

Role of trade policies and stakeholder involvement for sustainability:

Case study from palm oil in Indonesia

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CIFOR-ICRAF

20 August 2024

Workshop on Advancing Private-Public Partnerships to mainstream Biodiversity Conservation and Sustainable Use in Biodiversity Economy Voluntary Sustainability Standards



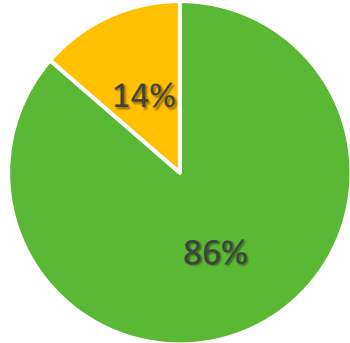
Content

- I. Problems of Indonesian palm oil sustainability
- II. Role of global trade in palm oil sustainability
- III. Role of certification and public policies
- IV. National roadmap and stakeholders
- V. Jurisdictional approach and stakeholders
- VI. Conclusion



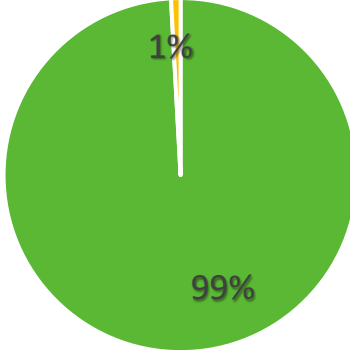
I. Problems of Indonesian palm oil sustainability

Deforestation cut off year 2010



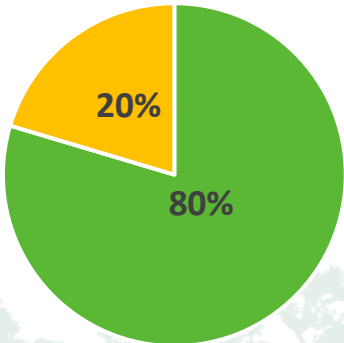
■ Not from deforestation ■ From deforestation

Deforestation cut off year 2020



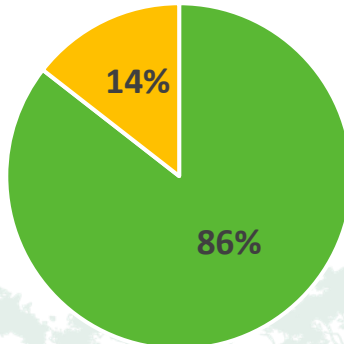
■ Not from deforestation ■ From deforestation

by Land status



■ Other use land (APL) ■ State forest

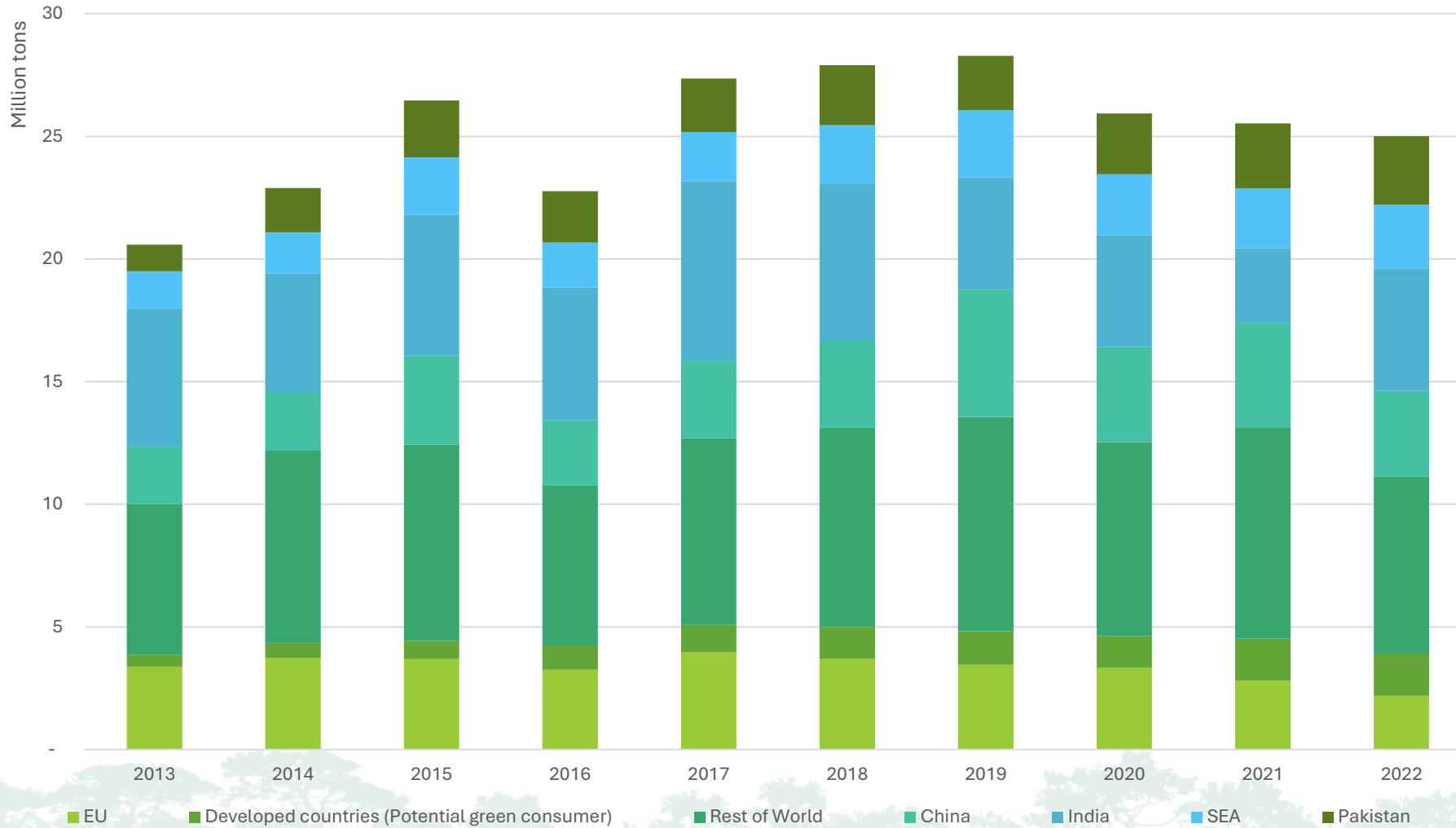
by Soil type



■ Mineral ■ Peat



CPO and Palm Oil Derivative Products Export Volume (UNComtrade 2022)



Only few palm oil from Indonesia went to “green” market meanwhile from supply side







Many untraceable and cannot prove their legalities



POTRACE (Palm Oil Traceability Tool for Smallholders)

The screenshot shows the POTRACE web application interface. The main map displays several plantation areas with labels such as BONTI PERMAI JAYA, AGRO SUKSES LESTARI, SINTANG AGRO MANDIRI - SIMBA, and PERMATA SUBUR LESTARI. A yellow arrow points from a specific area on the map to a data dashboard on the right. The dashboard contains the following information:

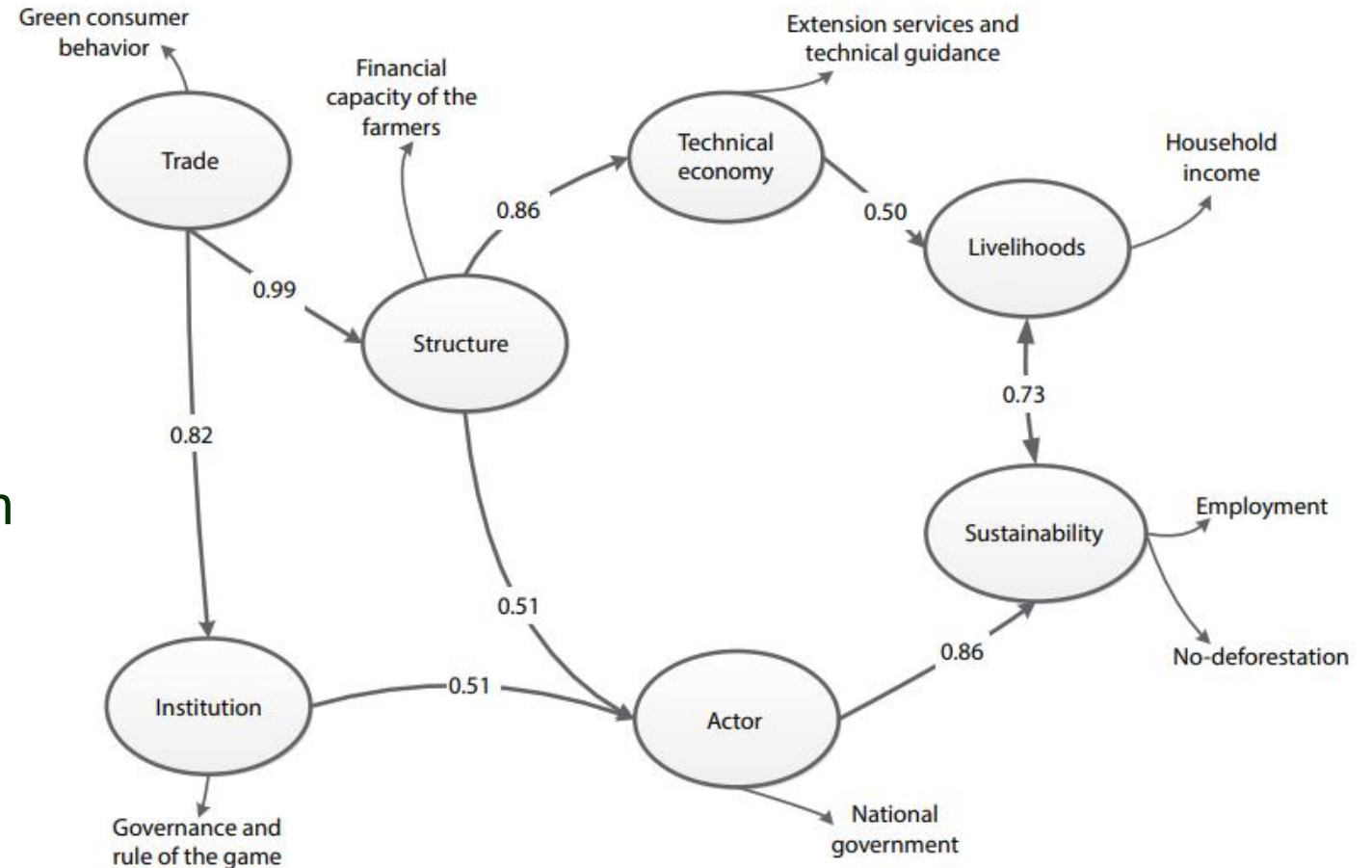
 50 Smallholders	 100 Hectares Plantations
 5000 Ton FFB/Yr Production	 50 Ton FFB/Ha/Yr Productivity

At the bottom left, the Walmart.org logo is visible. At the bottom right, it says 'Powered by Earthstar'.

II. Role of global trade in palm oil sustainability

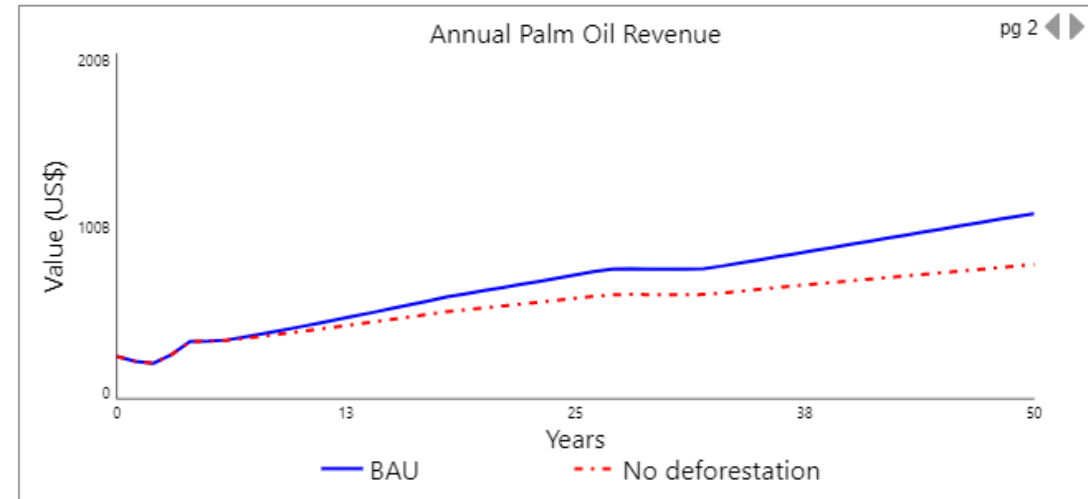
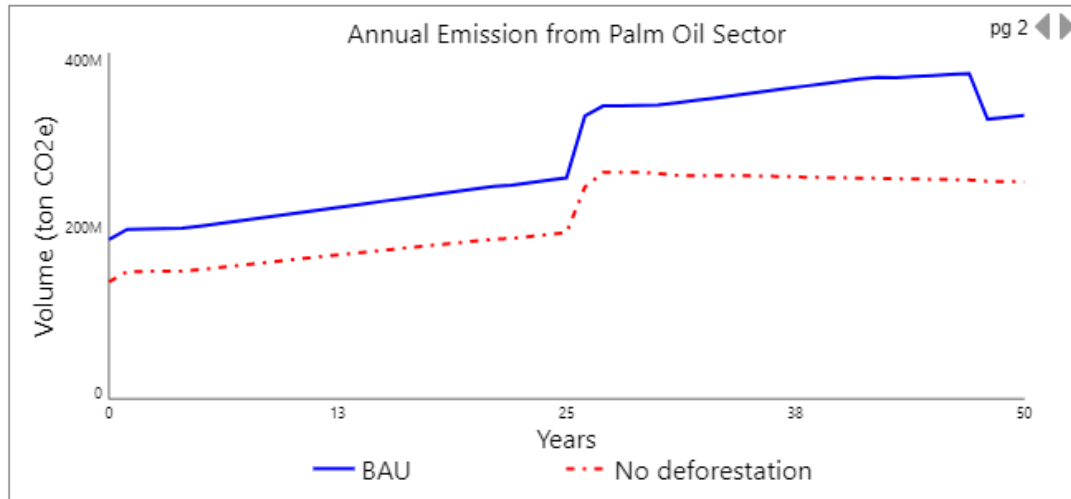
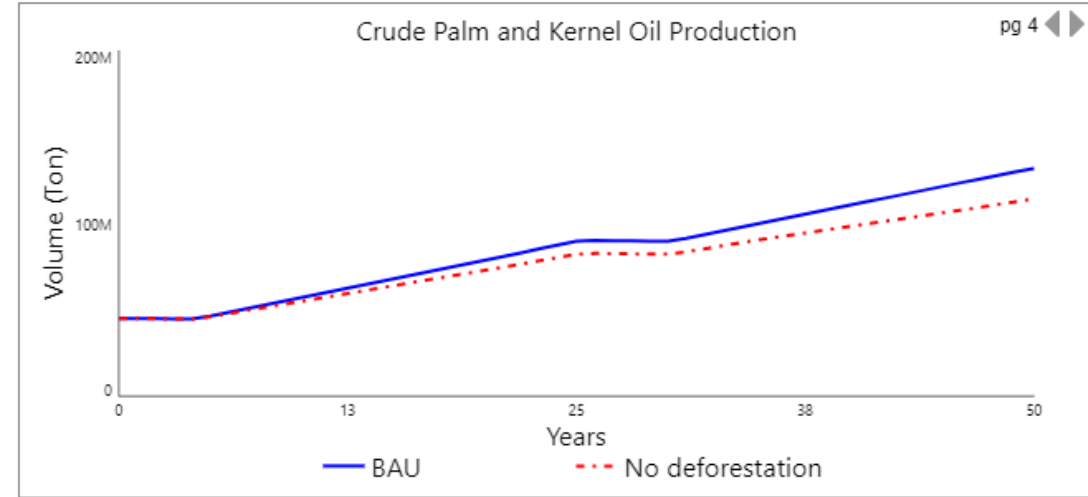
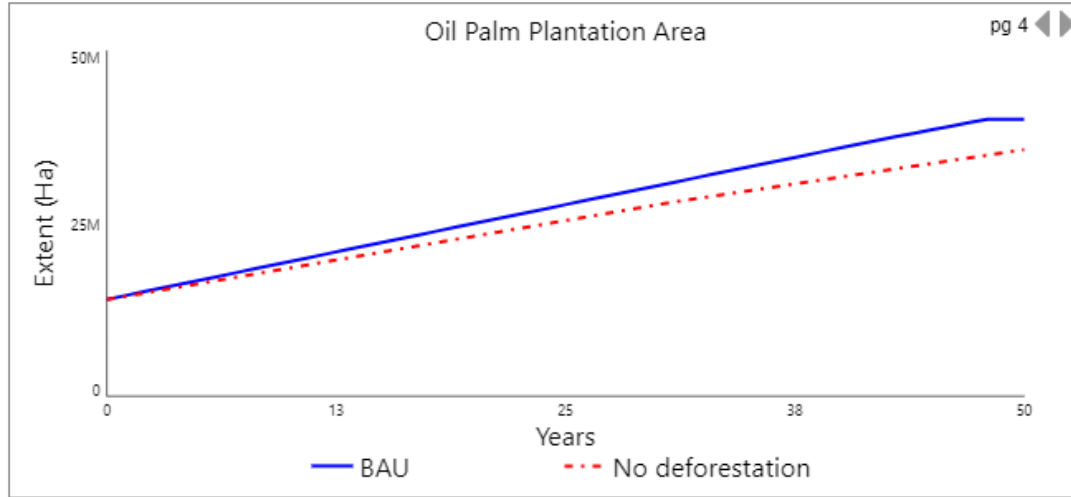
- Sustainable palm oil in Indonesia is mostly defined as **no-deforestation and employment**.
- **Trade and governance** matter to achieve sustainability of palm oil sector in Indonesia.

