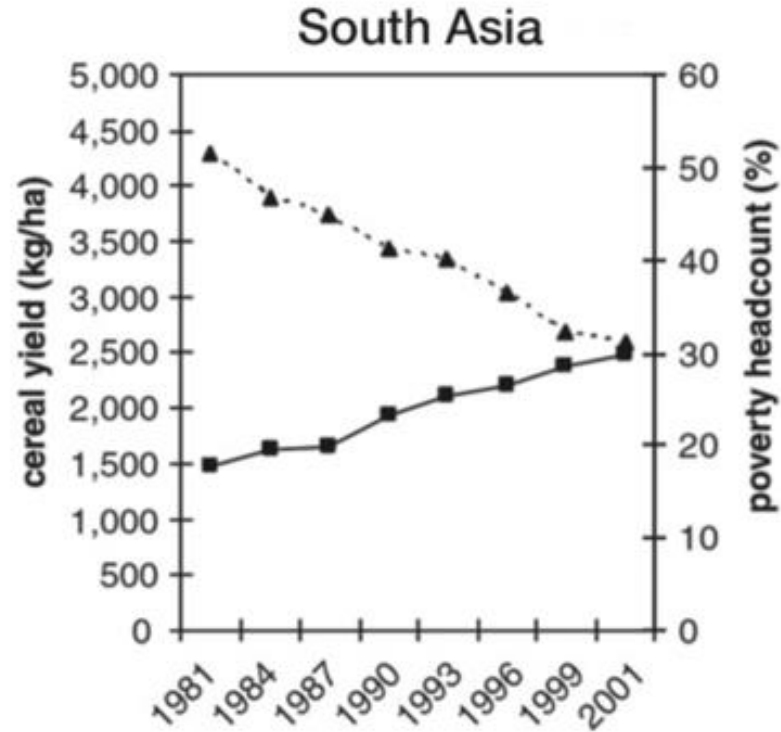
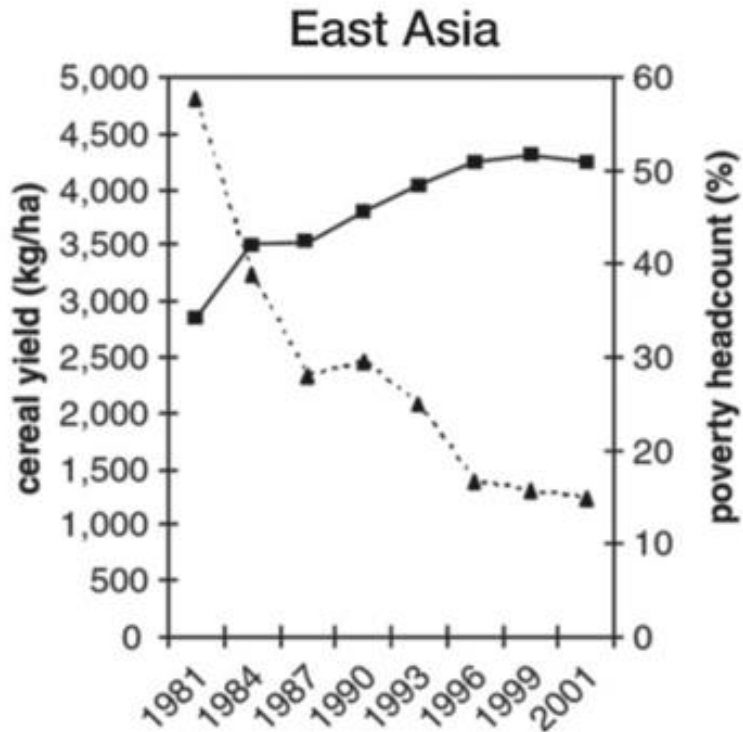
Reversing the trends



Cereal yield rates –
great potential

High yield gap between
actual & potential

Reversing the trends



Relationship between increasing yields and decreasing poverty

Reversing the trends

How do you increase yields for smallholder rainfed farmers?

How do you translate increased yields
into transformed rural economies
and national food security?

Reversing the trends

How do you increase yields for smallholder rainfed farmers?

