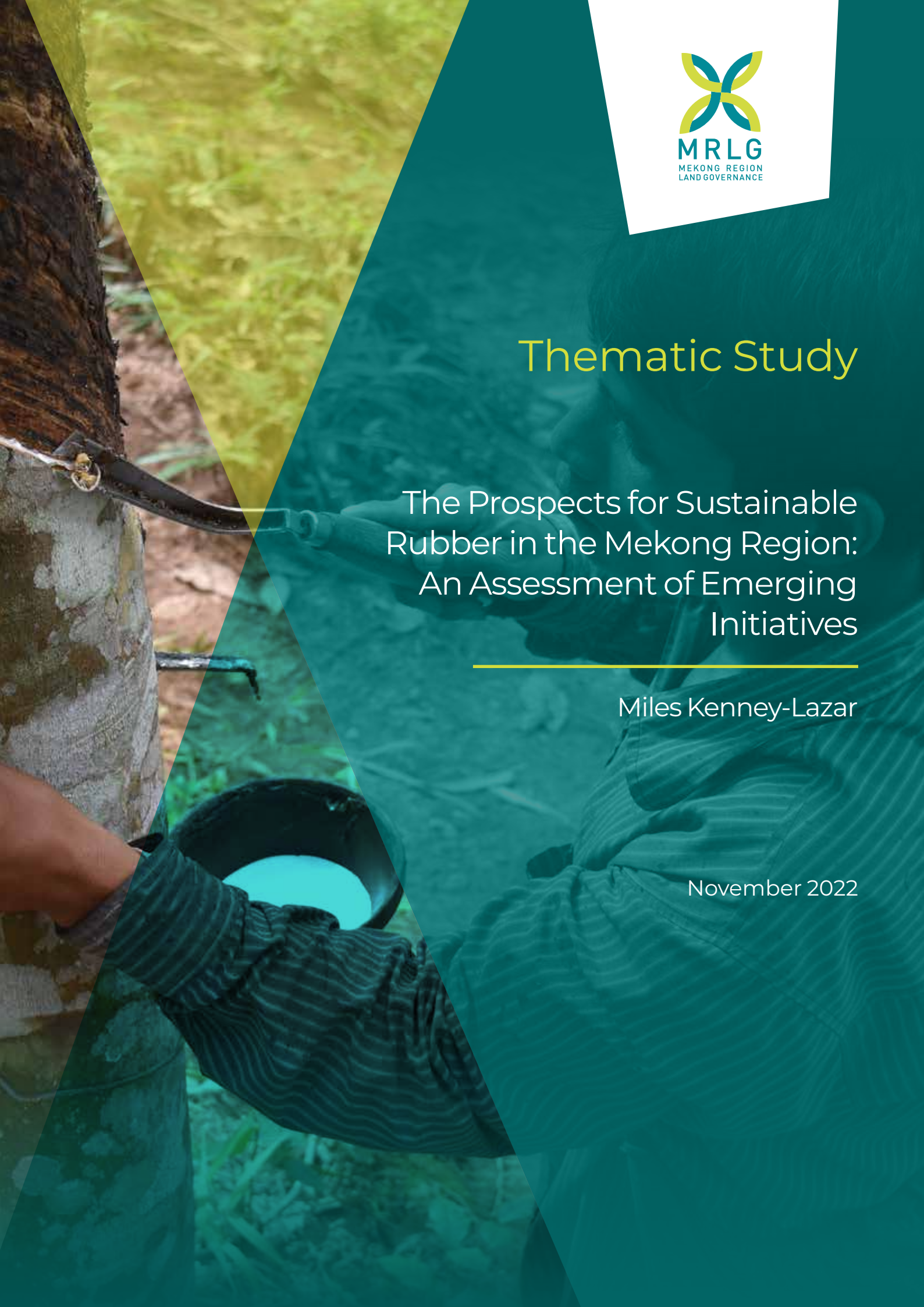

MRLG
MEKONG REGION
LAND GOVERNANCE

Thematic Study

The Prospects for Sustainable Rubber in the Mekong Region: An Assessment of Emerging Initiatives

Miles Kenney-Lazar

November 2022

Thematic Study

Acknowledgements

The author would like to thank the participants of the research project for generously sharing their time, knowledge and experiences. Although their names are not mentioned here out of respect for informant confidentiality, they should know that this report would not have been possible without their valuable contributions. The author would also like to thank those who played a critical role in facilitating this research: Khamanee Oudomdeth from MRLG Laos for administrative support, Le Thuy from MRLG Vietnam for coordinating research and interpretation, Nguyen Duy Thang for interpreting interviews in Vietnamese and Teo Yee Chin for translating and transcribing interviews in Chinese. In the writing and revising phase of the research, Juliet Lu and Hilary Smith provided invaluable feedback on earlier drafts. Many thanks are also due to Micah Ingalls, Antoine Deligne and especially Rob Cole for guiding the project and providing important comments and edits at key stages. Sangwan Sapma also played a key role in designing and proofreading the final report. It should be acknowledged that all remaining errors and omissions are the responsibility of the author alone.

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Layout and design: Watcharapol Isarangkul Na Ayuthaya

Suggested citation

Kenney-Lazar, M. (2022). *The Prospects for Sustainable Rubber in the Mekong Region: An Assessment of Emerging Initiatives.* Thematic Study No.14. Vientiane: Mekong Region Land Governance.

Disclaimer

Cover image: Smallholder tapping rubber, Luang Namtha province, Laos.

Contents

Smallholder rubber plantation, northern Laos

Abbreviations

CCCMC	China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters
CFS	Committee on World Food Security
DFID	Department for International Development (United Kingdom)
FAO	UN Food and Agriculture Organization
FPIC	Free, prior and informed consent
FSC	Forest Stewardship Council
GPSNR	Global Platform for Sustainable Natural Rubber
InFIT	International Forest Investment and Trade Programme
IP/LC	Indigenous peoples and local communities
IRSG	International Rubber Study Group
LRA	Lao Rubber Association
MOU	Memorandum of understanding
NGO	Non-governmental organisation
PanNature	Center for People and Nature Reconciliation
RSPO	Roundtable on Sustainable Palm Oil
SNR	Sustainable natural rubber
SNRI	Sustainable Natural Rubber Initiative
UN	United Nations
VGIA	Voluntary Guidelines on Mitigating Socio-Environmental Risks for Vietnamese Outward Investors in Agriculture in the Mekong Subregion
VRG	Vietnam Rubber Group
WBCSD	World Business Council for Sustainable Development
WWF	Worldwide Fund for Nature

Executive summary

The rubber tree (*Hevea brasiliensis*) has been planted across Southeast Asia since the late 19th century and the region has long been the world's largest source of naturally produced latex. Since the 1990s, rubber plantations have expanded to parts of Laos, Cambodia, Thailand and Myanmar, where it was not historically cultivated. Induced by high rubber prices and the economic liberalisation of formerly closed countries, rubber cultivation has offered prospects of higher incomes and livelihood improvement. However, many social and environmental problems related to rubber plantations are well documented. Large-scale rubber plantations have been responsible for the clearance of primary and secondary forests, the loss of biodiversity and the coercive and unjust acquisition of land rights. While smallholding rubber production can afford greater benefits to rural people, farmers' livelihoods have been subjected to a volatile rubber market, especially following the precipitous drop in prices since 2011.

Research, reporting and campaigns by scholars and civil society organisations have highlighted the social and environmental problems of rubber expansion and the need for change in the industry. Agricultural sustainability and responsible investment principles are becoming the norm among global agribusinesses and have been pursued for a range of commodities prior to rubber, including cacao, coffee, palm oil and soybeans. In the rubber industry, global and regional companies, governmental institutions and civil society organisations have collaborated to develop initiatives to address the key sustainability problems that plague the production of the crop. These initiatives come at a convenient time for industry actors as plantation expansion has slowed and thus the most significant social and environmental risks are in the past.

This report covers the three most prominent initiatives from the past five years that are active in the Mekong Region. All three have taken the fundamental step of outlining key principles of sustainable rubber. They have also initiated processes for implementing their visions. The first initiative comprises a set of guidelines called the *Guidance for Sustainable Natural Rubber*, formulated by the China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters (CCCMC). The second is the *Voluntary Guidelines on Mitigating Socio-Environmental Risks for Vietnamese Outward Investors in Agriculture in the Mekong Subregion* (VGIA), established by a group of Vietnamese companies and institutions. The third is a platform initiated by multinational tire companies called the Global Platform for Sustainable Natural Rubber (GPSNR), which includes a broad range of actors such as civil society organisations and smallholding rubber farmers. The first two are predominantly oriented toward Chinese and Vietnamese companies operating in Cambodia, Laos, Vietnam and Myanmar, while the latter largely includes international companies from outside of China and Vietnam that source most of their rubber from other areas of Southeast Asia.

Sustainable natural rubber (SNR) initiatives have significant potential for changing social-environmental practices and the goal of sustainability in the rubber sector is worth pursuing. Rubber may never be a truly sustainable crop, especially if it is planted as a monoculture and if there is a future increase in demand and prices, leading to further expansion into ecologically vulnerable areas. However, sustainability is an important goal for all actors involved as its pursuit alone can generate positive social and environmental change. Discussions around sustainable rubber have been an important first step for identifying the problems in the industry and potential pathways for addressing them. These discussions have helped outline the key elements of sustainable rubber and its defining principles. The development of guidelines and principles has brought together a diverse group of actors with different perspectives and interests to pursue a common goal. This has signalled to companies in the sector that they need to take sustainability seriously. Furthermore, the process has initiated debate concerning the best ways to achieve the goal of rubber sustainability.

Despite such potential, SNR initiatives also face serious limitations that raise important questions about their future development and implementation. First, they vary in terms of the strength and clarity of their guiding principles. In the author's assessment, the GPSNR has developed the clearest and most rigorous sustainability principles among the three initiatives reviewed. While the CCCMC guidelines and VGIA also contain strong social and environmental principles, they are comparatively ambiguous on commitments to some of the most important issues, such as deforestation and land expropriation.

