Expanding agricultural production without deforestation?



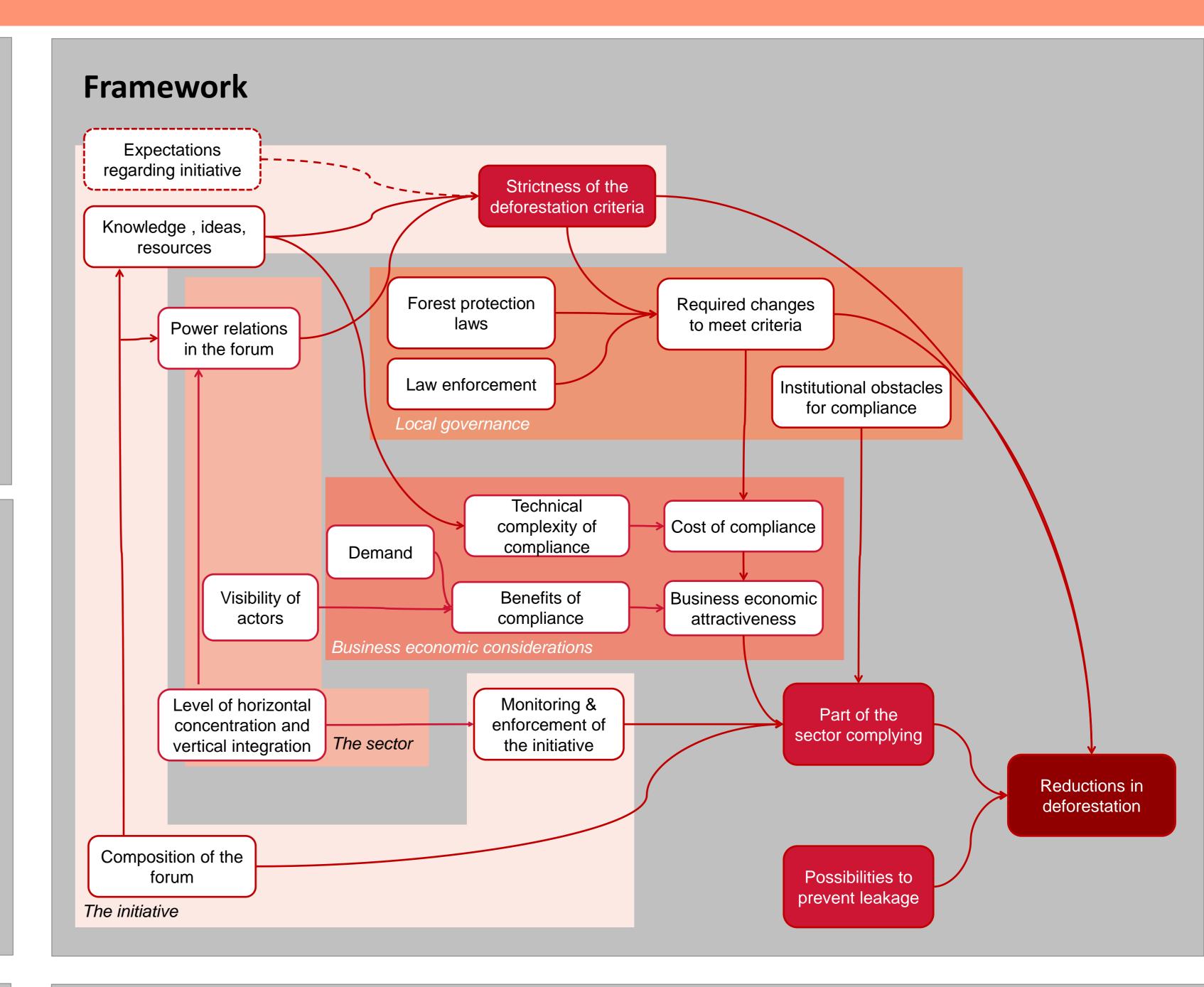
A comparison of four supply chain initiatives

Karen S. Meijer

Deutsches Institut fürGerman DevelopmentEntwicklungspolitikInstitute

Background

- Deforestation and forest degradation account for 10-15% of global greenhouse gas emissions
- Deforestation is largely driven by global demands for food and other commodities
- Particularly mentioned as major 'deforestation commodities': palm oil, timber, pulp & paper, soy, and beef & leather



- Voluntary supply chain initiatives aim at reducing deforestation while enhancing production
- Insight in functioning of these initiatives is required

Contribution

- Framework of factors influencing functioning of supply chain initiatives
- Qualitative comparison of four supply chain initiatives:

Initiatives considered					
Product	Initiative	Country			
Palm Oil	Roundtable on Sustainable Palm Oil (RSPO)	Indonesia			
Soy	Roundtable on Responsible Soy (RTRS)	Brazil			
Soy	Soy Moratorium	Brazil			
Beef and leather	Cattle Agreement	Brazil			



Certification schemes versus moratoria

 Stricter and clearer criteria for moratoria, allowing for monitoring and enforcement, with low leakage (displacement to other areas) within the moratorium area

Assessment

	RSPO - Indonesia	RTRS - Brazil	Soy Moratorium - Brazil	Cattle Agreement – Brazil
Entry into force/first certification	Established 2004, criteria 2007, first certification 2008	Established 2006, criteria 2010, first certification 2011	2006-2014	2009
Effectiveness				

- High implementation of the moratoria, due to dependence on parties who established the moratorium
- Soy: perceived risk through exposure important to companies (moratorium), even though end consumers do not set high sustainability standards, which was given as reason for low RTRS implementation.

