



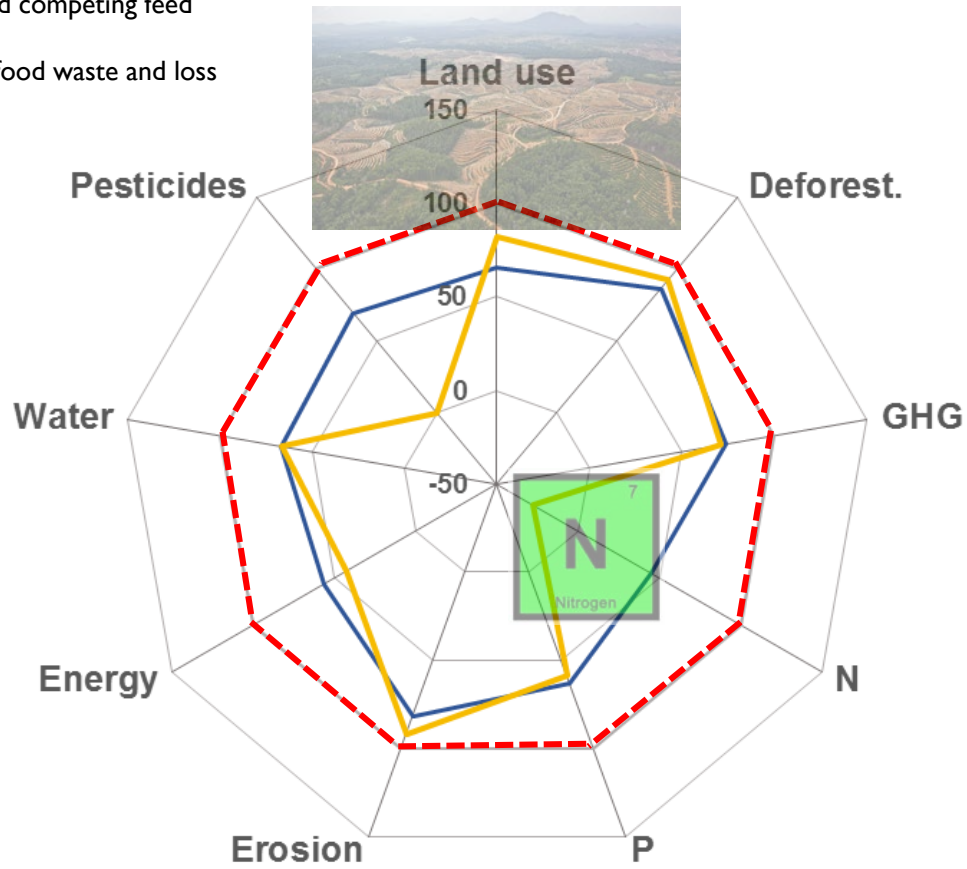
## Organic agriculture and aspects of food security

Adrian Muller (adrian.mueller@fibl.org)

Organic Sri Lanka – International Stakeholder Discussion on Building Sustainable Supply Chain for Organic Inputs in Sri Lanka