Second, they differ in terms of their mechanisms of accountability and commitments for companies involved. As voluntary and private initiatives, they lack strong mechanisms to ensure companies implement their principles. They do not closely link or engage with governments and thus lack the power of state policy and law. Additionally, accountability mechanisms are not well developed for any of the three initiatives as they are all relatively recent. The

GPSNR has gone the furthest by requiring that members who join the platform sign onto its policy commitments, including to develop their own sustainability policies. If they do not make significant progress towards those commitments they may lose their membership, although the mechanisms for this have yet to be clarified. However, the GPSNR has not been able to attract Vietnamese companies and only a few mainland Chinese companies have signed on. Additionally, its members have little exposure to rubber produced in the countries of the Mekong Region where the most significant sustainability risks exist. As for the CCCMC guidelines and VGIA, they do not have a clear mechanism to motivate companies to follow them apart from voluntary adoption. However, the companies linked to their initiatives are more embedded in the Mekong Region. State-owned Vietnamese companies have been able to place some pressure on their subsidiaries to adopt the VGIA principles and the CCCMC has begun to sign agreements with individual companies to implement its guidelines.

Third, the most significant limitation for all three initiatives is their lack of implementation. It has yet to be seen whether these initiatives produce substantive changes to social and environmental practices on rubber plantations. This is partly because they were developed recently and it is more challenging to apply these principles to existing than to new plantations, which carry the highest social-environmental risks. Additionally, there are uncertainties concerning the appropriate model for implementing sustainable rubber principles. Consumer-oriented traceability certification is more challenging for rubber than for other crops due to a lack of consumer awareness and the large percentage of smallholders in the commodity chain. The CCCMC and VGIA initiatives have largely been left to interested companies and civil society groups to implement through the development of detailed, locally specific handbooks and through training and capacity-building workshops and programmes. It remains unclear what will motivate actors to continue this work in the future. The GPSNR is in the process of developing a more sophisticated implementation approach comprising analyses of geographic-based risks, capacity-building programmes to address such risks and evaluations of company performance in making improvements. However, the details of this model are still being developed and it has yet to be tested, so it is still too early to assess its effectiveness.

In response to these limitations, this report makes key recommendations for the SNR initiatives and for civil society groups working on them. Recommendations for the initiatives include:

1) Ensure that all guidelines and principles are clear and reach a high standard in line with international best practices
2) Address sustainability issues in the highest-risk regions of Southeast Asia rather than only focusing on areas with lower risk
3) Collaborate and harmonise across initiatives to develop common principles and approaches
4) Include a greater diversity of actors in the initiatives such as landless people near plantations and labourers
5) Engage more directly with governments to pursue policy and regulatory changes
6) Address past unsustainable practices and plans for future expansions
7) Develop clear and viable paths of implementation
8) Create more robust mechanisms of accountability and transparency.

In advancing sustainable rubber initiatives, civil society and non-governmental organisations (NGOs) have an important role to play. The report recommends that they:

1) Carefully and strategically engage in SNR initiatives to achieve the greatest and most sustainable impact
2) Avoid doing the sustainability work of rubber companies for them
3) Hold companies accountable to sustainability commitments.

Ultimately, whether the three SNR initiatives reviewed will make significant advances in improving the sustainability of rubber production will depend on whether they are able to compel rubber buyers, producers, smallholders, processors and traders to change their practices, which has yet to occur. Such changes will need to be economically viable in the long term, for companies as well as smallholders. Questions remain concerning the continuity of funding for the sustainability initiatives. Although consumers are not currently aware of sustainability issues related to rubber, this may need to change if these initiatives are to succeed. Additionally, if rubber prices increase in the future and there is greater pressure to expand plantations, sustainability efforts will be tested in new ways. Nonetheless, the pursuit of SNR in Southeast Asia is an important step forward, especially considering the serious social and environmental problems in the sector over the past three decades.

Cup collecting tapped rubber.

Background

The production of latex from the rubber tree (*Hevea brasiliensis*) has a long and storied history. The tree was first cultivated by Indigenous peoples of Mesoamerica who used the white sap to produce rubber balls, containers and waterproof textiles. In the 18th century, European powers that colonised the Americas began planting, harvesting and processing rubber for industrial products. Throughout much of the 19th century, most of the world's rubber came from South America. This all changed in 1876 when British explorer Henry Wickham smuggled 70,000 Amazonian rubber tree seeds from Brazil and delivered them to Kew Gardens in England. Seedlings germinated there were sent to British colonies across Asia. Not long after, most rubber in the world was produced in Asia, which remains the case today. As of 2019, over half of the world's natural rubber was produced in Thailand and Indonesia.[1]

In response to increasing prices, market liberalisation in formerly closed economies and regional economic integration, rubber cultivation has expanded to areas that did not traditionally grow the crop, such as northeastern Myanmar (Burma), southern China, Laos, northeastern Thailand and northern Cambodia – in other words, the greater Mekong Region (Fox and Castella 2013). Governments promoted rubber as a means of alleviating poverty, fostering rural economic development, building rural infrastructure, spreading agricultural technology and production methods and transitioning upland farmers away from swidden cultivation towards more "stable" forms of employment. Rubber has been planted using a range of social and economic models, including large estate plantations on state land granted to companies, contract farming arrangements between companies and smallholder farmers and independent smallholder plantations.

The planting of rubber across the Mekong region has undoubtedly generated positive economic outcomes for rubber companies, government coffers, smallholders and related businesses (Baral et al. 2016). In many areas, farmers have been able to gain cash income to purchase household necessities that otherwise were not available to them (Sturgeon 2010). They have also been able to accumulate capital and reinvest it into other livelihood activities. At the same time, rubber production has had destructive environmental, social and economic impacts. The rapid expansion of plantations has led to deforestation and biodiversity loss (Ahrends et al. 2015; Beukema et al. 2007; Ziegler et al. 2009). Rubber plantations have also been shown to reduce groundwater and streamflow (Guardiola-Claramonte et al. 2010; Tan et al. 2011) and pollute soils and waterways when significant amounts of agrochemicals are applied.

Socially, larger-scale estates are often established by dispossessing farmers and Indigenous peoples of agricultural and forest lands under customary tenure, leading to a loss of subsistence resources, income and intergenerational wealth (Kenney-Lazar 2012; Woods 2012; Global Witness 2013). In smallholding and contract farming arrangements, unequal power and economic relationships between rubber companies and farmers can lead to exploitative production and trading relationships that limit benefits for smallholders (Dao 2015; Dwyer and Vongvisouk 2019). Economically, the global crash in rubber prices after 2011 reduced the gains from rubber that many farmers were expecting. Since 2016, prices have increased moderately but are far below their earlier peak and remain volatile.

Bags of fertiliser in land cleared for Vietnamese rubber plantation, Attapeu province, southern Laos.

1 56.7% of the world's rubber is produced in Thailand and Indonesia (FAOSTAT 2019 http://www.fao.org/faostat/en/#data/QCL/visualize. Last accessed 14 September 2021). Malaysia was previously one of the largest rubber producers globally until many rubber plantations were replaced with oil palm over the past several decades.

Tapping a mature rubber tree, northern Laos

1. Context of the study

The negative externalities of expanding rubber plantations have prompted a great deal of interest and concern from civil society, community-based, governmental and industry actors and a desire to improve social and environmental practices. These impacts were driven home mainly by a report published in 2013 by the activist NGO Global Witness, titled *Rubber Barons: How Vietnamese Companies and International Financiers Are Driving a Land Grabbing Crisis in Cambodia and Laos*. Additionally, the current period of low, stable rubber prices and limited plantation expansion has provided a moment for reflection and an opportunity to seek change.

Several voluntary and predominantly private initiatives have been developed in recent years to pursue sustainable rubber. They follow similar sustainability movements for other global agricultural commodities such as coffee, palm oil, cocoa and soybeans. Three initiatives are particularly relevant for the Mekong Region and thus the focus of this study:

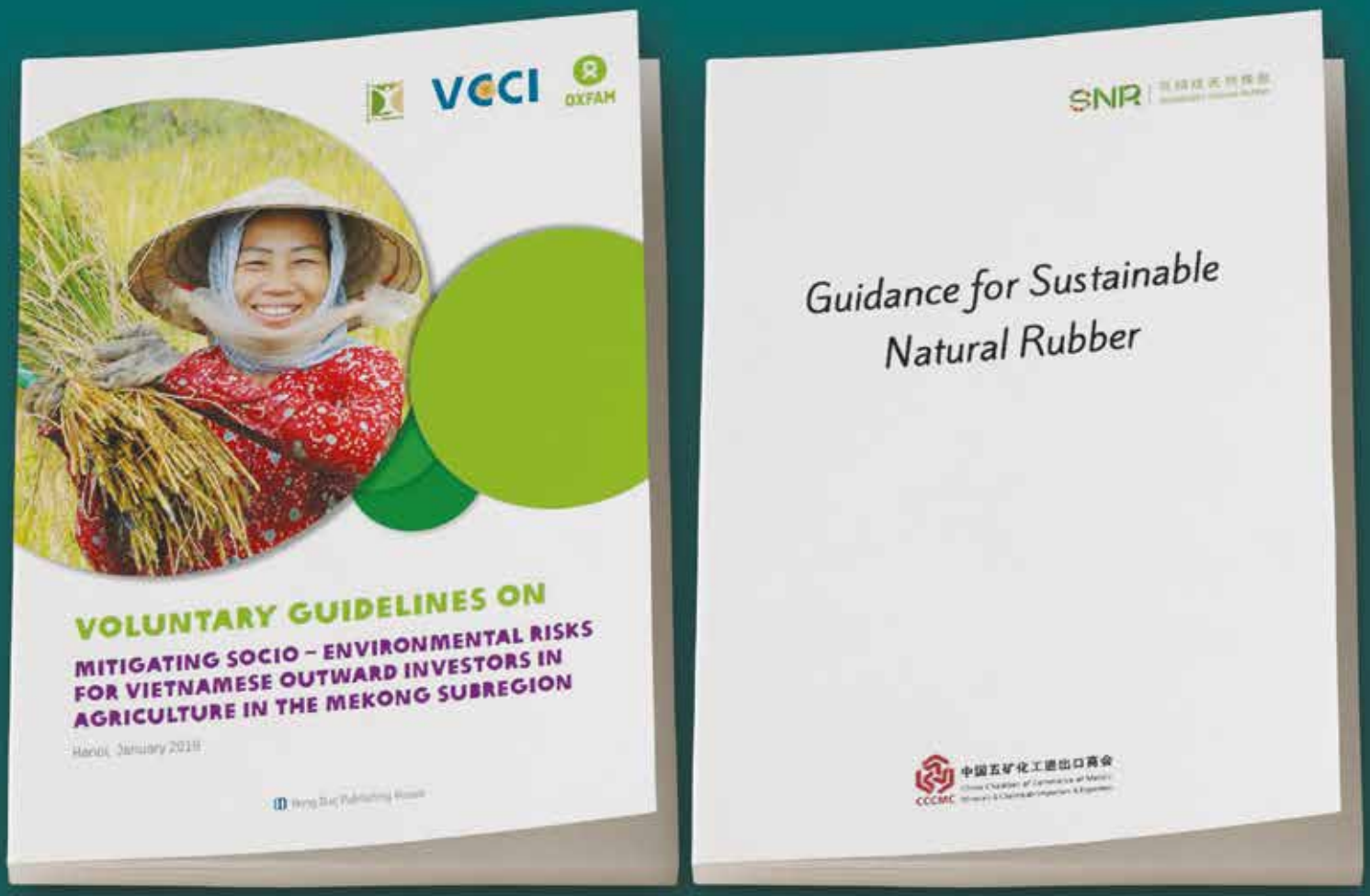
1) the China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters' *Guidance for Sustainable Natural Rubber* (CCCMC 2017)
2) the *Voluntary Guidelines on Mitigating Socio-Environmental Risks for Vietnamese Outward Investors in Agriculture in the Mekong Subregion* (PanNature et al. 2019)
3) the establishment of the Global Platform for Sustainable Natural Rubber (GPSNR 2018).