[Purnomo et al., 2023](#)



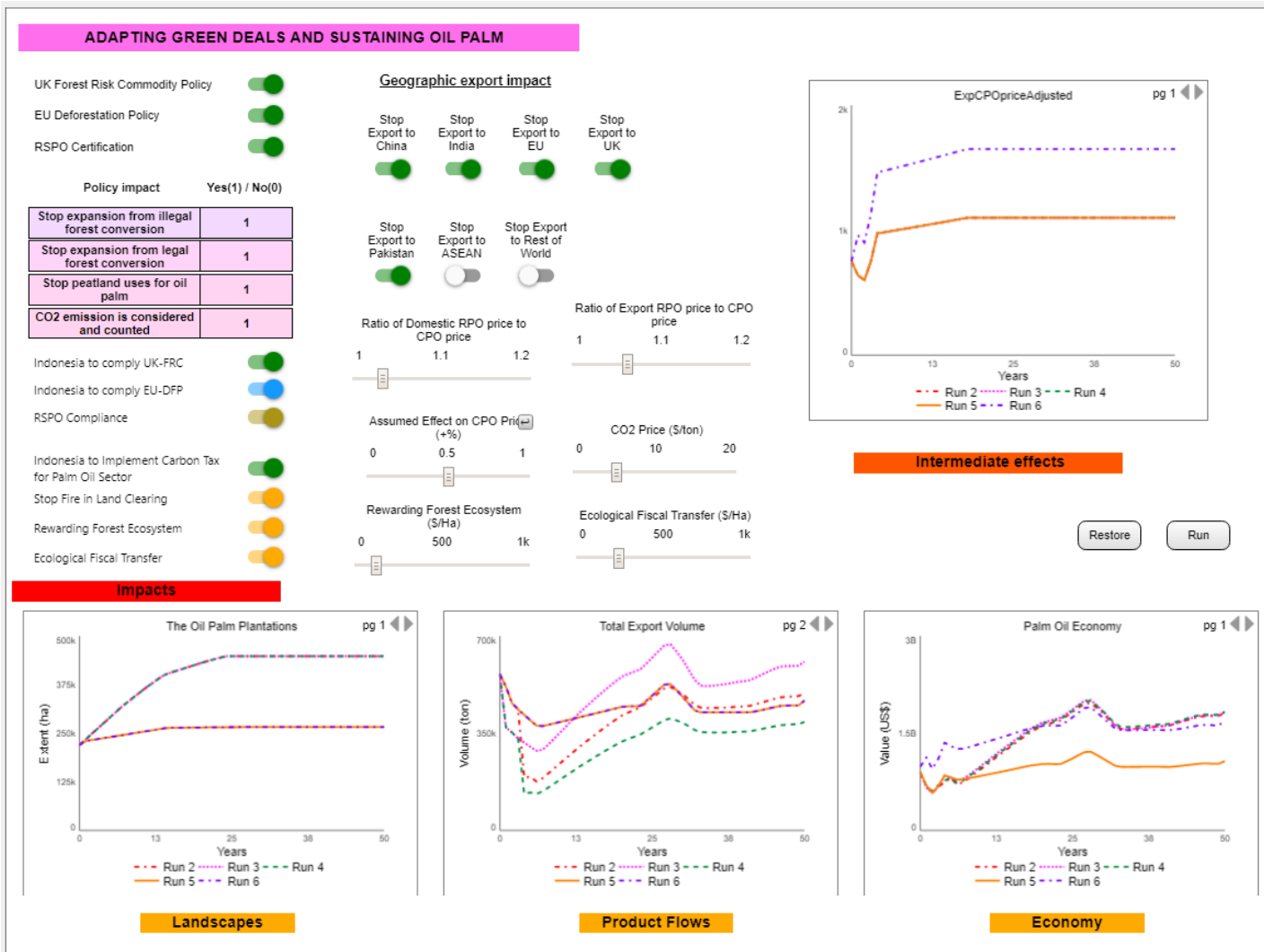
What are the impact of global green trade policy in Indonesia?