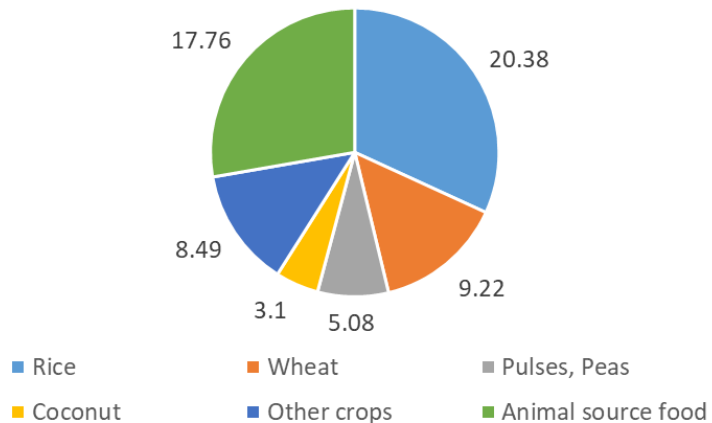
Online, 22.6.2021

100% food competing feed reduction  
50% less food waste and loss

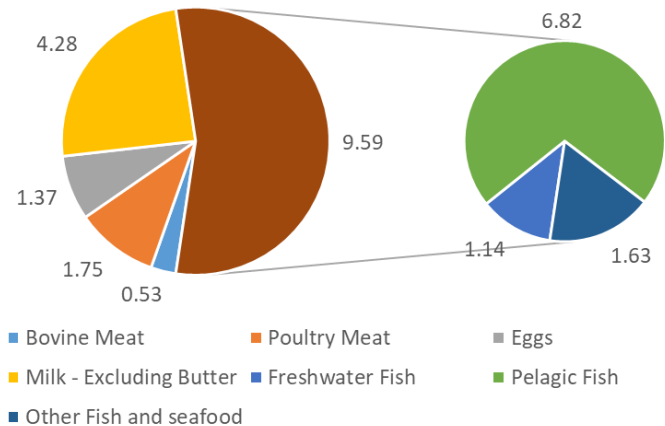


— Reference: 0% organic — 100% organic

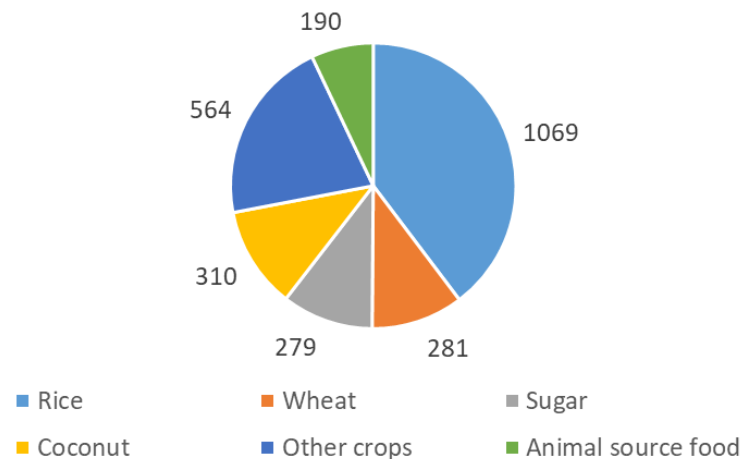
Protein - total about 65 g/cap/day



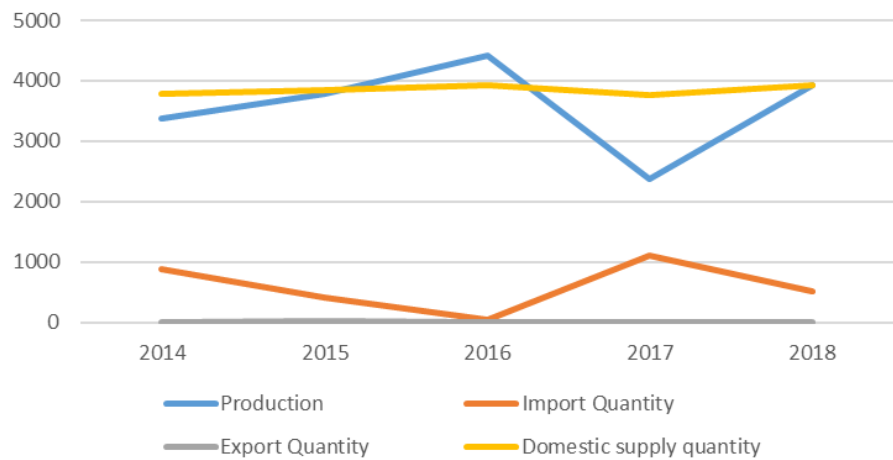
Animal source protein - total 17.5 g/cap/day