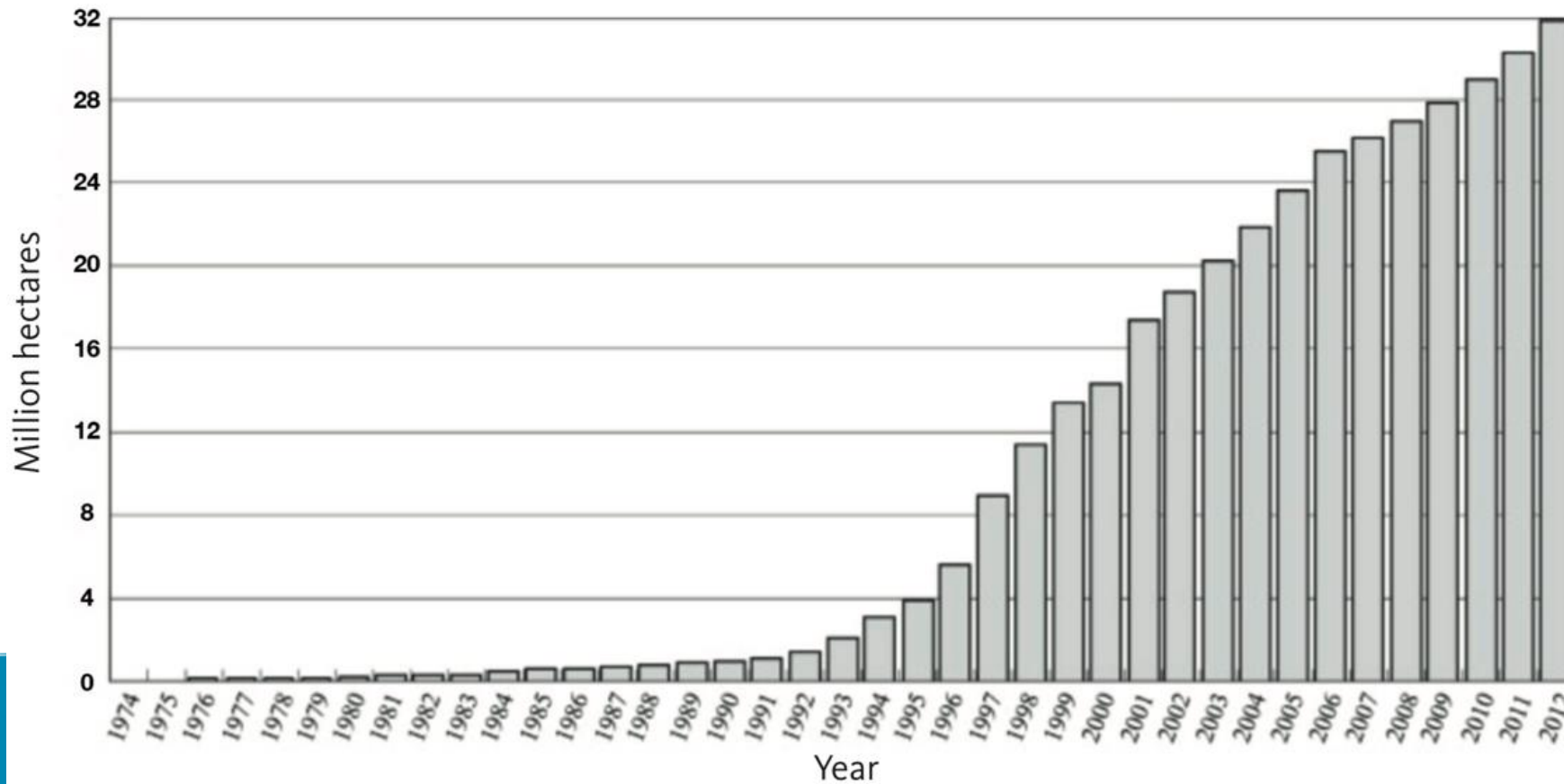
Through improved soil moisture (“green water”) and fertility management achieved through low/no till regenerative methods and small scale rainwater harvesting & storage.

Many examples in SSA: Tiyezi, Malawi (12,000 farmers); CNTA, Ghana; Dabane, Zimbabwe; Africa Conservation Tillage Network, Kenya; Sustainable Land Trust, South Africa

Global examples: Tobin, Australia; Conservation Agriculture Association, UK; NO-Till USA

Reversing the trends

Can this be done at a meaningful scale?



YES – it was done in Brazil and has transformed the entire economy.

Over 50% of crop area changed to no-tillage, conservation agriculture. Now they are major food exporters. Reversed soil erosion & degradation.

Crop area converted to conservation Ag in Brazil

Reversing the trends

How do you translate increased yields into transformed rural economies and national food security?