Impact of EUDR at national level (value chain dynamic simulation): trade-off between economy and environment impact



What are the impact of global green trade policy in Indonesia?

At landscape level: simulation at Kotawaringin Barat, Kalimantan



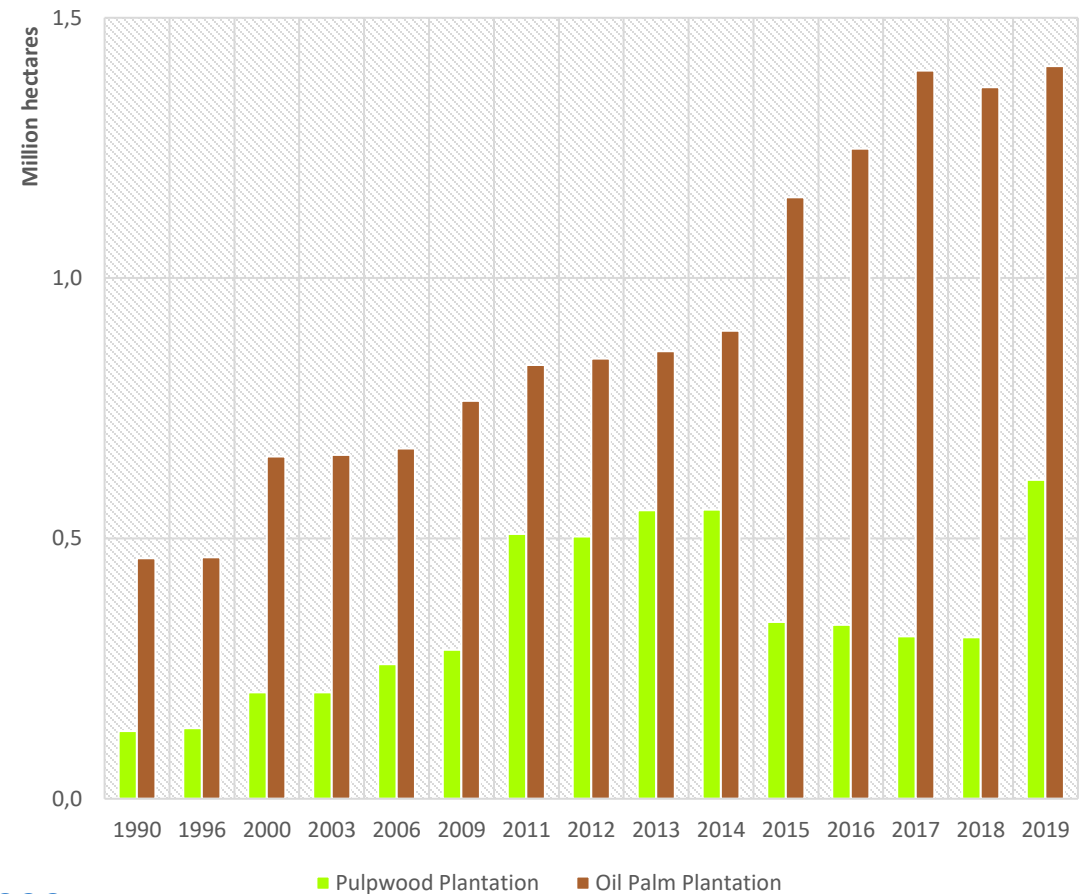
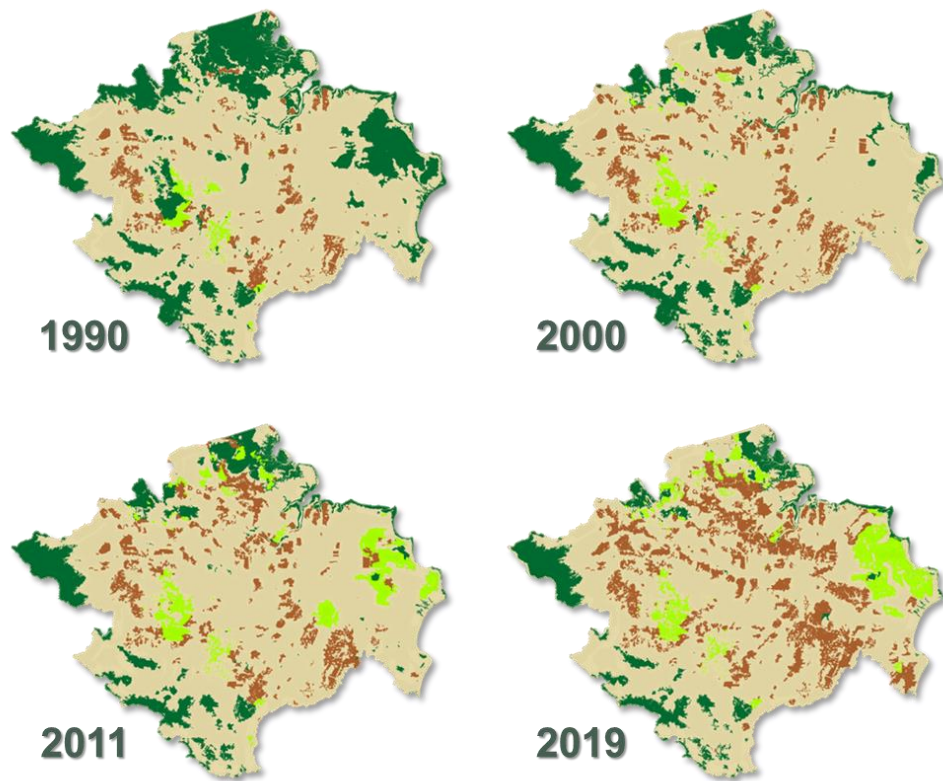
Scenario	A: BAU	B: Green deals	C: RSPO certification	D: Green deals, RSPO, and carbon policy	E: Scenario D and PES	F: Scenario E and premium price
Deforestation	H	L	N	N	N	N
CO ₂ emission	H	L	L	L	L	L
crude palm oil production	H	L	L	L	L	L
Carbon economy	N	H	N	H	H	H
PES economy	N	N	N	N	H	H
Palm oil economy	H	L	L	L	L	H
Total palm oil economy and ecosystem services	H	L	L	L	L	H