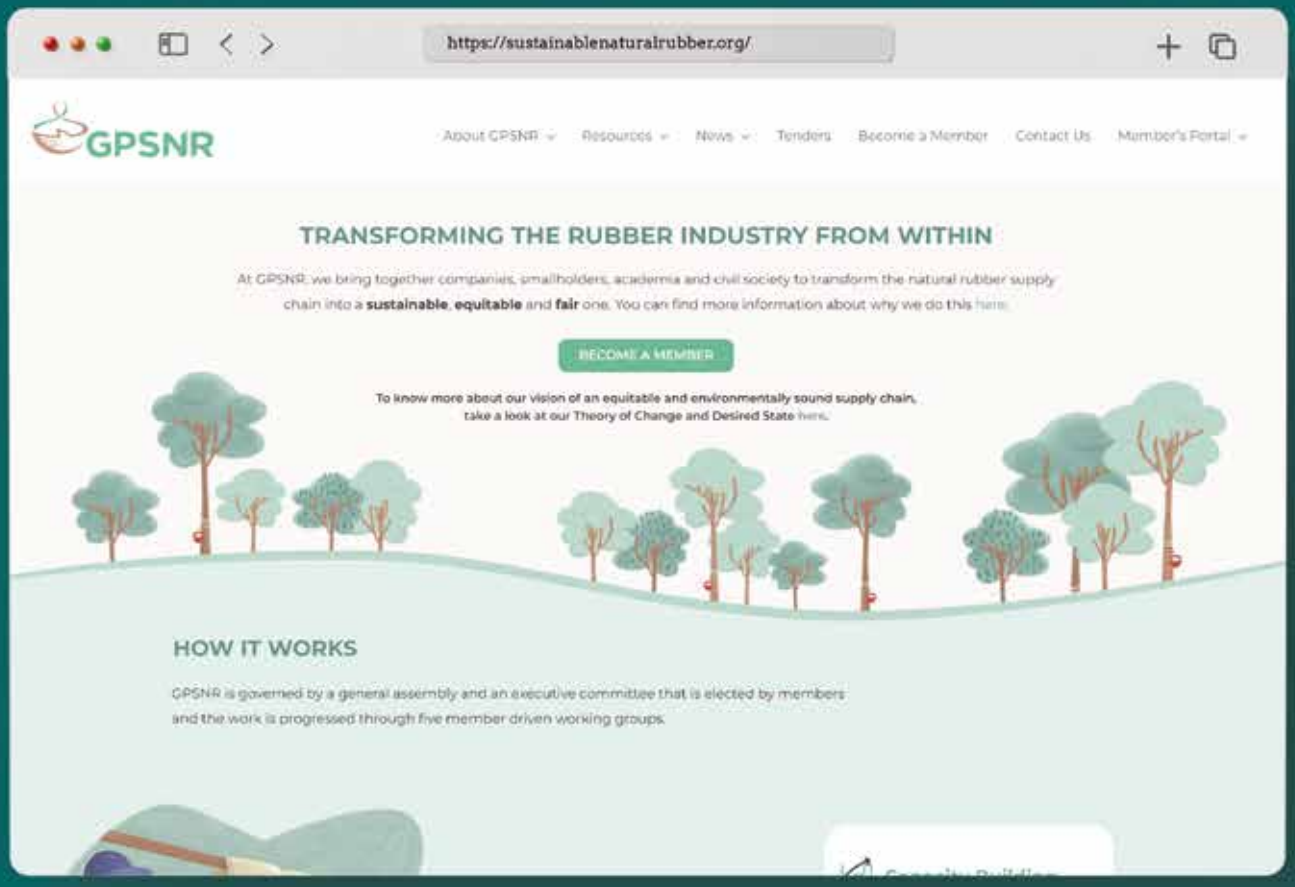
Considering that these three initiatives are relatively recent, there are many questions that still need to be asked of them, such as:

- How do they compare with one another?
- How well-developed and rigorous are they?
- How do they interact with existing regulations?
- What potential do they offer for changing social and environmental practices?
- What are the risks of seeking to address sustainability issues through voluntary guidelines?
- What are the best ways for civil society to engage with them?

This study aims to answer these questions and provide recommendations for 1) the further improvement of the guidelines and their efforts to address sustainability issues in the rubber industry and 2) how actors and organisations, including partners of the Mekong Region Land Governance Project (MRLG), might engage with them.

A qualitative research methodology was used to collect and analyse data for this study. The author conducted a secondary literature review on rubber sustainability and responsible agricultural investment. As part of this literature review, the author collected and closely analysed guidelines and policy documents of the three initiatives. The author also conducted 16 semi-structured interviews with actors involved in developing, implementing or using the guidelines and policies from the three initiatives. Interviewees included members of two bilateral development programmes, six international NGOs, two local civil society organisations, all three of the initiatives, one tire company and three rubber producing companies, as well as one rubber sustainability expert. Interviews were conducted between July and October 2021 and were held online due to the difficulty of traveling for in-person meetings during the COVID-19 pandemic. In some interviews, an interpreter was employed to translate between Chinese or Vietnamese and English. Despite the limitations of online interviews, they allowed for surprisingly in-depth engagement and candid responses from interviewees. The author analysed the data from the interviewees by searching for common responses and themes, which serve as the basis for general statements throughout the report. Key points that come from only one or several interviewees are attributed to them.





Covers of the CCCMC's Guidance for Sustainable Natural Rubber (2017), the Voluntary Guidelines on Mitigating Socio- Environmental Risks for Vietnamese Outward Investors in Agriculture in the Mekong Subregion (2019) and the website of GPSNR

2. Responsible agricultural investment

An increase in agricultural land investments across the Global South since the food price crisis of 2007-8 has placed a spotlight on unsustainable social and environmental practices surrounding land acquisitions. As part of this "global land rush" (Li 2014), a reported 33 million hectares (ha) of land were acquired between 2000 and 2020 for agricultural projects alone, representing an area larger than Norway (Lay et al. 2021). Investment in agriculture can generate economic development, increase productivity and improve livelihoods. However, much of the research on the global land rush has found that when such investments lead to the establishment of large estate plantations, they often lead to impoverishment due to land dispossession, popularly known as land grabbing, and environmental destruction in the form of deforestation, loss of biodiversity and chemical pollution (Rulli et al. 2013; Dell'Angelo et al. 2017; Lay et al. 2021; Müller et al. 2021; Yang and He 2021).

The reported negative impacts of agricultural land investments have led to a critical response from civil society organisations, governments and other development institutions. One effort to limit the negative effects of land investments has been to create voluntary guidelines for responsible agricultural investment, sometimes called codes of conduct. An early initiative was the *Principles for Responsible Investment in Farmland* unveiled by the United Nations (UN) in 2011. Around the same time, the UN Food and Agriculture Organization (FAO) began a multi-stakeholder process of developing the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forest in the Context of National Food Security*, which were adopted by the intergovernmental Committee on World Food Security (CFS) in 2012. Additionally, the CFS developed the *Principles for Responsible Investment in Agriculture and Food Systems* in 2014. From these, the Association of Southeast Asian Nations (ASEAN) formulated the *ASEAN Guidelines on Promoting Responsible Investment in Food, Agriculture and Forestry* in 2018 (Cole 2022).

Principles and guidelines for responsible agricultural land investment are part of a broader movement for responsible commodity production across multiple sectors. Notably, these guidelines are established mainly by the private sector, are often market-based and rely upon voluntary, certification-based schemes. One of the longest-running certification schemes is managed by the Forest Stewardship Council (FSC), established in 1993. Businesses whose products conform to the management principles of the FSC can be certified, making their products more attractive to sustainability-minded companies and consumers. In the palm oil sector, which is known for its significant social and environmental problems, the Roundtable on Sustainable Palm Oil (RSPO) was established in 2004 and created a certification scheme. For soybeans, the Round Table on Responsible Soy (RTRS)was founded in 2006, and its standards were approved in 2010.

Rubber is somewhat of a latecomer to this sustainability and responsibility movement. This is not surprising because of the nature of rubber as a "hidden commodity": consumers have little awareness or concern about the sustainability of the rubber products that they use and consume. As noted by an interviewee from Michelin, when the company first started working on sustainability issues a decade ago, "consumers were completely out of the scope and not asking anything about natural rubber." [2] He added that "very few consumers know that there is natural rubber in tires." He noted that there are hardly any situations when customers think about the tire, apart from when changing it at a repair shop, and even then, sustainability is likely to be the last thing on their minds.

SNR connects with and is motivated by broader movements toward sustainability across other industries. This could benefit SNR initiatives as they can learn from and improve upon earlier approaches. It also raises questions regarding how sustainability initiatives in rubber are distinct compared to initiatives in other industries, as many key concepts and best practices for sustainable agriculture are already well developed for other commodities. Additionally, when consumer demands are not the driving force for sustainability, it remains to be seen which actors and institutions will hold the industry accountable to its commitments.

2 Interview with Michelin, 6 September 2021.

Rubber plantation on steep sloping land in Laos next to earthworks to halt erosion.

3. Overview of sustainable natural rubber initiatives

This study reviewed three SNR initiatives developed by various Chinese, Vietnamese and international institutions, including bilateral donors, NGOs, civil society organisations, private companies and business networks. They are primarily driven by concerns among civil society actors about the impacts of rubber production rather than demands from consumers. The initiatives are a response to reports and critiques that emerged during a peak in rubber prices and a rapid expansion of plantations in 2011-12, after which prices began dropping (see Fig. 1). They are currently being developed during a lull in prices and expansion, which offers a moment for reflection and preparation for possible future booms.