Need investment (redirected food import expenditure) -

- Research
- Farmer education & support
- Value chain access
- Credit
- Land tenure security
- Supportive food marketing and import policy

Entirely Dependent on Political Will

Reversing the trends

Creating a virtuous cycle

- Create rural jobs and incomes, improved livelihoods
- Increase food security, rural health & wellbeing
- Reduction of rural poverty
- Reduction of widespread land degradation – **Zambezi River Basin**
- Redirection of foreign expenditure & improvement of balance of payments
- Bring 60% of the human capital of SSA into active participation in the economy

Degradation due to rural poverty
in the Zambezi River Basin





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Next steps

Advocacy:

- ✓ Continue to raise the profile of the issue of Virtual Jobs.

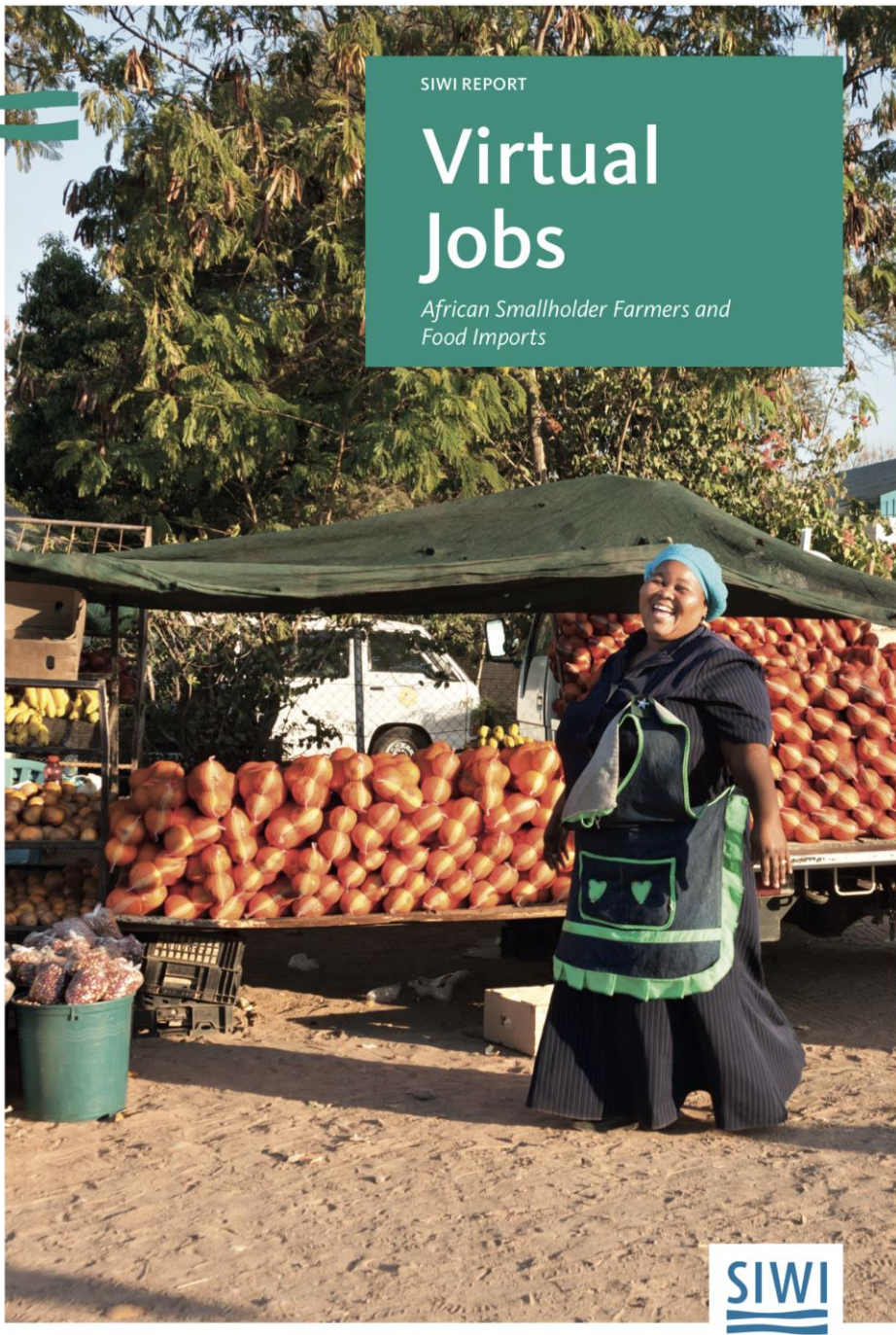
Support:

- ✓ African initiatives in regenerative smallholder rainfed agriculture to replace food imports

Research:

- ✓ On-farm smallholder rainfed improved agriculture methods focusing on 'green water', small scale water capture & storage (SIWI focus on water)
- ✓ Examine the carbon foot print implications of imported food
- ✓ Examine the economics of the global food market and the impacts in Africa

Build Political Will



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