N=None; L=Low; H=High

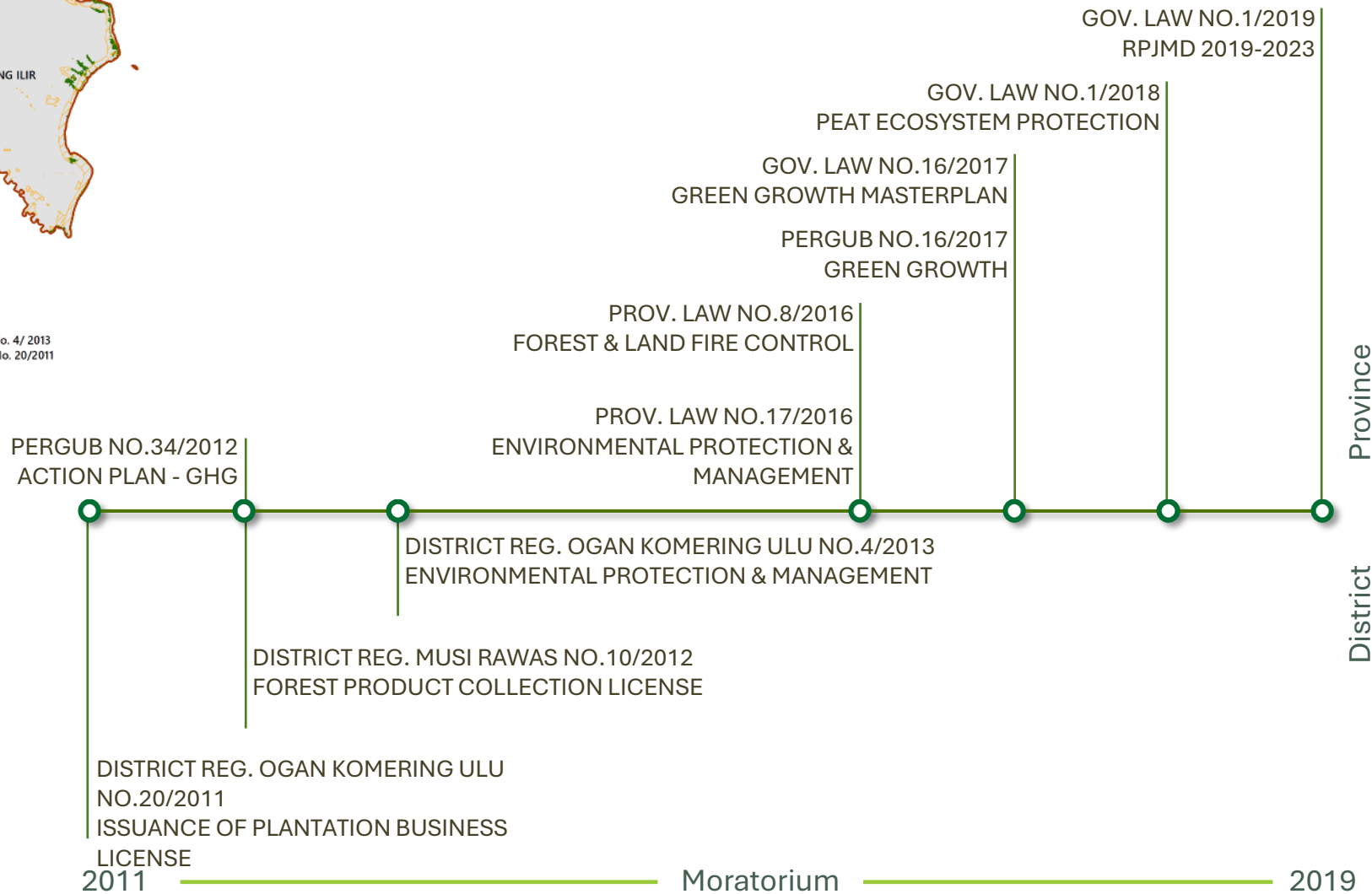
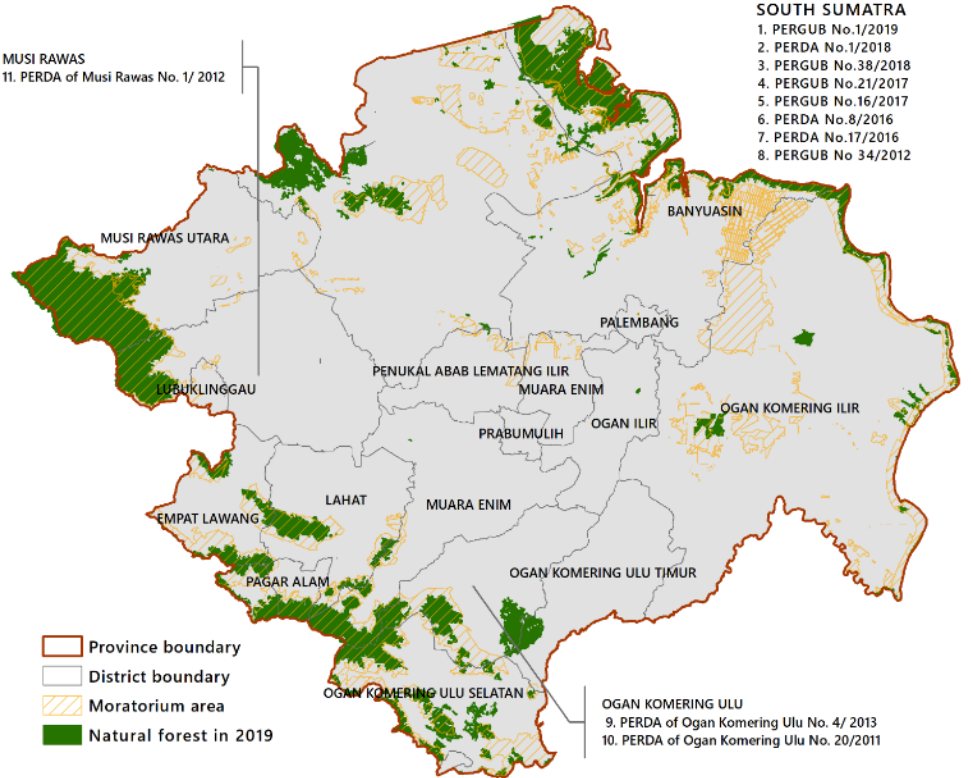
Optimum scenario to address trade-off: green trade policy with voluntary certification combined with premium price and, payment for ecosystem services.

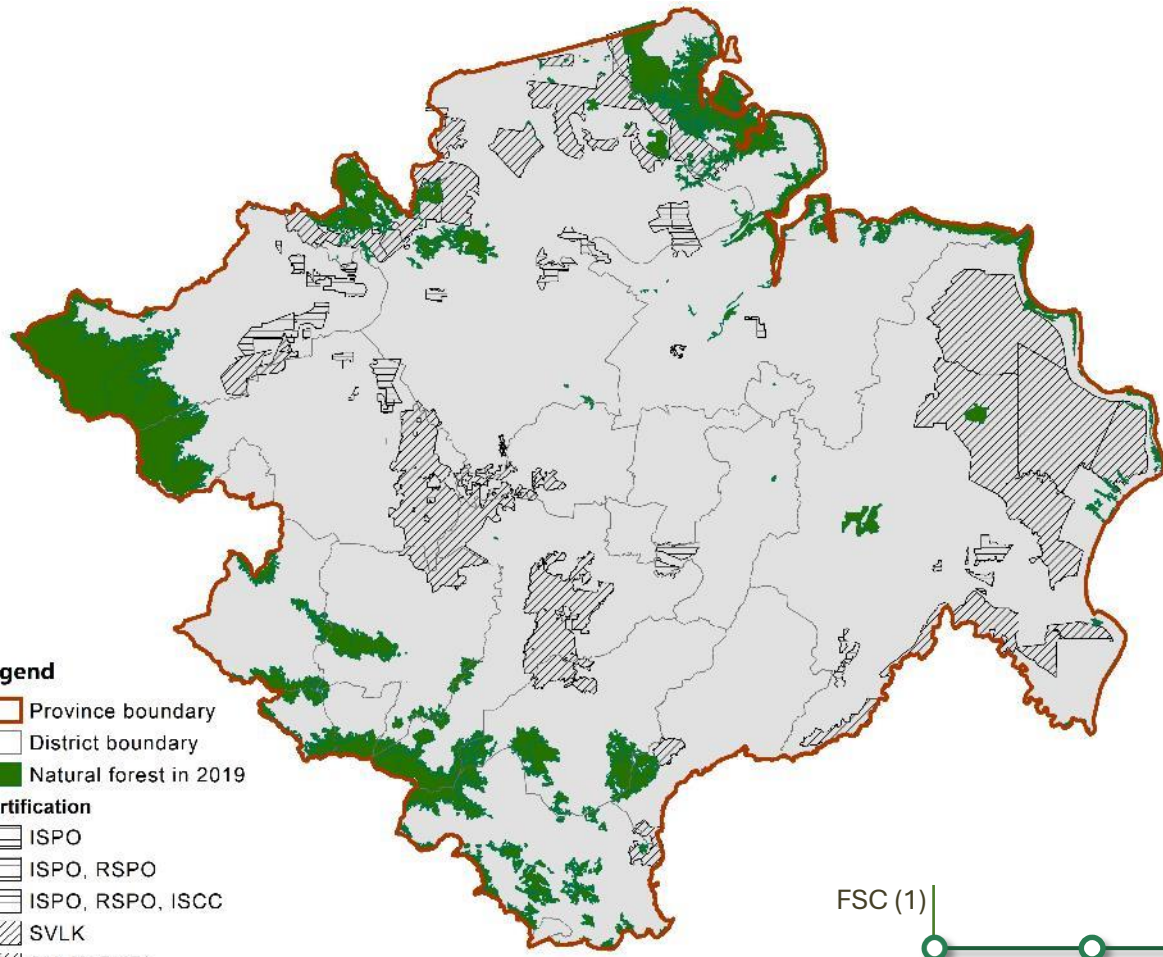
III. Role of public policies and certification