All three initiatives are voluntary, although the GPSNR establishes a mechanism for holding member companies accountable to their commitments. While some of the institutions involved are linked to governments, the initiatives are largely oriented towards the private sector and do not closely involve government agencies, nor do they seek to change government policies. They are built upon common principles of legal compliance; environmental protection; healthy and functioning ecosystems; and respect for human rights, local culture and customs, including land rights. However, they differ in the stringency of their commitments and those of the GPSNR are the clearest and strongest. There are commonalities among their implementation strategies, which include identifying and analysing risks; raising awareness, knowledge and capacity; enlisting the support of civil society; gaining commitments from rubber producing companies; and evaluating practices of companies and smallholders and how these should be changed. The initiatives are all currently focused on developing strategies for implementation, which is the least-developed aspect of their work.

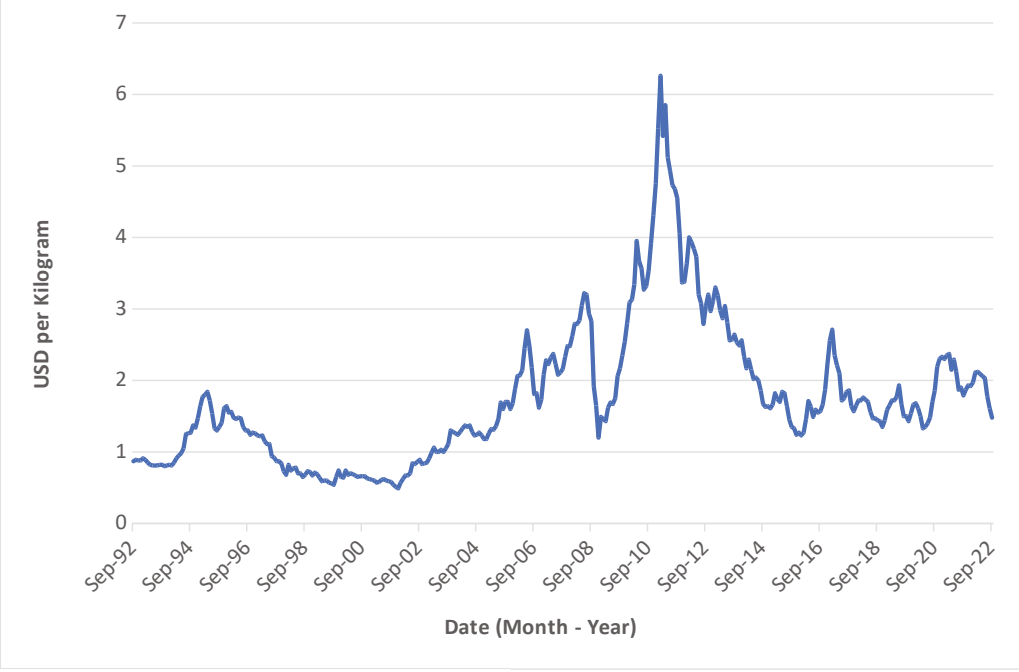


Figure 1. Rubber prices in US$ per kilogram on the Singapore Commodity Exchange over the past three decades. Source: IndexMundi.

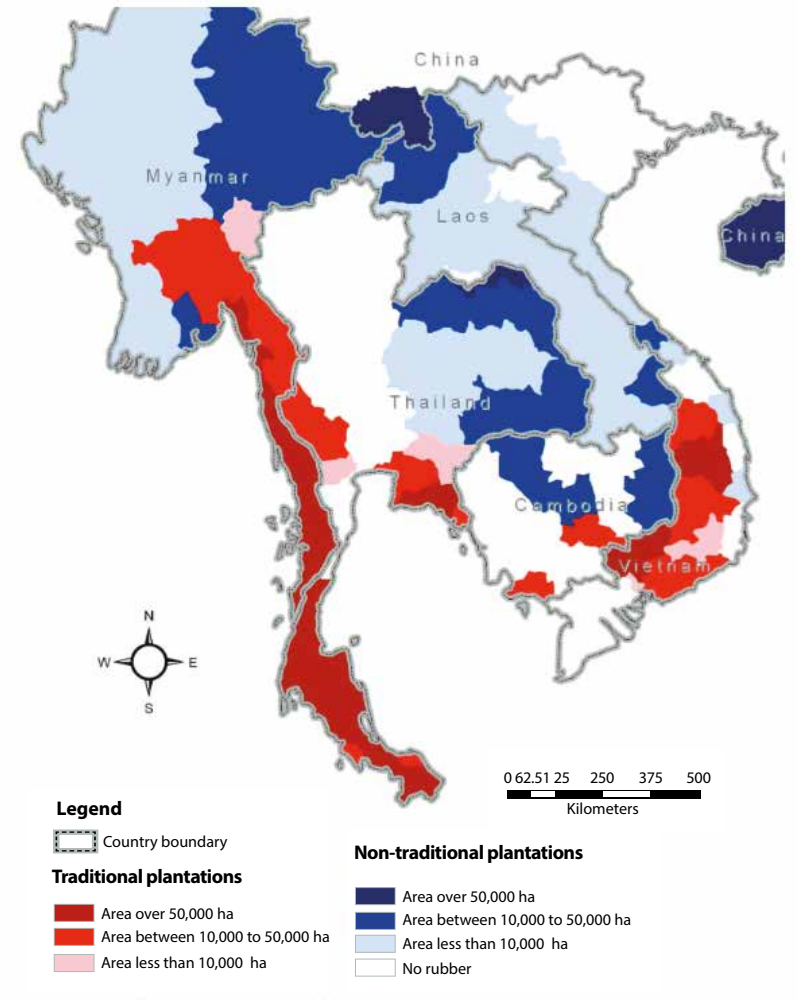


Figure 2. Traditional and non-traditional rubber growing areas in mainland Southeast Asia as of 2009. Source: Fox and Castella 2013.

3.1 CCCMC

The China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters (CCCMC) published its guidelines in 2017, titled *Guidance for Sustainable Natural Rubber*. The 60-page document lays out six guiding principles (Chapter 2 of the document), summarised in Table 1 below. Additionally, it outlines suggestions for systems of due diligence and implementation (Chapter 3), investment risk assessment and reduction (Chapter 4) and sustainable management and risk control during business operations (Chapter 5). The guidelines are voluntary and can be implemented by any rubber company or organisation. Chinese companies may be more likely to implement them as they were involved in formulating the guidelines, although CCCMC representatives emphasized that they are not directed towards companies from any one country.[3] The CCCMC is currently seeking to facilitate the implementation of the guidelines, which rubber companies may do independently, through a cooperation agreement with the CCCMC or in collaboration with INGOs operating in the Mekong Region, such as Oxfam. The CCCMC is also developing assessment tools and verification protocols. However, moving from guidelines on paper to a transformation of socio-ecological practices is the most challenging step.

The CCCMC guidelines emerged from a bilateral cooperation project between the United Kingdom's Department for International Development (DFID) and the Chinese government. The UK and China developed the International Forest Investment and Trade Programme (InFIT), which identified commodities imported to China that are associated with high deforestation rates, including wood products, minerals, palm oil and natural rubber. InFIT sought to improve the sustainability of supply chains. CCCMC was identified as a suitable partner because of their previous work on corporate social responsibility in China's mining sector and because

3 Interview with the CCCMC, 18 August 2021.

some rubber companies are members. Although the CCCMC was organised under China's Ministry of Commerce (MOFCOM), it always retained a high degree of autonomy in decision making and recently separated from the government to become an independent entity.[4]

The CCCMC's motivation for developing SNR guidelines emerged from an understanding that unsustainable rubber production poses risks to Chinese companies. A representative of the organisation explained that "we of course know that development of natural rubber has brought great economic gains, but practically it has also had other effects, such as deforestation, soil erosion and biodiversity degradation."[5] These issues create reputational risks for Chinese companies and can potentially mire them in social conflicts at the sites of their investments. The interviewee further expressed that these social and environmental impacts are particularly problematic for rubber because it is a long-term crop: "For such a long period, a mid- to long-term investment, the negative consequences I mentioned earlier will turn into investment risks."

The CCCMC and its partners began working on the SNR guidelines in 2014. CCCMC representatives expressed that it was challenging at first as there were no established SNR guidelines to follow, and thus they had to start from scratch: "We did not have any references. We could only refer to some similar international standards such as ISO [the International Organization for Standardization], and also forestry standards, agricultural standards, even mining standards."[6] They also looked toward other relevant international policies to provide support, such as the UN 2030 Agenda for Sustainable Development, the UN Convention on Biological Diversity, the UN Guiding Principles on Business and Human Rights and the ISO 26000 Guidance on Social Responsibility, among others. Additionally, they brought in specialists, or what they referred to as a "multi-stakeholder expert team," which included INGOs, research institutes, trade organisations, individual experts and academics. They also consulted prominent Chinese and international rubber and tire companies. They aimed to develop the guidelines openly and transparently to ensure the project would be legitimate and relevant beyond China and would align with international standards. The final set of guidelines was published in 2017. CCCMC and InFIT representatives proudly noted that these were the first guidelines in the rubber sector and expressed that they played an essential role in setting norms for SNR at the global level.

Six principles are at the centre of the guidelines (summarised in Table 1 below) and companies following the guidelines should commit to them. The principles cover essential aspects of sustainability in rubber, such as respecting human rights. However, they are also relatively short, each being a paragraph in length. Additionally, many key statements are rather broad, such as the last bullet point of principle six, to "Share responsibilities and values with stakeholders, to achieve inclusive development." They leave a great deal of room for interpretation by the companies that would implement them. Finally, they do not directly mention some of the most critical issues in the rubber sector, such as deforestation, biodiversity loss, land conflicts and labour rights abuses. In general, they are presented in a non-combative way that makes them easier for companies to follow. This may reflect the consensus-building approach by which they were formulated. As a CCCMC representative explained:

> One section of the experts recommended to make the guidelines very stringent, to set a high standard. But another section recommended to set an appropriate level for the standard, so that it is more achievable. They were concerned that the standard will simply not be used if the bar was set too high… Finally, we actually managed to find agreement through discussion. Both sides found a compromise.[7]

Worker camp in young Vietnamese rubber plantation, Attapeu.

