

# Towards a Sustainable Future for Palm Oil; Reviewing Governance Challenges

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Prof. Peter Oosterveer MPOB-UKM Chairholder



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100years  
1918 — 2018

# Introduction

- palm oil production and consumption is worldwide one of the most debated activities with respect to sustainability
- raising many challenges for governments, the industry and civil society organisations
- how can these be addressed?
  - what is sustainability governance with respect to palm oil provision?
  - what are key challenges from an integrated system perspective?
  - how can challenges and actors be brought together?



# From government to governance

- governments are no longer the dominant actors in society and many more (private) actors are involved in steering developments in society
- => governance
- sustainable palm oil governance involves different public and private actors and this entails different balances of power
- how to coordinate these multiple actors and develop integrated and effective forms of governance?



# *Sustainability*: what is it?

- WCED (Brundtland-Report 1987) definition: sustainable development is 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'
- combining developmental and environmental aims
- balancing three dimensions:
  - economic (development, income, employment)
  - social (small-holders, workers, poor)
  - environmental (climate, pollution, biodiversity)
- also know as 3Ps (People, Planet and Profit)

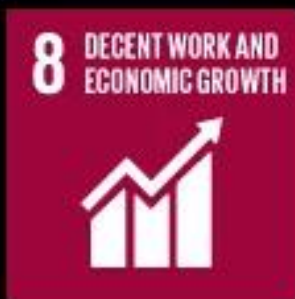


# Sustainable Development Goals (SDGs) set in 2016 to be achieved in 2030



## SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD



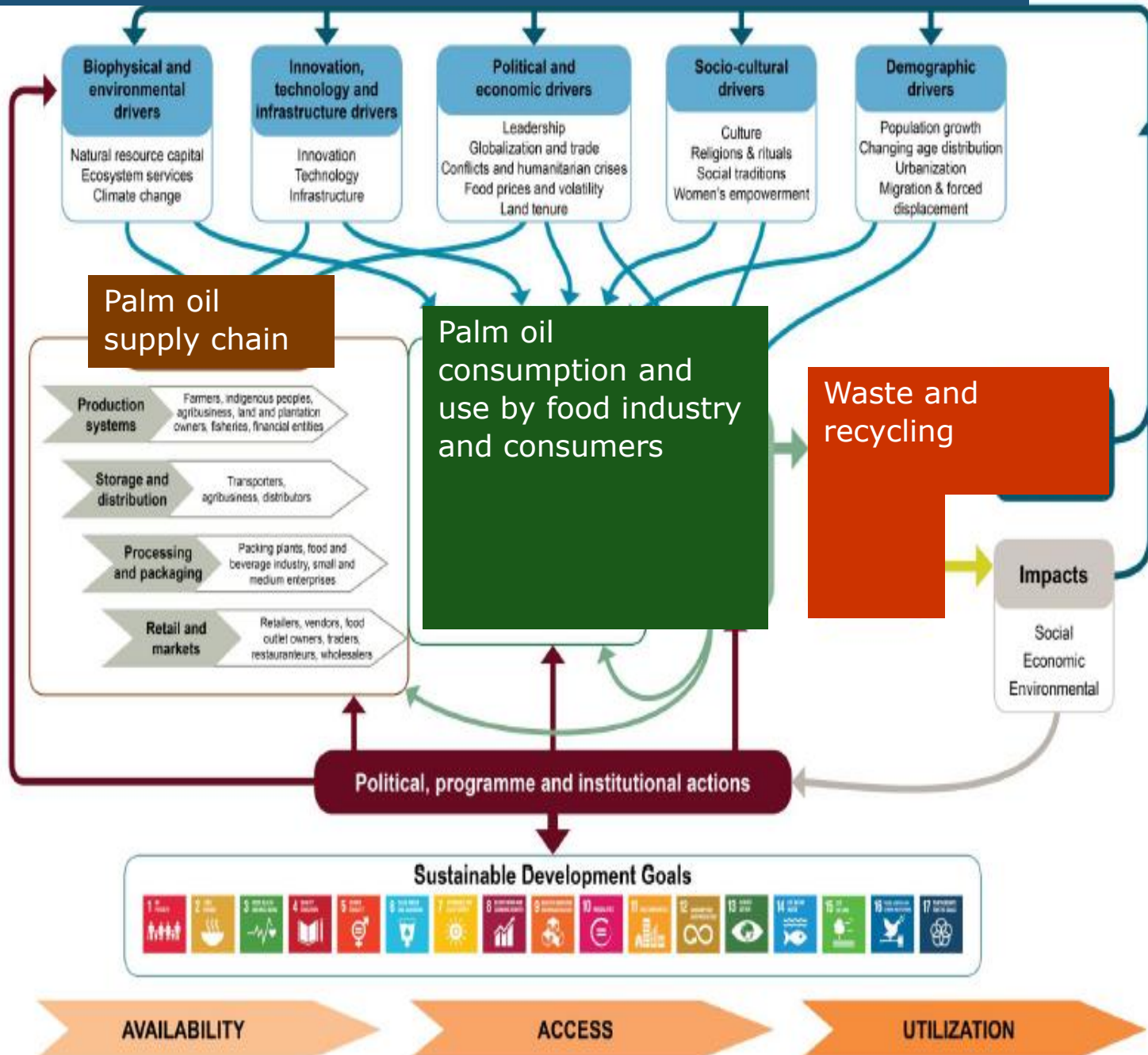
# Sustainability and Palm Oil

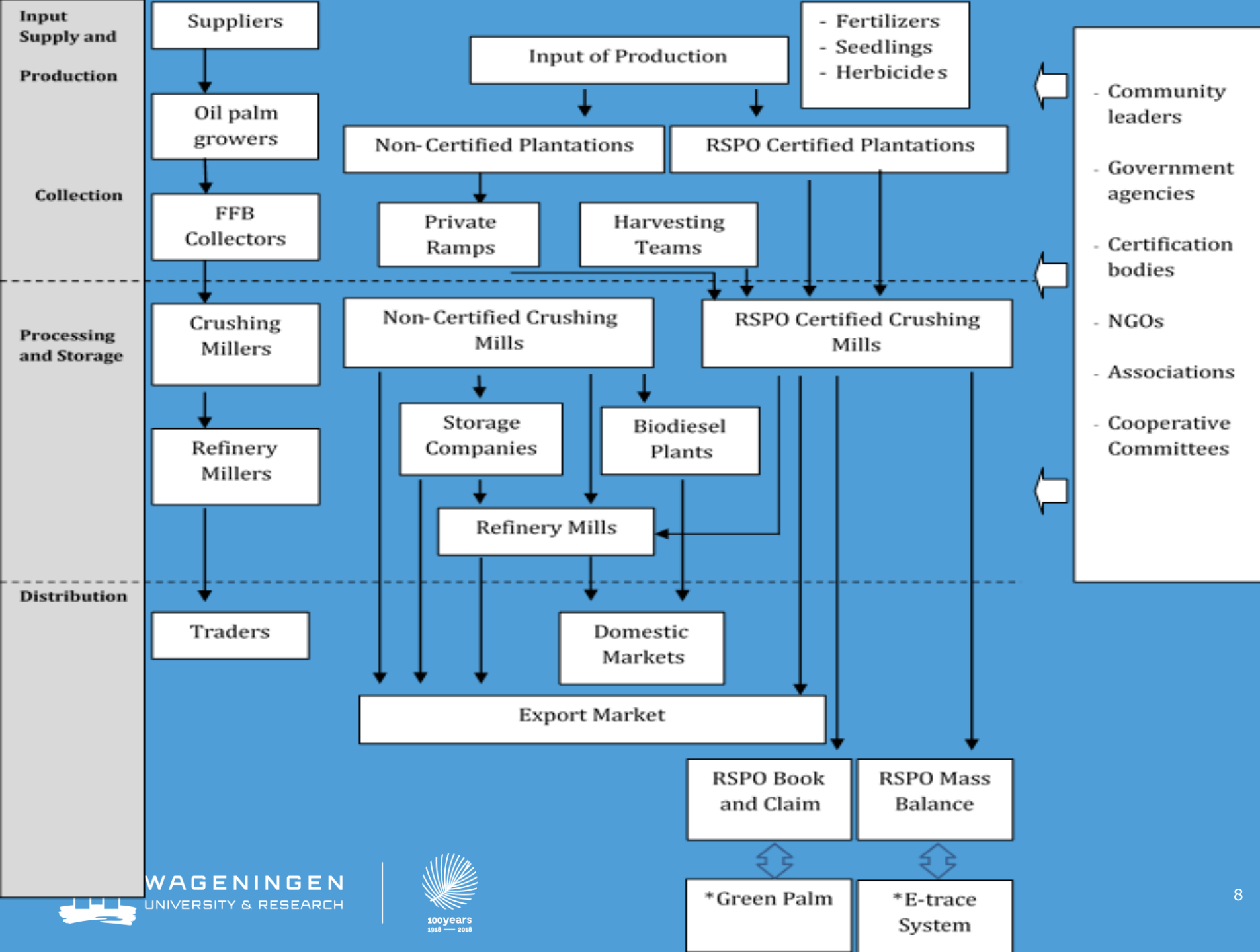
- multiple challenges along the palm oil supply chain
  - cultivation
  - harvesting
  - processing
  - end-use
- involving different actors
  - producers (farmers, companies, workers, etc.)
  - industry (processors, final industries, transporters, etc.)
  - public authorities (local, national, international)
  - consumers and NGOs