- Public sector commitment was assessed by its policies and regulations, while private sector commitment was assessed by its compliance with mandatory and voluntary certification schemes.
- Case of oil palm and pulpwood companies, as one of main driver of deforestation in South Sumatra.

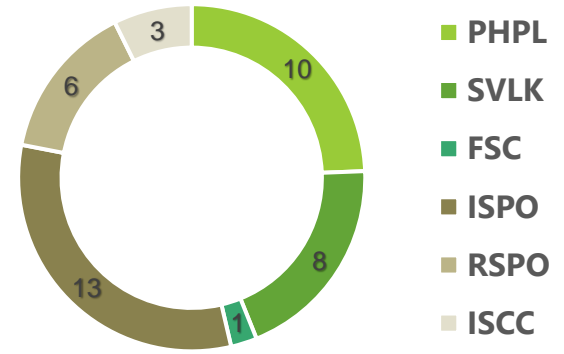


Public Policies and Regulations

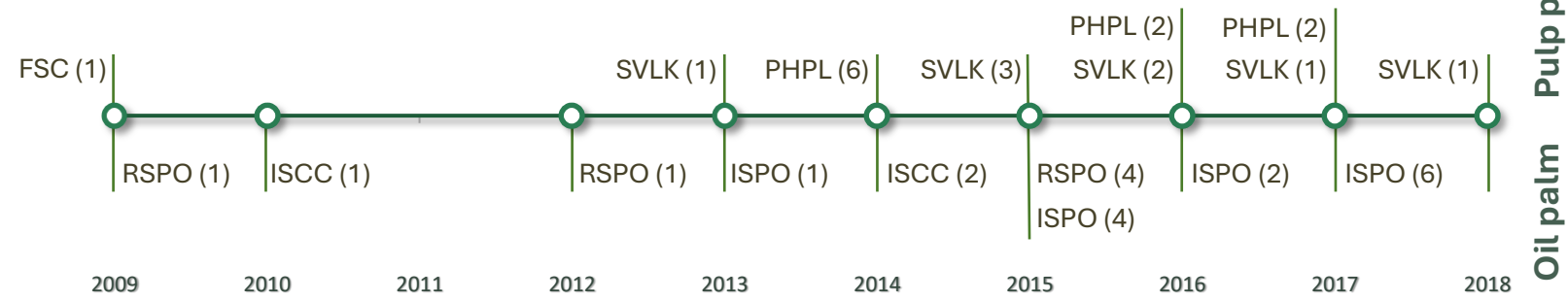




- Legend**
- Province boundary
 - District boundary
 - Natural forest in 2019
- Certification**
- ISPO
 - ISPO, RSPO
 - ISPO, RSPO, ISCC
 - SVLK
 - SVLK, PHPL
 - SVLK, PHPL, FSC



Of the 41 companies, 18 pulp and 13 oil palm plantations have mandatory certification. 1 pulp and 6 plantations have voluntary certification



Private commitments

Key findings

- Public and private sector commitments do matter. Non-state actor support the implementation of commitments.
- We found sufficient evidence that private sector commitments were able to significantly reduce deforestation from year of commitments to 2019, at a 90% confidence level.

PUBLIC COMMITMENT

	Model 1 t+1 after commitment	Model 2 t+2 after commitment	Model 3 t3 after commitment
Before commitment (%)	1.43	1.43	1.43
After commitment (%)	1.43	0.82	0.82
H ₀ p-value 10%	0.9959	0.4986	0.5290
Conclusion	Failed to reject H ₀	Failed to reject H ₀	Failed to reject H ₀

PRIVATE COMMITMENT

	Model 1 t+1 after commitment	Model 2 t+2 after commitment	Model 3 t3 after commitment
Before commitment (%)	6.39	6.39	6.70
After commitment (%)	2.61	2.25	1.50
H ₀ p-value 10%	0.0197	0.0077	0.0145
Conclusion	Reject H ₀	Reject H ₀	Reject H ₀

Multi-stakeholder processes for developing roadmap for sustainable palm oil trade: Lesson learned from TRADE Hub

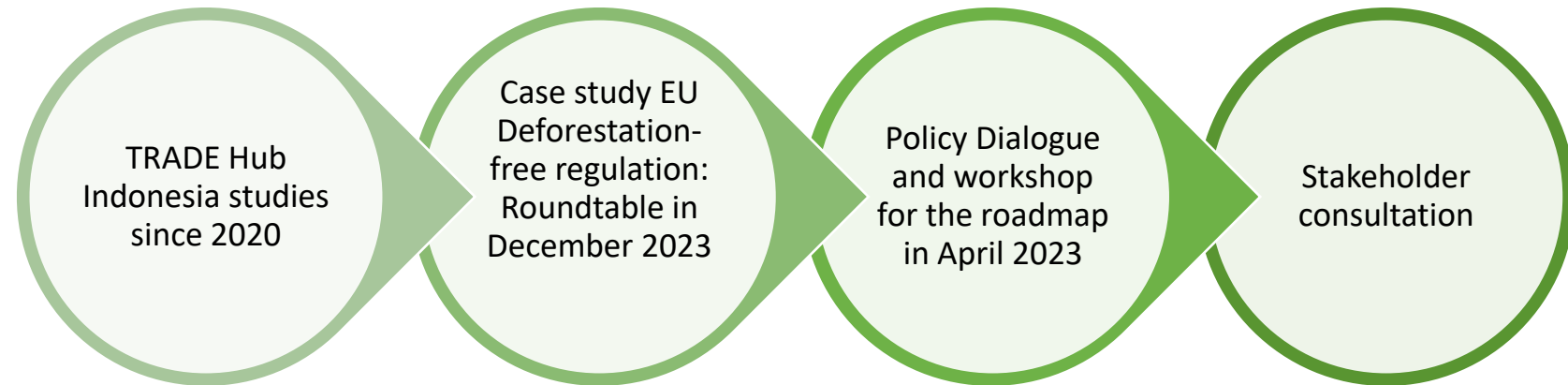


Pathways for sustainable palm oil trade: addressing global green trade initiatives and the climate crisis in Indonesia