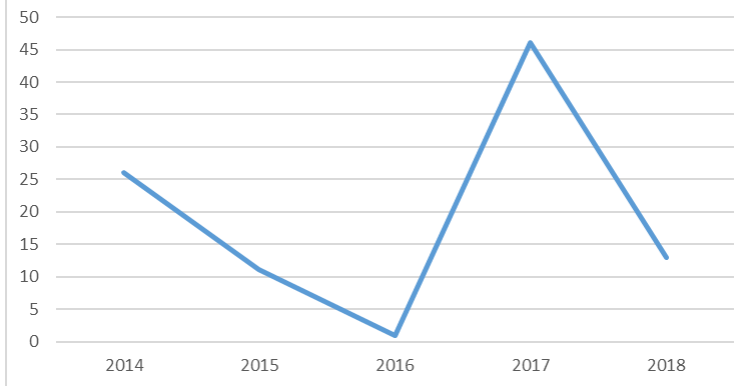
Calories - total about 2700 kcal/cap/day



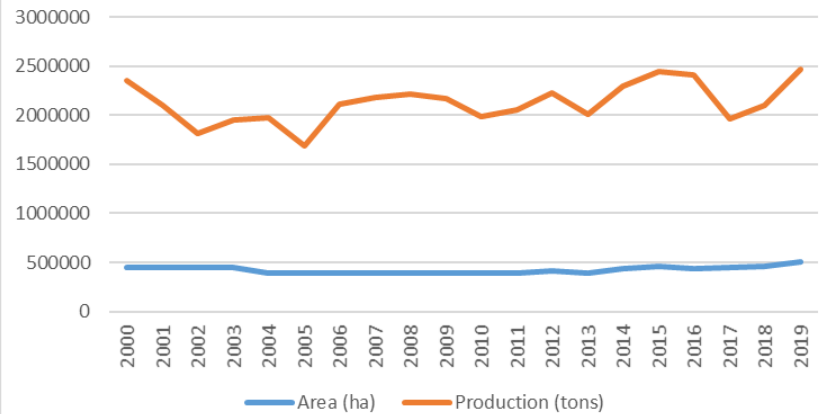
### Rice (1000 tons)



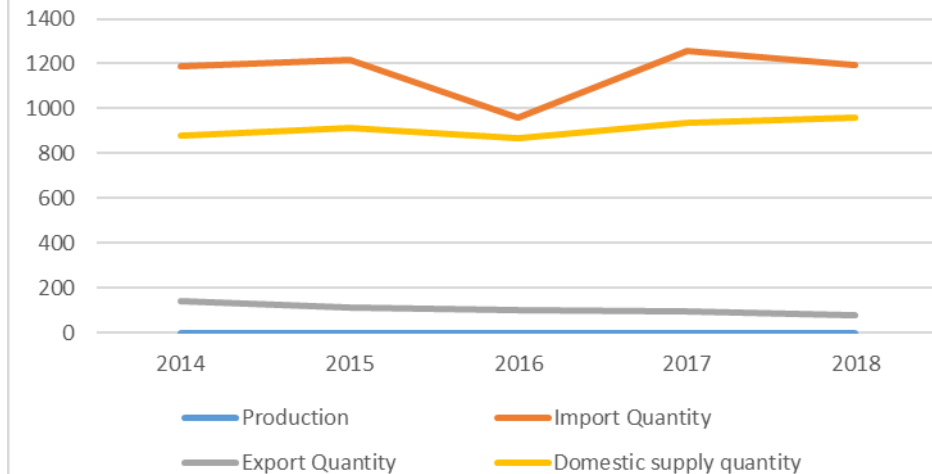
### Rice import as percentage of production



### Coconuts (tons)



### Wheat (1000 tons)



## Food System in Sri Lanka – further aspects

- Small feed areas and feed imports
- Post harvest losses: about 30%
- Strong dependence on fertilizer imports (in particular P)
- Overall, rather low level of nutrient recycling
- Climate change impacts