4 Ibid.
5 Ibid.
6 Ibid.
7 Ibid.

Table 1. Six principles outlined in the CCCMC's Guidance for Sustainable Natural Rubber.

Principle	Key elements
1. Legal compliance and lawful business operations	Abide by all applicable laws and regulations of the country Respect relevant international codes of conduct, conventions and customary law
2. Respect for human rights and secured rights and interests	Identify and evaluate direct and indirect impacts of business practices on human rights Adopt appropriate precautionary measures to prevent and mitigate negative impacts on local communities, Indigenous peoples, staff and other relevant stakeholders Protect human rights and labour interests to promote economic and social development
3. Site-specific considerations with respect for differences	Fully consider the natural environment and its suitability when making investment decisions Identify and evaluate relevant features of the social environment Assess the investor's adaptability to the social context of the host country
4. Open, transparent and fair competition	Promptly disclose decisions and activities with economic, social and environmental impacts and reveal the potential degree of impact Maintain communication with all key stakeholders Take part in healthy market competition on a fair and equal basis through honest business operations Do not participate in any corrupt practices Preserve fair market conditions and good practice
5. Green and environmental protection and ecological benefits	Identify potential environmental impacts of business practice Take measures to prevent or mitigate the negative impacts on environment, climate and biodiversity Achieve harmonious development of both ecological and economic benefits through activities such as integrated agriculture and diversified operations
6. Innovative development, inclusion and sharing	Consider and respect the interests of stakeholders, including authorities, local communities, employees and both upstream and downstream enterprises Provide effective feedback to stakeholders on their social concerns and appeals Innovate planting systems, processing technology and industrial models Share responsibilities and values with stakeholders, to achieve inclusive development

The remainder of the document provides more specific details on how these six principles might be implemented, which helps to flesh out the principles and address some of what is lacking in their brevity. The document includes details on setting up systems for due diligence, risk identification and assessment, risk management and mitigation and effectiveness tracking and reporting.

The guidelines provide further specifics on investment risk assessment and mitigation in Chapter 4. The chapter includes some basics of international investment, such as understanding a foreign country's laws and regulations. More significantly, it highlights the importance of consulting with communities in the development of rubber production projects, including showing them the results of environmental and social impact assessment (ESIA) studies and respecting their right to free, prior and informed consent (FPIC). This section also details the need to conduct comprehensive assessments of customary tenure; respect user rights to land, water, forest and other natural resources; and ensure that legal rights are not infringed upon. Importantly, it suggests that a project should not go forward if the expected impacts are too severe, if it does not gain FPIC from Indigenous peoples, or if consensus is not reached with the community on any necessary resettlement or compensation.

Chapter 4 also details some of the environmental risks of rubber investments. The guidelines recommend that, apart from studying these risks carefully, companies should not plant rubber on land that has steep slopes, high conservation value, high carbon stock or riparian conservation areas. It also recommends setting up multiple cropping systems to manage understory vegetation, protect ground cover, reduce soil erosion and enhance biodiversity.

In the author's review of the CCCMC guidelines, it is not always evident how the six brief and broad principles in Chapter 2 link with the recommended practices in Chapters 4 and 5. It is not clearly stated whether companies must follow such specific practices in order to comply with the guiding principles. For example, while it is encouraging that FPIC principles are mentioned in Chapter 4 as an important element of community relations (section 4.1.3), it is unclear whether companies must gain FPIC in order to meet guiding principle 2.2, "Respect for human rights and secured rights and interests". There could be a situation in which a company claims they are following principle 2.2 while they have not engaged in an FPIC process and thus their compliance status would be uncertain. Therefore, the critically important economic, social and environmental practices that companies should follow ought to be directly linked to the six guiding principles.

Since the CCCMC guidelines were published in 2017, efforts have been made to implement them, although progress has been limited. It is difficult to track whether and to what degree companies are aware of the guidelines or how companies are implementing them. A representative of the NGO Mighty Earth expressed that the CCCMC does not have the authority or leverage to get companies to implement the guidelines and observed that even Chinese companies have been slow to use them.[8] However, the CCCMC has worked directly with one company, Singapore-based Halcyon Agri, to sign a memorandum of understanding (MOU) to pilot implementation of the guidelines.[9]

Most substantially, INGOs working in the Mekong Region, such as Oxfam, have developed projects to implement the guidelines in various ways. These projects include adapting the guidelines to local contexts; translating them into Vietnamese, Khmer and Lao; conducting training and piloting workshops with rubber companies and smallholders; and developing community engagement handbooks with more detailed instructions for companies. In Laos, Oxfam has piloted the implementation of the guidelines by working with the Oudomxay Provincial Chamber of Commerce and several Chinese rubber companies. Surveys were conducted to identify sustainability problems and companies were then allowed to choose three issues to address. This approach carries the risk of letting the companies pursue low-hanging fruit rather than the most challenging but important sustainability issues. Additionally, an interview with one of these companies demonstrated that they had a very shallow understanding of the guidelines and how they operated and viewed them largely as a form of economic support for farmers and a mechanism for ensuring close cooperation with the government.[10]

Although implementation of the CCCMC guidelines has a long way to go, this is understandable considering that it is a recently established initiative. Thus far, it is not clear whether the guidelines have impacted plantation practices, in part because

8 Interview with Mighty Earth, 23 August 2021.
9 Halcyon also has a policy aligned with the GPSNR Policy Framework.
10 Interview with Jian Feng Rubber Co. and the Oudomxay Provincial Chamber of Commerce Office, 6 August 2021.

Collecting rubber cup lumps in smallholder plantation, Luang Namtha.

they are being adopted retrospectively after many plantations have already been established. The CCCMC is now considering the next steps for further developing their initiative. This includes piloting the guidelines with companies and signing additional MOUs. Furthermore, the CCCMC is developing a risk alert and analysis platform that could support companies to make decisions in accordance with their guidelines. It is evident that these strategies for implementation are only at the initial stages of formulation.

3.2 VGIA

In January 2019, a consortium of Vietnamese rubber enterprises and NGOs published the *Voluntary Guidelines on Mitigating Socio-Environmental Risks for Vietnamese Outward Investors in Agriculture in the Mekong Subregion* (informally abbreviated as VGIA). The VGIA are 72 pages in length and lay out guidelines that Vietnamese agribusinesses should follow when pursuing projects in the Mekong Region. These guidelines focus on risks related to four broad issues of land, labour, environment and culture, and Indigenous people, particularly as they relate to the three stages of investment preparation, implementation and termination. Although the guidelines are designed to be relevant for all types of Vietnamese agribusinesses, the NGOs working on them noted in interviews that they are mostly oriented towards rubber companies.[11] With the publication of the guidelines, the involved companies and NGOs have moved toward implementation by creating detailed community engagement handbooks, training workshops and pilot projects.

The development of the VGIA began in the aftermath of the publication of the Rubber Barons report by Global Witness (2013). The report focused on the social and environmental practices of Vietnamese companies, motivating them to improve the sustainability of their operations. Prominent Vietnamese rubber companies began looking to address the identified problems by creating a grievance resolution mechanism. One of the most prominent investors was the Vietnam Rubber Group (VRG), a restructured state enterprise that is majority-owned by the Vietnamese government and holds nearly 100 subsidiary rubber companies operating in Vietnam, Laos and Cambodia. They were primarily motivated by the FSC's decision to dissociate from them due to VRG's documented involvement in land grabbing and deforestation. This resulted in the termination of VRG's FSC certificates in 2015.[12]

11 Interview with Oxfam in Vietnam, 1 July 2021; and PanNature, 13 July 2021.
12 For further information about the FSC's decision: https://fsc.org/en/media/5207

Starting in 2015 - 2016, a collaborative group of NGOs including People and Nature Reconciliation (PanNature), the Vietnam Chamber of Commerce and Industry (VCCI) and Oxfam in Vietnam conducted field surveys in Laos and Cambodia to identify major sustainability issues for Vietnamese overseas investments in the Mekong Region. As a result of these efforts, they established a coalition called the Pioneer Group to discuss ways to improve the sustainability of the investments and develop voluntary social and environmental safeguard guidelines for investors. VRG, Hoang Anh Gia Lai Join Stock Company (HAGL), Vietnam-Lao-Cambodia Association for Economic Cooperation Development, Vietnam Rubber Association (VRA) and four other Vietnamese rubber companies joined the Pioneer Group and contributed to the development of the guidelines.

Like the CCCMC guidelines, the VGIA are motivated by reputational risk to Vietnamese companies investing abroad in the Mekong Region, especially following the shock of the *Rubber Barons* report. The report and its prominent media presence raised awareness about social and environmental abuses in the rubber sector which the public was unaware of previously. Importantly, the motivation behind the VGIA comes from Vietnamese NGOs, the government and the rubber industry rather than from a bilateral aid programme as in the case of the CCCMC.

Additionally, Vietnamese companies are motivated by increasing demand in the global supply chain for sustainably produced rubber. According to VRG representatives, the demand "comes from the market, from the buyers. So recently the buyers, when they want to buy our rubber, they require certificates, for example sustainable development certificates or sustainable rubber plantation management."[13] NGOs working on the guidelines noted that international companies such as Nike and Adidas seek to buy rubber from companies with FSC certification.[14] However, no Vietnamese rubber companies have held FSC certification since the revocation of VRG's licenses (Turton 2021).

Interviewees felt that meeting these standards may help increase the prices of Vietnamese rubber products. VRG representatives explained that "when we grow our products in a sustainable manner, some buyers have agreed to buy our products at a higher price. But how high exactly, at what price, we are still negotiating." However, as a representative of PanNature explained, there is a general understanding that the price is not guaranteed: "When we work with the company there's also some discussion that the commitment on the price is not there. So, when you aim for sustainability, it must be from yourself. It's not just because of the market." [15]

Vietnamese companies interviewed for this project said that sustainable investment is a significant global trend that all companies will eventually need to pursue. A representative from Dak Lak Rubber Investment Joint Stock Company (DRI) explained that after they became involved in this project, they began to clearly see that "responsible investment or sustainable investment is becoming an obvious trend."[16] Furthermore, they explained that "most of our exports go to the US and EU and many importers in the US and EU ask us about sustainable production." They said that because of this, the company must start learning how to change their practices now.

The VGIA are derived from the same guiding documents as the CCCMC guidelines. They draw from the *UN Guiding Principles on Business and Human Rights*, especially the three basic principles of "protection," "respect" and "remedy". The main content of the VGIA focuses on a wide range of risks related to land, labour, environment, culture and Indigenous people. Across the project stages of preparation, implementation and termination, there are 12 significant themes listed in Table 2 below, along with a summary of what the guidelines recommend. Within these themes, there are a total of 33 specific recommendations, some of which include multiple specific measures for companies to follow. Ultimately, the VGIA's approach focuses on specific actions that companies should implement in their projects rather than broad, guiding principles.