Herry Purnomo, Sonya Dyah Kusumadewi, Dyah Puspitaloka, Lila Juniyanti, Beni Okarda, Salwa Nadhira, Suria Darma Tarigan, Iskandar Zulkarnaen Siregar, Sonny Mumbunan and Miftah Rahman

March 2024

Results of GCRF TRADE Hub roundtable discussions, policy dialogues and workshops in Indonesia during 2022–2023



96 participants from 51 institutions

Policy dialogue: 450 hybrid participants from 258 organizations
Workshop: 56 participants from 40 organizations

602 hybrid participants from 270 different institutions

[Purnomo et al., 2024](#)



Roadmap for sustainable palm oil trade



Common vision: Sustainable trade system through respecting smallholders' and IPLC rights and environmental justice with multistakeholder collaboration

Action track	Pathway
0: Common Understanding	Build and harmonize a concept of sustainability among consumers and producers that reflects each other's priorities
1: Sustainable consumption	Promote and create demand for sustainable palm oil, including in the domestic market and derivatives industries
2: Production system	Ensure sustainable practices by small- and large-scale producers
3: Markets	Connect smallholders to markets for sustainable produce and create market incentive schemes
4: Benefits	Ensure benefits are shared between all actors along value chains
5: Fair system	Ensure cost and risk burdens for a sustainable transformation are distributed fairly between producers and consumers
6: Access to finance	Provide better access to existing finance schemes and/or create alternative schemes for smallholder farmers
7: Communication	Improve communication between actors, sectors and levels to ensure respect for each other's interests



What stakeholders can do:

Consumers: Provide incentives for producers to strive towards sustainability

Smallholders: Implement sustainable practices and improve business models with support

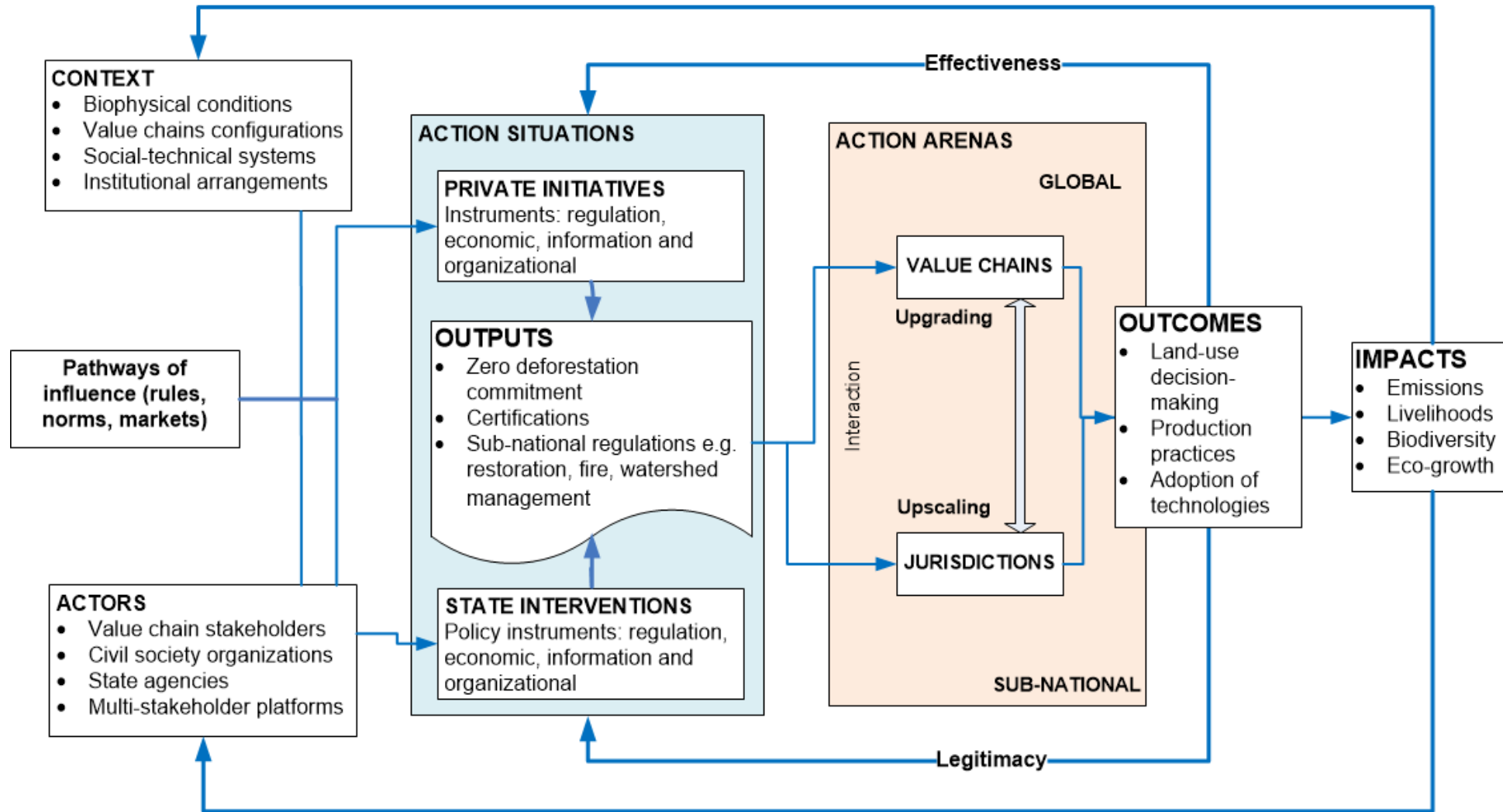
Public sector: Establish an accountability framework; integrate and harmonize policies; enable incentive mechanisms; support smallholders

Private sector: Implement sustainable practices and improve achievement, transparency and traceability; connect sustainable palm oil supply chains with end consumers (manufacturers); support, and connect with smallholders producing sustainable palm oil

Civil society, media and academia: Promote collective actions and connect the dots for small but impactful initiatives; provide and distribute credible information.



V. Jurisdictional approach and stakeholders



Institutional Analysis and Development (IAD) framework adopted for research project on strengthening JA for sustainable palm oil sector in Indonesia

Kutai Kartanegara



The first workshop (left), and second workshop (right)



The third workshop (left) and fourth workshop (right)

Pulang Pisau



The first workshop (left), and second workshop (right)



The third workshop (left) and fourth workshop (right)

Pelalawan



The first workshop (left), and second workshop (right)



The third workshop (left) and fourth workshop (right)

Sintang



The first workshop (left), and second workshop (right)



The third workshop (left) and fourth workshop (right)

Jurisdictional Approach Model Canvas (JAMC)

Partners: Local governments, Sedagho Siak, Sriwijaya University, FORDAS, LTKL.

