

# Feeding Africa

## Fertilizers and Soil Health

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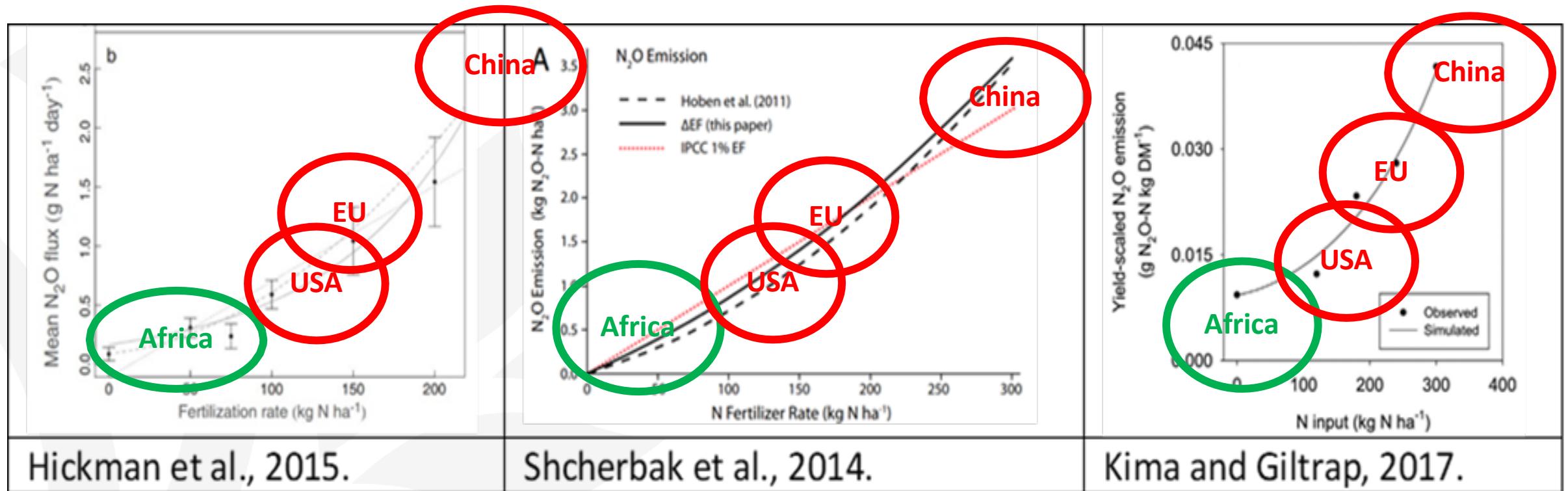
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# (Mineral) Fertilizers