Land cleared for a Vietnamese rubber plantation, southern Laos

13 Interview with VRG, 26 August 2021.
14 Interview with Oxfam in Vietnam, 1 July 2021; and PanNature, 13 July 2021.
15 Interview with PanNature, 13 July 2021.
16 Interview with Dak Lak Rubber Investment Joint Stock Company, 3 August 2021.

Table 2. Key themes and recommendations of the VGIA.

Investment stage	Theme	Summary of recommendation
Preparation	Developing investment plans	Conduct due diligence prior to investment (follow relevant laws, consult with related stakeholders, research potential impacts, etc.)
	Environmental and social impact assessment (ESIA)	Conduct a detailed and thorough ESIA that includes participatory methodologies
	Pre-feasibility or feasibility report of investment projects	Conduct thorough assessment of project feasibility, taking into account environmental and social factors
	Investment license and site approval	Review all relevant information for acquiring investment license and site approval
Implementation	Land preparation	Carefully and thoroughly map out the targeted land and determine its status using a participatory methodology and disclose the results
	Acquisition of and compensation for land and property	Consult landowners during land acquisition process and provide fair and reasonable compensation
	Clearance/reclamation	Clear lands in close cooperation with local populations and deal with disputes openly and transparently
	Land procedures	Ensure that land leases and allocation are compliant with legal processes
	Environmental procedures	Follow proper processes for approval of EIAs and notifying relevant parties
	Construction	Follow correct procedures and minimise social-environmental impacts
	Operating projects	Establish fair hiring and labour practices, create positive relations with communities, cooperate with Indigenous peoples and implement environmental management plans
Termination	Termination or transfer of projects	Follow obligations to communities and workers

The VGIA comprehensively cover a wide range of social and environmental issues, providing companies with specific recommendations and identifying risks. However, it is notable that they do not lay out a clear set of principles that companies should follow to be in line with the guidelines. With the sheer number of specific recommendations, it may be challenging for companies to understand which practices are the most important for companies to adhere to or avoid. For example, nowhere in the document does it ask companies to make a commitment to avoid some of the worst problems in the rubber supply chain, such as deforestation, land grabbing or use of child labour.

The orientation of the document asks companies to consider risks that their project might create rather than commit to avoiding them, exhibiting a soft stance toward company behaviour. For example, under the section on land preparation, the guidelines recommend that companies assess land

ownership within the project area and implement a participatory approach. However, they do not recommend that companies gain consent from local land users to acquire their land. FPIC is mentioned as a reference to be consulted but the VGIA do not state that companies should follow this principle. An interviewee from PanNature noted that this is because the companies do not fully understand the issues related to FPIC: "When I work directly with the companies, I find that it is very challenging for them to understand what is consent and why consent… they have been familiar with consultation but they do not really understand about FPIC and making consent."[17]

Like the CCCMC guidelines, the implementation of the VGIA has been pursued through partnerships between Vietnamese companies and NGOs, particularly in Vietnam and Cambodia. The Vietnamese companies interviewed expressed that their knowledge of social and environmental sustainability issues is limited and thus they rely upon NGOs to work in these areas. VRG noted that "regarding economic and technical aspects, we have a lot of experts, but in terms of social aspects, we have a limitation at the member companies. For example, the skills to work with the community […] or developing the CSR plan".[18] After the initial publication of the VGIA in 2019, workshops were held to raise awareness of the guidelines and promote their use. More recently, there have been efforts to pilot parts of the guidelines, but these activities are at an early stage and have been hampered as the COVID-19 pandemic has limited visits to field sites in Cambodia and Laos. Additionally, Oxfam and PanNature worked with VRG to produce a community engagement handbook that includes more specific instructions for developing responsible relationships with the communities their projects affect.

In contrast with Chinese companies and the CCCMC guidelines, Vietnamese companies have a greater incentive to implement the VGIA, especially as they were more directly involved in the guidelines' development. VRG representatives expressed in an interview that their subsidiary companies are required to implement the VRG's sustainable development plan, which is based upon the VGIA.[19] They explained that subsidiaries had already begun making changes to their practices in Vietnam, such as halting the burning of vegetation, replanting forest in some concession areas, restricting the use of illegal agrochemicals and reducing fertilizer use. Additionally, some other companies, like the privately held Dak Lak Rubber Company, are highly motivated to adopt the guidelines and make changes to their practices. NGOs interviewed felt that it is much easier for private rubber companies to change their policies than for state-owned enterprises (SOEs), like VRG subsidiaries, to do so, because they can make decisions independently of state bureaucratic procedures.[20] However, once SOEs make a decision, they can then impose it upon their subsidiaries quickly.

Despite movement toward implementation of the guidelines, it is not yet clear how significantly and extensively social and environmental practices have changed. This is partly because the VGIA were only recently published and because the COVID-19 pandemic has limited progress. Like with the CCCMC guidelines, they are being applied retrospectively to already established plantations and thus cannot address the most significant impacts, many of which occur during the land acquisition, clearing and planting stages. Importantly, questions remain on how the guidelines would be implemented in practice beyond holding workshops and pilot trainings. Thus far, there are no mechanisms in place to monitor and certify any changes companies make.

Rubber tree (Photo Ken Doerr, Flickr)

17 Interview with PanNature, 13 July 2021.
18 Interview with VRG, 26 August 2021.
19 Interview with VRG, 26 August 2021.
20 Interview with Oxfam in Vietnam, 1 July 2021; and PanNature, 13 July 2021.

3.3 GPSNR

The Global Platform on Sustainable Natural Rubber (GPSNR) was launched in 2018. Based in Singapore, it was initially established by a consortium of multinational tire companies that are members of the World Business Council for Sustainable Development (WBCSD) Tire Industry Project (TIP). Membership has since expanded to include other private industry actors (such as producers, processors, traders, carmakers and financial institutions), civil society organisations and smallholder farmers. The platform pursues a variety of strategies to improve sustainability in the rubber industry. It is global in scope and its members represent 50% of the natural rubber traded worldwide by volume. The GPSNR has not had as much of a presence in the Mekong Region, apart from Thailand. However, that is beginning to change as its members are starting to buy rubber from countries in the region, such as Vietnam,[21] and organisations in the Mekong Region are interested in working with GPSNR members.[22]

Initial efforts to develop an SNR initiative within the industry began with the International Rubber Study Group (IRSG), an intergovernmental organisation that includes governments of rubber producing and consuming countries and industry members. In 2015, the IRSG created the Sustainable Natural Rubber Initiative (SNRI), a set of guidelines for the sustainable production of rubber. The effectiveness of the SNRI was limited for several reasons. It was based upon a problematic assumption that rubber is inherently a sustainable crop because it is a renewable tree crop and has a high density of biomass that can sequester carbon and build biodiversity (see IRSG 2014, p. 5).[23] According to industry actors interviewed, the main constraint of the SNRI was that because it was based within an intergovernmental organisation, it largely focused on legal compliance rather than improving sustainability beyond the law.[24] Industry actors may also have sought to develop sustainability standards outside of the constraints of governmental decision-making processes. In the IRSG, private companies were largely kept in an advisory role and major tire companies, particularly Michelin, Continental and Bridgestone, began developing their own sustainability policies while coordinating to establish the GPSNR, working through the WBCSD's TIP.

The motivations driving the GPSNR are similar to those behind the CCCMC guidelines and VGIA. Reputational risk was on the minds of rubber companies in the wake of the rapid expansion of rubber plantations and the critical civil society and media reports that followed. Additionally, they are falling in line with a broader movement to improve sustainable production of other major plantation commodities like coffee and palm oil. As a representative of the GPSNR stated, "Either you have a social license to operate or you're out of business in the long term and that's the reason why you do sustainability".[25] The respondent also expressed that sustainability is an important element of improving quantity and quality in supply chains so that there is a consistent supply of rubber. Due to low prices, farmers are increasingly switching to other crops such as oil palm when possible. There are concerns that supply chain issues associated with the COVID-19 pandemic could significantly disrupt the rubber industry (Miller 2021). GPSNR members hope that improving sustainability in the sector would help to increase prices and make rubber a more attractive option for smallholders. A GPSNR representative noted "the economic part is really important for companies because they are realizing smallholders are not getting enough".[26]

The GPSNR established its Policy Framework in 2020, laying out the key principles and approach of the platform. The Policy Framework includes eight key principles that GPSNR members must commit to: legal compliance; healthy, functioning ecosystems; respecting all human rights; community livelihoods; increased production efficiency; systems and processes to drive effective implementation of policy components; supply chain assessment, traceability and management; and monitoring and reporting on progress toward compliance with policy components. Each of the principles has several policy components. Table 3 contains the principles and abridged versions of the policy components. For precise wording, nuances and clarifications, the original Policy Framework should be read closely.[27]

21 Interview with Michelin, 6 September 2021.
22 Interviews with PanNature, 13 July 2021; NGO Forum in Cambodia, 15 July 2021; and WWF in Cambodia, 19 July 2021.
23 Interview with Michelin, 6 September 2021. These assumptions are problematic because rubber is not an inherently sustainable crop just because it is a tree. Although plantations do sequester some carbon and provide room for some biodiversity, research has shown that they do not perform these functions nearly as well as forests (Ahrends et al. 2015).
24 Ibid.
25 Interview with GPSNR, 27 July 2021.
26 Ibid.
27 See the Policy Framework at https://sustainablenaturalrubber.org/policy-framework/. Last accessed 6 September 2022.

Table 3. Key elements of the GPSNR Policy Framework.