Key activities: MSP on vision, mission and TOC, regulation and planning, peatland restoration and management, blended finance, linking to national and global, connecting across jurisdiction and levels, and reporting and monitoring systems

JA Proposed values: Carbon credit, green products, and prevented fire

Customer relations: Co-creation process, mouth-to-mouth, social and mass media, publication, visits, conference and seminar.

Customer segments: Green customers, global and national donors and initiatives, local markets, national and global governments and institutions

Antecedents: REDD+ initiatives, NDPE, palm oil district action plan, Green Siak, South Sumatra green growth

Key resources: Donor funding, government supports, private sector and NGO involvements, academicians, network with global green initiatives

Channels: Carbon traders and initiatives; sub-national and national governments

Cost structure: Meeting and coordination; mapping and planning, JA cases on peatland restoration, management and blended finance; Communication and connection across jurisdiction, levels; Selling the created value to national and global initiatives and markets.

Revenues: Carbon and green product payments, ecological fiscal transfer, donor support, CSR from companies

Jurisdictional Approach for Palm Oil Sustainability (JAPOS)

as tool for measurable and evidence-based planning at sub-national level using value chain dynamic approach

Home | Plantation and Production | Deforestation and Emission | Trade | Scenario

Policy Scenario [Run] [Restore]

Extensification

Corporate Plantation Growth (%) 0 5 10 12 15 20

Smallholder Plantation Growth (%) 0 5 8 10 15 20

Intensification

Corporate Intensification (%) 0 10 20 40 60 80 100

Smallholder Intensification (%) 0 10 20 40 60 80 100

Stop new plantation from illegal forest conversion

Stop new plantation from legal forest conversion

Stop new plantation on peatland

Certified Palm Oil (%) 0 20 40 60 80 100

RPO Export Fraction (%) 0 20 40 60 80 100

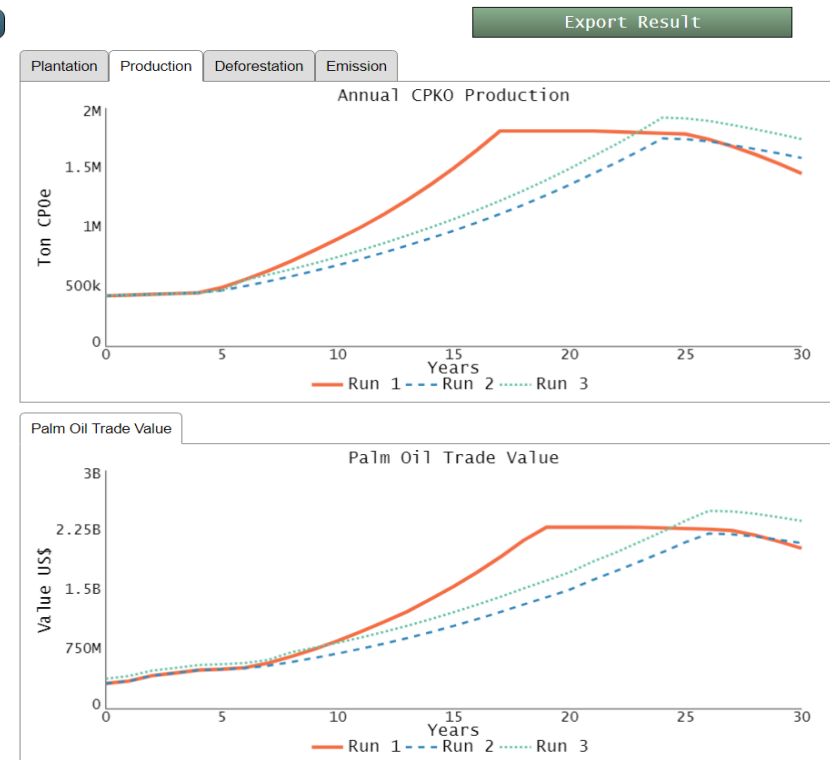
Premium price (%) 0 10 20 30 40 50

Carbon Tax for Palm Oil Sector

CO2 Price (\$/ton) 0 5 10 15 20

Ecological Fiscal Transfer

Ecological Fiscal Transfer (\$/Ha) 0 50 100 200 300



Home | Plantation and Production | Deforestation and Emission | Trade | Scenario

Jurisdictional Approach Palm Oil Simulation (JAPOS)

Sintang

Powered by isee systems, inc.

<https://exchange.iseesystems.com/public/cifor-vfi/japos-sintang-id>



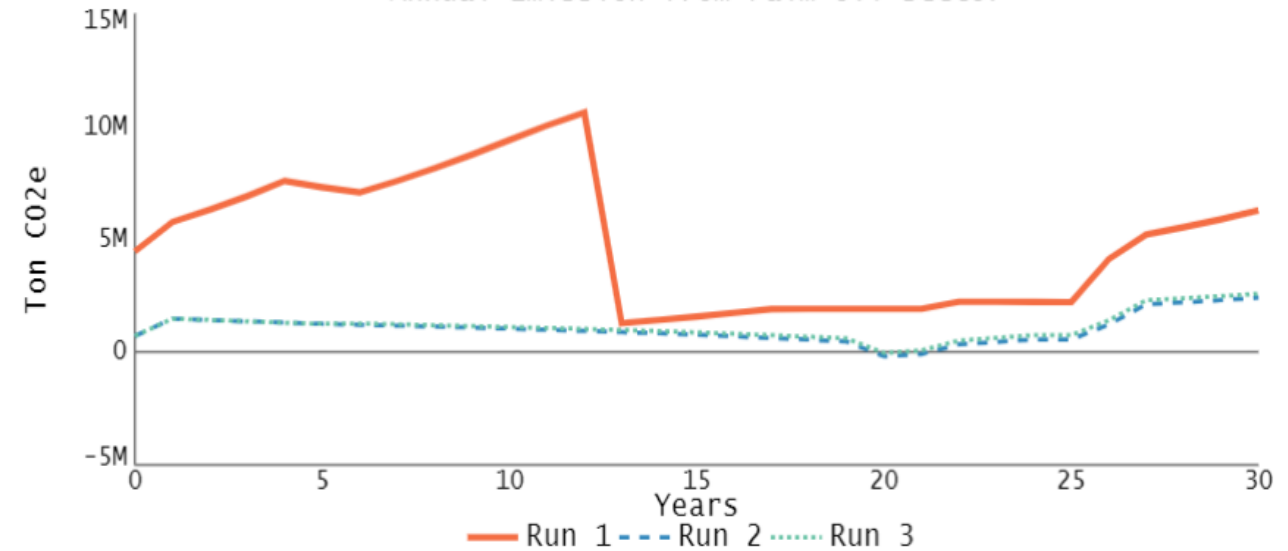
Sustainable oil palm production can contribute to emission reductions

Case study: Sintang Regency, West Kalimantan

Annual Deforestation from Palm Oil



Annual Emission from Palm Oil Sector



Run 1: BAU

Run 2: NDP

Run 3: NDP with 10% intensification, 100% certification and incentives: premium price 20%, carbon tax USD 5/ton, Ecological Fiscal Transfer USD 50/ha

VI. Conclusion

- I. Stakeholders define deforestation and job opportunity as key factors for palm oil sustainability.
- II. Global trade significantly influences palm oil sustainability.
- III. Certification significantly reduce deforestation.
- IV. Systematic and facilitated stakeholders' participation are keys for national roadmap development.
- V. Jurisdictional approach supported by quantitative models at subnational level can increase participation and develop action plans.





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