# Based on the HLPE (2017) Conceptual framework for food systems

HLPE  
2017







# Palm oil supply chains



# Palm oil cultivation (1) Plantation



Forest fires and haze



Use of peat soils



Biodiversity



Local community

# Governance challenges and instruments

- spatial planning to structure and control new and existing oil palm plantations
  - involving local communities, local authorities and regional/national authorities
- clarity about land-ownership:
  - local communities, national authorities, local authorities and legal system
- mixed cropping:
  - agricultural experts, producers, market partners, national authorities



# Palm oil cultivation (2) cultivation



Pesticide use



Labour conditions



Use of  
leftovers;  
biomass

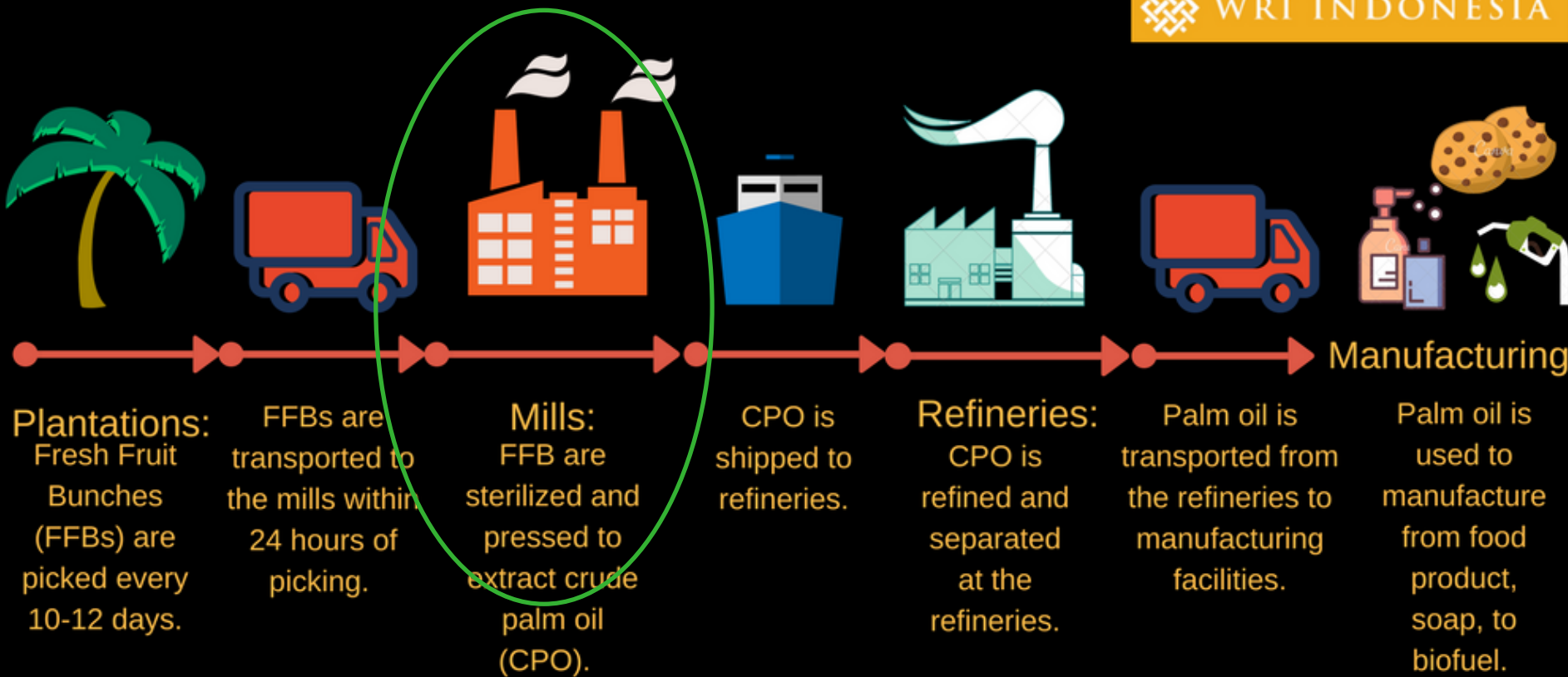
# Governance challenges and instruments

- environmental and labour regulations:
  - national authorities, labour unions, producers (large and small), legal system
- use of biomass:
  - technical experts, economic experts, market partners, public authorities (in case of subsidies)

# Palm oil supply chains



WRI INDONESIA



**Plantations:**  
Fresh Fruit Bunches (FFBs) are picked every 10-12 days.

FFBs are transported to the mills within 24 hours of picking.