Principle	Policy components
1. Commitment to legal compliance	1.1 Complying with applicable laws at all levels
	1.2 Working against corruption
2. Commitment to healthy, functioning ecosystems	2.1 Not contributing to deforestation or forest degradation; identifying and managing conservation areas
	2.2 Supporting long-term forest conservation and restoration
	2.3 Not using open burning/fire
	2.4 Protecting wildlife
	2.5 Protecting water quantity and quality
	2.6 Protecting soil quality and preventing erosion, nutrient degradation, subsidence and contamination
	2.7 Preventing the development of or sourcing from rubber plantations on peat
3. Commitment to respecting all human rights	3.1 Respecting and protecting internationally recognized human rights
	3.2 Establishing and maintaining a company grievance mechanism
	3.3 Respecting and protecting the customary, traditional and communal land rights of Indigenous peoples and local communities (IP/LC)
	3.4.1 Securing FPIC whenever activities affect lands, territories and resources of IP/LC 3.4.2 When IP/LC rights are impacted, compensating or accommodating through appropriate, mutually agreed upon measures set out in the FPIC process 3.4.3 Providing remedy through mutually agreed upon procedures when the company previously impacted IP/LC lands, territories or resources without FPIC
	3.5 Establishing ongoing, effective, culturally appropriate channels of dialogue with IP/LC
	3.6 Upholding applicable the labour rights and labour laws of jurisdictions where operating, the UN Guiding Principles on Business and Human Rights and the intent of the International Labour Organization's eight core conventions
4. Commitment to community livelihoods	4.1 Supporting decent living conditions
	4.2 Supporting the right to food and food security
	4.3 Supporting the economic, social and cultural rights of local people, including access to education and employment

5. Commitment to increased production efficiency	5.1 Offering or supporting training for natural rubber producers to improve yield and quality
	5.2 Managing operations to minimise rate of energy usage
	5.3 Managing operations to maximise natural resource efficiency
	5.4 Minimizing and mitigating carbon emissions
6. Commitment to systems and processes to drive effective implementation of policy components	6.1 Setting public, timebound and geographic-specific targets for applying commitments
	6.2 Embedding commitments into company decision-making processes, systems and performance metrics
	6.3 Maintaining an active, regular stakeholder dialogue regarding fulfilment of the company's commitments
	6.4 Participating in/supporting multi-stakeholder planning and policy efforts to uphold GPSNR principles
7. Commitment to supply chain assessment, traceability and management	7.1 Conducting supply chain mapping and assessing suppliers for social and environmental risk
	7.2 Supporting traceability of natural rubber
	7.3 Communicating to all suppliers of natural rubber that material produced and processed in accordance with GPSNR policy components is preferred
	7.4 Regularly engaging the supply chain to support their conformance with company commitments
	7.5 In instances of supplier non-conformance, developing timebound plans to move toward conformance and/or remediation of past harms
8. Commitment to monitoring and reporting on progress towards and conformance with policy components	8.1.1 Regularly monitoring progress toward company commitments 8.1.2 Applying monitoring systems and practices to incorporate crowd-sourced information regarding non-conformance with commitments
	8.2 Reporting publicly on progress toward implementation of policy components at least annually

The GPSNR Policy Framework is an impressive document that comprehensively covers a wide range of economic, social and environmental issues. It addresses the most important social-environmental concerns related to rubber production, including deforestation, land grabbing and labour exploitation. Companies effectively implementing all the policy components would have gone a long way to address some of the most serious problems related to rubber plantations. It is worth noting, though, that the wording of some of the policy components does allow for some flexibility in their interpretation. Several policy components are written to require "supporting" different causes such as forest and ecosystem protection (2.2) or decent community living conditions (4.1). However, it remains unclear what support should look like and what would be an adequate level of support to meet this commitment.

As with the CCCMC and VGIA sustainability initiatives, the most significant challenge will be effectively implementing the GPSNR policy components in ways that improve economic, social and environmental practices. As with the other initiatives, the recent adoption of the Policy Framework means that the GPSNR still has a long way to go in developing a plan for implementation. Six GPSNR working groups are tasked with the

further development of the platform, focusing on the themes of 1) creating a policy toolbox, 2) capacity building, 3) traceability and transparency, 4) smallholder representation, 5) strategy and objectives and 6) shared responsibility.

The GPSNR focuses on two major areas of implementation. The first is developing implementation guidance for GPSNR members. The second is developing capacity-building programmes and activities that will enable members to improve sustainability in line with the eight policy commitments. The latter includes projects with smallholders and industrial plantations in Thailand, Indonesia and the Ivory Coast to increase transparency around social-environmental risks, improve agricultural practices, diversify smallholders' income sources and establish rubber cooperatives. For example, GPSNR members Halcyon Agri, WWF and other partners are implementing the Sumatran Pilot Project.[28] They work with upstream processors and farmers to identify the source of rubber, evaluate its social and environmental risks (including potential deforestation in high-value conservation areas) and design intervention programmes to mitigate identified risks.[29]

In addition to these specific initiatives, the GPSNR has been working on what it has termed the "assurance model" to implement and achieve its policy components. The GPSNR model is deliberately distinct from certification models, such as that of the RSPO, in which the commodities sold are certified to have met all the required sustainability conditions. Such approaches focus on traceability and trace the commodity back to its source through the chain of custody to guarantee that it was produced sustainably. GPSNR representatives and members expressed that this type of certification model is problematic because it only covers a small percentage of the sector.[30] According to them, many producers cannot meet the conditions for traceability and as such cannot be certified, thus a major portion of the sector would not change their unsustainable practices. It is an especially challenging prospect in the rubber industry considering that a majority of latex is produced by smallholders.

In contrast, the assurance model seeks to move the whole sector in a sustainable direction. The assurance model identifies risks across geographic regions and develops projects to address those risks. Whether they have led to improvement is later monitored and evaluated. The model intends not to immediately achieve perfect criteria of sustainability but to make continuous improvements. As a GPSNR representative explained, "we have a different approach than a chain of custody approach, but an approach whereby still you will push companies to improve on the performance and this will be based on how they behave in terms of the collaboration in GPSNR and GPSNR capacity building and all the programmes, as well as how they buy rubber and what assurance they have on the rubber that they buy."[31] The model is still under development and thus the details have yet to be worked out and clarified and it has yet to be approved by GPSNR members. There are many questions remaining about how the model will operate in practice and the extent to which it will be binding for members.

It is notable that the GPSNR has largely not focused on countries in the Mekong Region, apart from Thailand. GPSNR representatives have been meeting with key actors in Myanmar, Cambodia and Vietnam to discuss strategies for pursuing sustainable rubber. However, even though GPSNR members represent 50% of the globally traded volume of natural rubber, most of their members do not produce or buy from Cambodia, Laos, Myanmar Vietnam. As an interviewee from Michelin explained, one reason is that these countries do not produce enough rubber at a high enough quality.[32] Another issue, especially when seeking to address sustainability, is that there is a high risk in sourcing rubber from these countries as it could come from plantations with histories of social and environmental abuses. Additionally, the GPSNR has only a few member companies from mainland China and none from Vietnam, which are the main investors in rubber in the riskier Mekong countries of Cambodia, Laos, and Myanmar. Interviewees did not specify why this was the case but it may have to do with the higher standards imposed by the GPSNR. Companies from mainland China and Vietnam may also face some pressure to follow the guidelines developed within their own countries rather than participate in a competing global platform.

28 https://heveaconnect.com/projects/sumatran-rubber-pilot/. Last accessed 6 September 2022.
29 For more information: https://sustainablenaturalrubber.org/news-publications/continuing-the-conversation-with-gpsnr-topic-talks-the-sumatran-rubber-pilot-public/
30 Interviews with GPSNR, 27 July 2021, and Michelin, 6 September 2021.
31 Interview with GPSNR, 21 July 2021.
32 Interview with Michelin, 6 September 2021.

Smallholder rubber plantation, Luang Namtha province, Laos.

4. Comparative analysis of SNR initiatives

This section comparatively analyses the strengths and weaknesses of the three SNR initiatives reviewed above. It is important to recognise the significant advances that these initiatives represent. Various stakeholders have come together to develop approaches for improving the economic, social and environmental practices of an industry that has historically been unsustainable (Woods 2012; Fox and Castella 2013; Ahrends et al. 2015; Kenney-Lazar et al. 2018; Dwyer and Vongvisouk 2019). In the process, they have developed new standards for sustainability that can set important goals for rubber production worldwide. At the same time, there are serious limits to the initiatives: they are voluntary, they lack harmonisation, they could be used for greenwashing and their implementation has been limited. An honest assessment of the initiatives is important for to determine how to engage with them, recommend improvements and ultimately seek to improve rubber sustainability.

4.1 Strengths

Raising awareness and consciousness about SNR. Pursuing SNR raises awareness and consciousness among those involved regarding what it would mean for rubber to be sustainably produced. Furthermore, the process highlights how rubber production in many places is still far from reaching that goal. Prior to the exposure of rubber's unsustainability and the pursuit of SNR, many actors downstream in the value chain and far removed from sites of deforestation and land conflicts were not aware of the problems and what changes needed to be made. As discussed above, the IRSG's SNRI assumed that rubber was inherently sustainable because it is a tree crop and a renewable resource. Many governments and international agencies continue to classify rubber plantations as forest cover.[33] The process of pursuing sustainability initiatives has required surveys of social and environmental issues to better understand the problems of the sector. For example, surveys of Chinese and Vietnamese rubber plantations in the Mekong Region were conducted in advance of developing the CCCMC guidelines and VGIA. Approaching SNR has also demanded that a diverse group of stakeholders work together to discuss what sustainable rubber means, what it might look like and what indicators can be used to assess its implementation. As a result, a broader group of people are becoming aware of important facets of SNR: its importance, what it is and is not, and what it would take to pursue it.

Bringing together a diverse group of actors to pursue a common goal. One of the weaknesses of the concept of "sustainability" is its vagueness. It means different things to different people and thus can be manipulated by powerful institutions such as regional and global plantation companies as well as governments, bilateral donors and INGOs. Its strength, though, is that it brings together a diverse group of actors under one umbrella to work out how sustainability should be defined and pursued. These actors do not necessarily have the same interests and perspectives and their interactions can be contested and conflictive. They may not ultimately agree on the same definition but through a shared commitment to the idea of sustainability, they can work through their differences to pursue a common project. As a representative of Michelin mentioned, "the way it's working now is just amazing. There is very little friction between the NGOs, the civil society and the industry for natural rubber because we are all working together".

Economic, social and environmental problems in the rubber industry have been a major source of contention amongst farmers, communities, civil society groups, governments and rubber producers and processors. However, they all generally agree that rubber production needs to be more sustainable and that they can pursue this goal collectively. The idea of SNR has brought together critical activists and NGOs, development donors, governments across the Mekong Region and beyond, tire companies and smallholder farmers to make improvements. By debating and discussing what sustainable rubber means and how to pursue it, they have opened spaces of dialogue, such as GPSNR working groups or workshops to discuss implementation of the CCCMC guidelines and VGIA; this is a significant achievement in and of itself. For example, in the development of the CCCMC guidelines, critical NGOs like Global Witness, bilateral development partners, Chinese government institutions and Chinese companies were able to come to a consensus on key guiding principles.