## Organic: opportunities

Soils; adaptive capacity  
environmental performance



Waste and losses





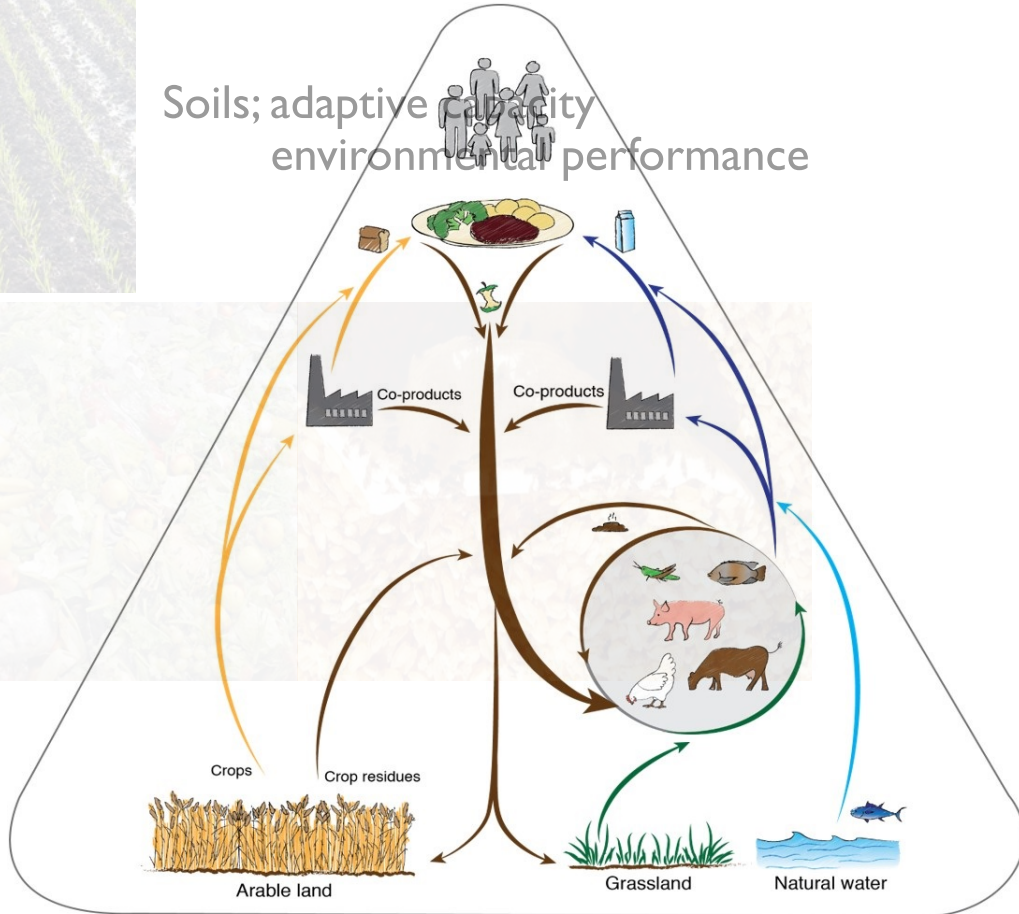
# Organic: opportunities



Waste and losses



Soils; adaptive capacity  
environmental performance



Closed nutrient cycles  
circular food systems  
nutrient sources/supply

## Organic: challenges

- Yields and nutrient supply
  - Not much room for reduction of feed crop areas
- Potential import dependence – price volatility
- More fruits, vegetables – healthy diets
  - Plant protection
  - Losses
- Irrigation



## Conclusions

- High shares of organic agriculture are possible
- but a good risk management strategy is key (prices of imports, climate impacts, etc.)

## Conclusions

- Plan for an extended transformation period
  - goals – requirements to reach those – steps needed to meet the requirements
  - establish risk management institutions
- building the knowledge base and extension services
- testing new approaches (agroforestry, etc.)
- learning by doing (what works where)
- developing locally adapted solutions
- involving all value chain actors (storage, processing, etc.)
- changing the policy landscape (subsidies, etc.)