**Mills:**  
FFB are sterilized and pressed to extract crude palm oil (CPO).

CPO is shipped to refineries.

**Refineries:**  
CPO is refined and separated at the refineries.

Palm oil is transported from the refineries to manufacturing facilities.

Palm oil is used to manufacture from food product, soap, to biofuel.

# Palm oil processing



Empty fruit bunches (EFB)



Palm oil mill effluent (POME)



Air pollution

# Governance challenges and instruments

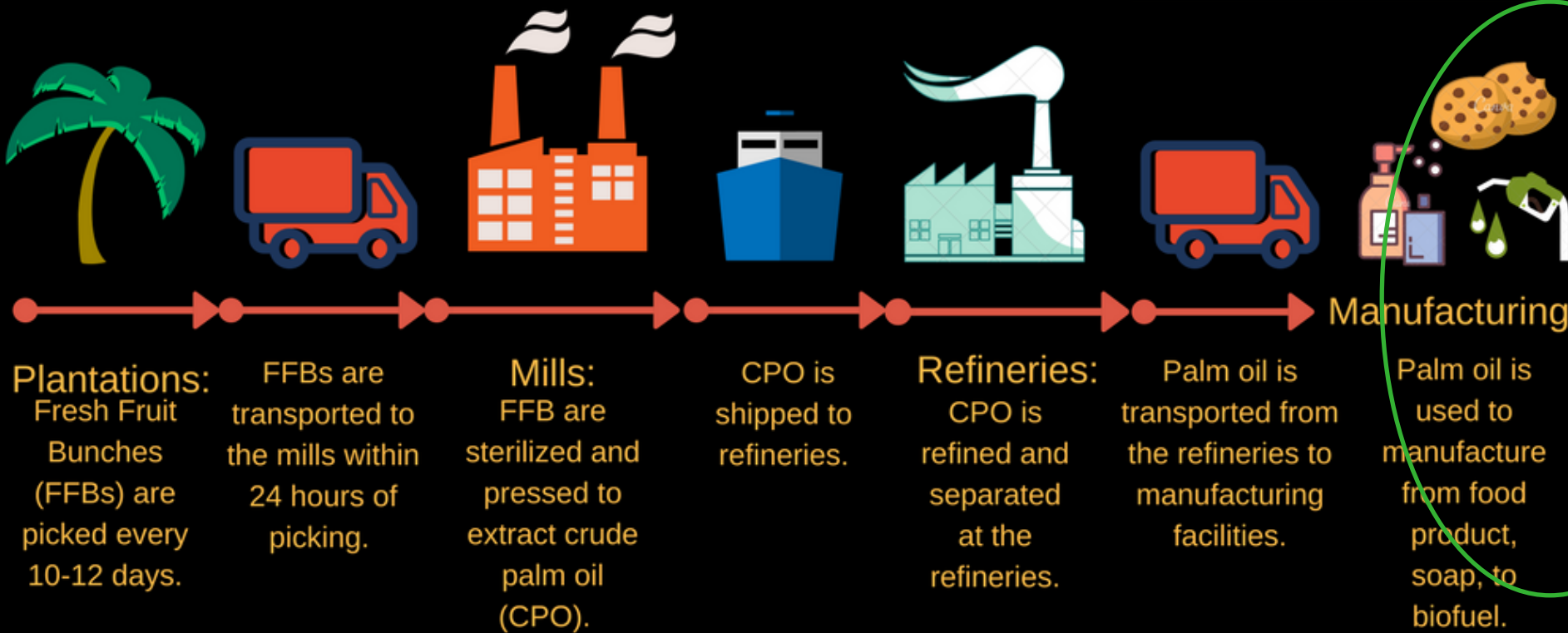
- environmental regulations (design and implementation):
  - national authorities, mills, legal system
- use of biomass in optimized manner:
  - technical experts, economic experts, market partners, public authorities (in case of subsidies)