Soy Moratorium and Cattle Agreement

- Similar setting with similar result. However, Soy Moratorium to end this year, while Cattle Agreement continues
- High effectiveness attributed to combined activities from NGOs, supply chain, national government and international government

RSPO and RTRS certification schemes

- Ambiguous criteria and low implementation, although higher for RSPO than for RTRS
- Brazilian soy producer think existing law suffices, while for RSPO the low price premium may be the reason for low compliance

Discussion and Conclusion

- Leakage a major risk supply chain initiatives can only be effective if they have high sector participation and full spatial coverage
- Demand for sustainable production important, although exposure seem to have been key for the moratoria

Strictness of deforestation criteria	No replacement of primary forests and HCV, avoid peat	No replacement of native habitat, unless	No trade in soy from deforested areas in Amazone	No cattle from ranches from deforested areas in Amazone
Part of the sector complying	2013: 10% of production in Indonesia versus 16% globally	2013: 0.6 % of production in Brazil versus 0.4% globally	90% of Brazilian market	1/3 of Brazilian market
Possibility to prevent leakage	Low, no control beyond company	Low, no control beyond company	Confined to Amazon	Confined to Amazon
Characteristics of the initiative				
Composition of the forum	All components of supply chain, 13% producers	All components of supply chain, 16% producers	2 associations of grain traders/processers	4 slaughterhouses
Power relations in the forum	At start Unilever and Indonesian/Malaysian growers	Unclear, associations left	Forum consisted of powerful actors only	Forum consisted of powerful actors only
Availability of knowledge and ideas	Unclear about substantive discourse. Participants got access to better quality seedlings	Discourse not substantive	Not sure a substantive discourse took place	Not sure a substantive discourse took place
Monitoring & enforcement of the initiative	Certification by specific independent certification bodies	Certification by specific independent certification bodies	Remote sensing	Remote sensing
Sector characteristics				
Vertical integration	Many different actors for different steps	Many different actors for different steps	Many different actors for different steps	Many different actors for different steps
Horizontal concentration	Some concentration through dependence on mills	Some concentration through dependence on traders	Some concentration through dependence on traders	High concentration through dependence on slaughterhouses
Visibility of actors	Producers and manufacturers mentioned by name in campaigns	Major producers/traders mentioned by name in campaigns	Major producers/traders mentioned by name in campaigns	Major slaughterhouses mentioned by names in campaigns
National governance				
Forest protection laws	No development of plantation allowed in specific zones and on peat deeper than 3 m. Not well enforced.	Not well enforced, recent	Forest Code allows for only 20% of land to be deforested. Not well enforced, recent amnesty for large part of illegally deforested land.	Forest Code allows for on 20% of land to be deforested. Not well enforced, recent amnesty for large part of illegally deforested land.
Institutional obstacles for compliances	Hampered by the requirement to develop land for which concessions are obtained	No specific policies mentioned	No specific policies mentioned	No specific policies mentioned
Required changes to meet criteria	Some requirements required by law, but not enforced	Stricter than Forest code which allows 20% clearance, but FC not well enforced	Stricter than Forest code which allows 20% clearance, but FC not well enforced	Stricter than Forest code which allows 20% clearance, but FC not well enforced
Business economic considerations				
Demand	Certified oil not fully taken up by market, many markets accept lower standards, price premium low	Lower standards accepted as sustainable	Lower standards accepted as sustainable, clear demand by major actors	Clear demand by major actors, full demand by en consumers not known
Benefits of compliance	Low price premium	Price of certificates unknown	Risk of losing market/purchasers	Risk of losing market/purchasers/credit
Technical complexity for compliance	Unclear, lands technically available but economically/politically perhaps not	Unclear how farmers needed to adjust operations	Unclear how farmers have responded	Unclear how cattle ranchers have responded
Costs of compliance	Borne by producers	Borne by producers	Borne by producers	Borne by producers
Business economic attractiveness	Only when land owned/concessionned already meets criteria	Low, hassle but low demand	Some parties directly targeted, for growers high as a result of the moratorium	For initiators high, avoidance of losing contracts, for ranchers hig as a result of the moratorium

- Technical and institutional possibilities for farmers to expand production without deforestation or with reduced deforestation not well understood
- Supply chain initiatives can contribute in combination with public policies that create incentives and take away institutional obstacles

Acknowledgements

The author thanks Nathalie Walker (National Wildlife Federation), Inke van der Sluijs (RSPO), Eddy Esselink (Netherlands Fats and Oil industry), Tamara Mohr (BothEnds), Gesche Jürgens (Greenpeace) and Clara Brandi, Jonas Hein, Ines Dombrowksy and Alejandro Guarin (all Deutsches Institut für Entwicklungspolitik) for sharing insights and ideas on the initiatives and the analysis

> Dr. Karen S. Meijer, Deutsches Institut für Entwicklungspolitik (DIE), Tulpenfeld 6, 53113 Bonn; Corresponding author: <u>karen.meijer@die-gdi.de</u>. The German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) is one of the leading research institutions and think tanks for global development and international development policy worldwide.

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