# GHG Emissions from N-fertilizer use

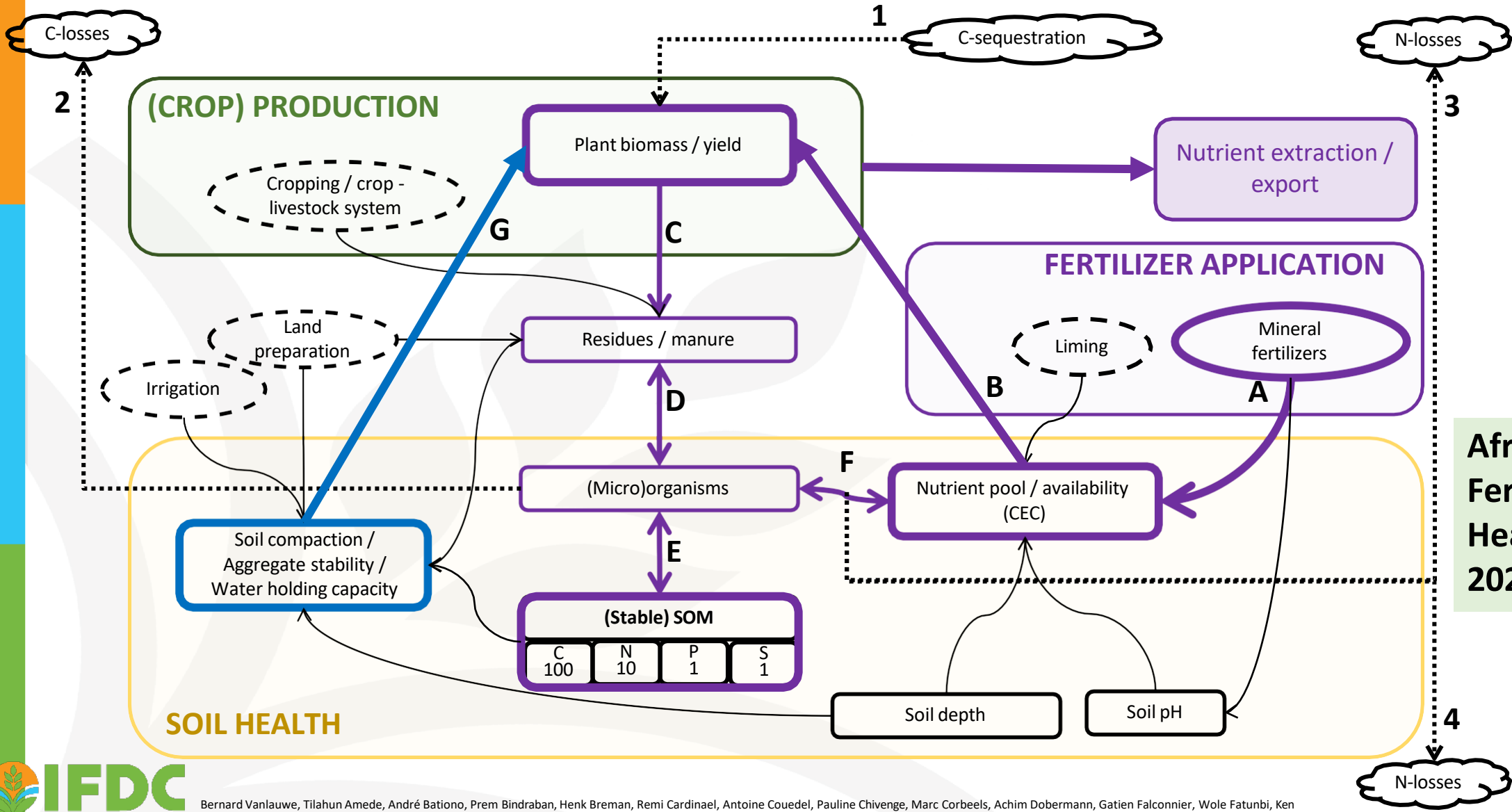


# Sri Lanka's: From Ideology to Complete Chaos

- Island Country – 21.5 M people
  - Tourism, tea, ...
- 2019 ideological policies:
  - 2 M farmers to turn into organic agriculture in 10 years
  - Saves \$ on import of mineral fertilizers
  - Fertilizer imports dropped by 50%
- Agriculture (2020-2021)
  - Rice yield dropped by >>20%: import 450M\$; rice price increased
  - Tea production dropped → loss of income 425M\$
- Crises
  - Poverty: From proud middle income country, poverty & food insecurity rose for millions
  - Financial crises
    - Tourism collapsed (Covid)
    - Agricultural income collapsed
- 2021
  - Revive fertilizer imports, but too late....
  - ...



# Fertilizer – Soil health linkages



African Union  
Fertilizer & Soil  
Health Summit  
2023

# Concluding remarks

- More than half of humankind is fed from fertilizer-based food
- Rejection of fertilizers will increase hunger and poverty
- Agro-ecology, organic agriculture (rejecting fertilizers) are socio-economic / institutional forces in (excessively) food secure **developed nations** against the global use of fertilizers (based on their excessive overuse) but do no justice to basic physical/biological processes on earth.
- Mineral fertilizers
  - Feed the world
  - Reduce land clearing (prevents loss of biodiversity)
  - When **excessively used** they cause loss of biodiversity, dead zones, and contribute to CC
    - **economic rather than ecological optimization of production systems**
- Climate Change community should call for sustainable use of fertilizers
  - Specifically support the sustainable use in SSAfrica
- Opportunities African Agriculture
  - Soil Health (in SSAfrica) cannot be improved without supplemental use of fertilizers
  - Innovative fertilization strategies and fertilizer products can lower environmental footprint
  - Accelerate the learning curve of effective fertilizer use to push African Agricultural Intensification
  - Ensure stakeholder engagement – locally, nationally, internationally

# Fertilizers and Soil Health

A solid foundation for resilient food systems



Thank You