# Palm oil supply chains



WRI INDONESIA



# Palm oil consumption and recycling

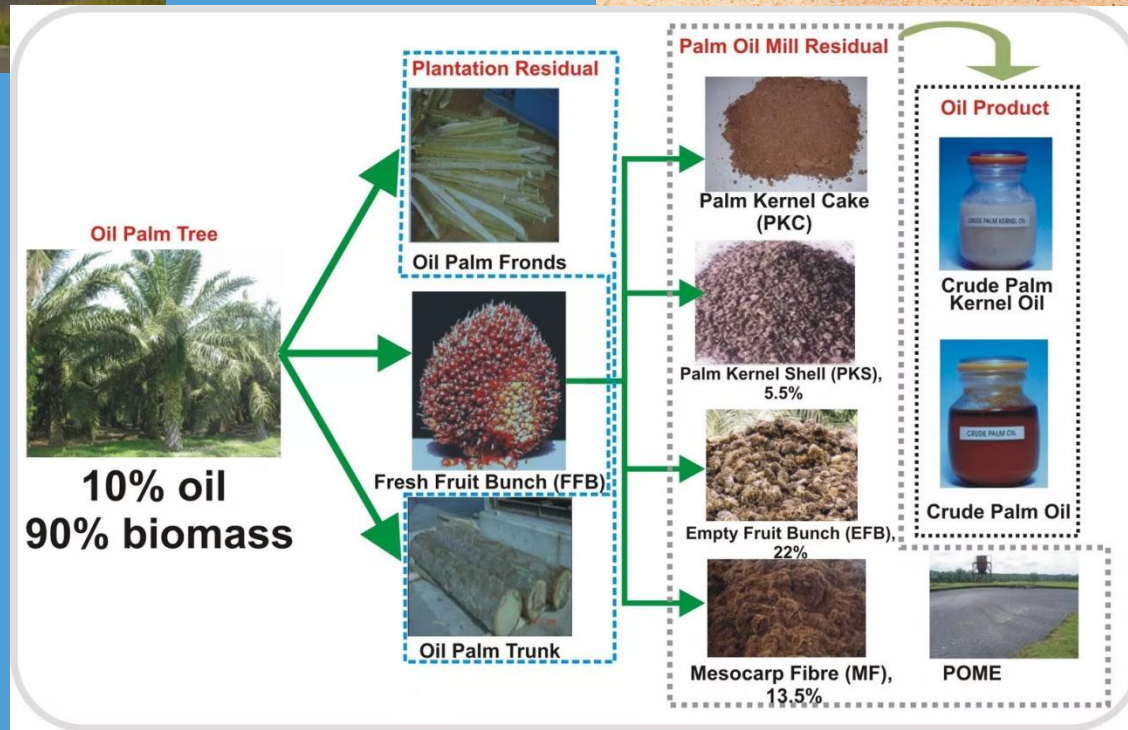


Used cooking oil as airplane fuel

Buying sustainable palm oil



© RICHARD STONEHOUSE/WWF



# Governance challenges and instruments

- environmental regulations (recycling):
  - national authorities (regulations and finances, consumers, industry (collecting and processing))
- use of biomass in optimized manner:
  - technical experts, economic experts, market partners, public authorities (in case of subsidies)

Dutch households recycle 41% of the used cooking oil



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# Backcasting to address sustainability governance

- designing sustainability governance arrangements and choice of instruments needs involvement of relevant stakeholders
- backcasting is a potential instrument for this:
  - stakeholder analysis and involvement
  - envisioning the desirable future
  - exploring potential pathways towards this future
  - checking whether these pathways will result in the desired future
  - extracting and aligning stakeholder action plans based on the joint pathways



# Governance arrangements

- government instruments:
  - national: spatial planning, environmental and social regulations, R&D, subsidies
  - international: WTO, FAO
- market instruments:
  - standards, labelling and certification
  - prices
- alternative instruments:
  - improvement projects, sustainability partnerships, pre-competition collaboration
  - resource-based approaches: area-based management, improved ICT-based traceability



state regulation  
(mandatory)



private standards  
(voluntary)

End-use

Biofuel  
regulations

Principles

Processing

Sustainable  
biofuel  
certification  
schemes

Pledges and  
commitments

Trade

Trade  
regulations

Codes of  
conduct

Processing

Sustainable  
palm oil  
certification  
schemes

Voluntary  
standard  
systems

Production

production  
regulations

# Conclusion

- promoting sustainability in palm oil provision means addressing many challenges across the complete supply system from production until consumption involving many stakeholders
- a more integrated approach is needed involving multiple stakeholders in a systematic way
- collaboration between different stakeholders is needed to be effective including setting priorities and dealing with synergies and trade-offs
- social sciences need to collaborate with science and technology to suggest feasible ways forward



Thank you for  
your attention