33 This is a controversial claim as rubber plantations do not afford the same degree of biodiversity, ecosystem services and carbon sequestration as primary and old growth secondary forests (Ahrends et al. 2015).

Development of clearer standards of SNR. Prior to the advent of the three SNR initiatives reviewed above, there were no clear standards for SNR. The initiatives all had to start from scratch, although they could draw ideas from sustainability standards for other commodities such as palm oil. Thus, the development of SNR standards is an important achievement. When companies, civil society groups, farmers or governments want to refer to definitions, indicators and approaches for SNR, these guidelines are now available. Although quality and clarity differs across the initiatives, collectively they provide important guidance for moving forward.

Pursuit of international best practices for sustainability. SNR initiatives have generally been effective in incorporating international best practices in sustainability into their principles and policy commitments. All three initiatives have drawn from international standards on sustainability, business and human rights and social responsibility from the UN and ISO. They all address critically important economic, social and environmental issues, although they are not significantly different from the principles and standards for other commodities. In general, the GPSNR framework is strongest and clearest in the international best practices that it espouses. In particular, it clearly lays out a framework for preventing land grabbing and deforestation, which the other two initiatives do not address as explicitly.

Ambitious attempts to change practices in the rubber industry. Collectively, the SNR initiatives reviewed should be commended for seeking to make a significant change to economic, social and environmental practices. Although they have yet to be realised, if the guidelines were implemented they would go a long way toward reducing the worst practices of the industry and making positive transformations to benefit rubber farmers, rural communities near rubber plantations and the environment. The GPSNR guidelines are the most ambitious in this regard in their comprehensive coverage of economic, social and environmental issues.

4.2 Weaknesses

The initiatives are largely voluntary and thus lack systems of accountability. This is an obvious limit for any non-binding guidelines or initiatives. Regardless of how well-constructed a set of guidelines are, when they remain voluntary they have little capacity to ensure that they are adopted and followed. This is especially the case when they are privately developed and not enforced by governments, as with the three SNR initiatives evaluated here. At its worst, this can mean that guidelines are created and actors agree that they should be the industry standard, but companies or smallholders do not make any substantial changes to their social and environmental practices.

However, just because guidelines are voluntary does not mean that producers and buyers can ignore them. If companies agree to sign up for sustainability standards, then there is a degree of peer pressure to implement them. If they are found to have violated the standards, then the impact upon their reputation could be even worse considering the commitment they had made. In some cases, companies are required to follow a set of standards, as with VRG's imposition of its standards upon its subsidiaries. In other cases, companies could lose access to international financing. Companies that are members of the GPSNR could suffer from low scores in the assurance model or eventually lose their membership if they perform poorly. Additionally, certification schemes could require companies to follow standards in order for their products to be certified as sustainable, although this is not currently being pursued for SNR. In general though, the voluntary nature of all three sets of guidelines means that rubber producers and purchasers have significant leeway in implementation. Oftentimes, it is not clear how they might be held accountable if they do not meet their stated goals. Additionally, non-binding guidelines may become the norm instead of binding legal instruments and laws over the long term.

Lack of harmonisation in guidelines, platforms and implementation. Across the three initiatives reviewed, there are important differences in terms of guidelines, standards, platforms and approaches to implementation. For example, the CCCMC guidelines and VGIA take a more tentative approach to controversial issues such as land grabbing and deforestation than the GPSNR policy commitments. These differences can be positive when they facilitate an exchange of ideas among various actors in different countries. Collectively, this endeavour may lead all actors in the same direction — towards improved sustainability of the rubber industry. However, this diversity of approaches can also be a weakness as it constrains the development of a harmonised set of standards and strategies for implementation. There is a wide range of implementation activities on the ground across Cambodia, Laos, Myanmar, Thailand and Vietnam, and it can be unclear how they relate to the different

standards. It can be equally confusing for different actors to understand what guidelines they should follow or what platform they should join. Thus, it is worth considering how sustainability could be advanced if these efforts were integrated.

Past injustices and unsustainable practices are not sufficiently addressed. SNR initiatives are being developed during a lull in rubber expansion due to low prices. Some of the worst social and environmental practices associated with plantations already took place when the plantation frontier was expanding before prices dropped in 2011. However, the initiatives are largely focused on current and future practices, thus limiting the effectiveness of their implementation. For example, the GPSNR policy component on deforestation and forest degradation only includes activities since April 1, 2019. The worst impacts of rubber plantation expansion are largely ignored because they occurred in the past. The CCCMC and VGIA initiatives have little to say about past injustices, although the latter does recommend the establishment of a grievance mechanism. The GPSNR Policy Framework includes language recommending remediation for past harms, but it remains unclear how this applies to members' practices prior to agreeing to these standards.

Limits and challenges to implementation of the guidelines. The most significant weakness of SNR initiatives concerns their implementation. This is not surprising considering that the initiatives have been developed recently; the earliest of the three was published only four years ago. It has taken a great deal of effort to devise the guidelines and platforms and they are a critical first step. However, it is much easier to formulate sustainability guidelines than to implement them and there is a large gulf between SNR and the current reality. Since the guidelines' formulation, there have been few substantive examples of companies or smallholders changing their practices. Although a range of public and civil society organisations are involved in formulating guidelines, ultimately it is up to rubber planters and producers, which includes both companies and smallholders, to implement their content by changing production practices. Additionally, many plantations have already been established and their most significant social and environmental impacts have already taken place. Thus, the guidelines would be most meaningful for new plantations and there is currently little expansion taking place.

There is uncertainty regarding what pathway towards implementation is most effective, including how to motivate producers to change their practices, evaluate how effectively they have done so and ultimately hold them accountable to their commitments. Common activities include developing handbooks, holding training workshops or carrying out pilot projects and capacity-building programs. While these are all important for increasing understanding of SNR and how to achieve sustainability or implement the guidelines, it is unknown how significant an impact they will have on actual practices. Additionally, they rely upon unsustainable levels of donor support. There are concerns among those involved about the sustainability of financing for implementation of SNR initiatives in the long term. Thus far, SNR guidelines and initiatives have been financed by a combination of company budgets and funding from bilateral development donors and NGOs. These funds may not always be available. For companies, they likely want to see SNR as not only a sunk cost but also an opportunity for economic gain, such as by improving the quality and quantity of rubber production. The GPSNR recognises that they have yet to work out a long-term financing model for their work. Across the initiatives, interviewees expressed uncertainty regarding whether SNR can fetch a premium price like sustainable commodities in other sectors.

Risk of greenwashing. As with any sustainability or "greening" initiative, there is always the risk that SNR is manipulated to greenwash malpractices. If that were the case, then a significant amount of energy, time and resources would go into marketing rubber as "green" or "sustainable" rather than changing actual social and environmental practices. As a result, companies, smallholders and the sector at large could be perceived as more sustainable even if changes are superficial, thus creating a false image of legitimacy. The SNR initiatives reviewed in this study run the risk of appearing to be a form of greenwashing because they have thus far mostly created guidelines and policies rather than changing practices on the ground. As discussed above, this would be an unfair characterisation as they are all very recent and have had little time to develop implementation plans. However, this makes implementation urgent in order to demonstrate within several years' time that they are generating concrete improvements and that the sector is moving in the right direction. It is critically important to set up systems of accountability to ensure that the initiatives achieve their intended goals and that the public is aware if they do not. It is important to consider that real and visible impacts require long-term commitments and resources.

Traders weigh rubber cup lumps before purchasing at a roadside, northern Laos

5. Recommendations

Based upon these findings, this study offers recommendations for strengthening the initiatives and addressing their weaknesses so that they can better improve the sustainability of rubber. These recommendations are intended not to be exhaustive but rather as a starting point for conversations about advancing the initiatives. The recommendations are divided into two sections. The first concerns recommendations for the initiatives while the second concerns recommendations specifically for civil society actors as they engage with this type of initiative.

5.1 Recommendations for initiatives

Focus on clear and principled guidelines that follow international best practices. All of the initiatives should strive to continuously clarify and strengthen the principles of their guidelines and policies to follow international best practices. The CCCMC guidelines and VGIA especially should include stronger, principled wording on some key issues identified above. This should include principles that clearly require companies implementing them to avoid or prevent practices of deforestation and coercive acquisition of land rights. These requirements make the initiatives' goals clear to all involved. Although the guidelines have already been published, their current versions do not need to be the final versions and they should be revisited regularly and updated to strengthen their language and requirements.

Include regions and forms of rubber production with higher risks. This recommendation largely applies to the GPSNR platform, in which its member companies are focused on meeting sustainability goals for low-risk regions and low-risk forms of production (i.e. smallholders). This is in part due to the composition of the member network and economic logics. However, this avoids the most challenging sustainability issues in the sector. For rubber, the areas of highest risk include new regions of production, especially in Cambodia, Laos and Vietnam, and large-scale estates established through land acquisitions and expansion into remote uplands and forest frontiers. It is important that initiatives like the GPSNR and their member companies include these regions in their projects despite the challenges they present. An important starting point is closer and sustained engagement with civil society organisations working on rubber sustainability in such places.

Collaborate and harmonise across initiatives. Although the development of diverse initiatives has been an innovative and fruitful process, this is an important moment for collaboration and harmonisation or even possibly integration across them. There should be mechanisms for exchange to help standardise approaches to sustainability that all actors can easily follow. It may be worth exploring the potential for developing a regional platform or network on SNR for the Mekong Region for purposes of integration. This need not be a new initiative, but rather a regionally specific extension of existing initiatives in collaboration with one another.

Include a greater diversity of actors in the initiatives. The three initiatives reviewed have been developed as projects that involve multiple types of actors, including civil society and even smallholder farmers, in the case of the GPSNR. However, they should be even more inclusive to incorporate a wide range of actors. The CCCMC and VGIA projects should do more to incorporate smallholder farmers. All three initiatives should include people who have been displaced or dispossessed by plantation development and also villagers in the vicinity of plantations, as they can be affected by sustainability issues related to plantations even if they themselves do not farm rubber. Additionally, the initiatives should include representation of workers on plantations and in processing facilities.

Engage more directly with governments. The SNR initiatives are mostly private, rather than governmental affairs. The CCCMC was previously connected to the Chinese government before becoming an autonomous organisation and VRG, a key member of the VGIA, is a state-owned enterprise, but both initiatives are established for companies. The initiatives do not involve governments in part to develop guidelines more quickly by avoiding slow bureaucratic processes. Representatives of the initiatives also expressed during interviews that governmental actors are less motivated to make significant advances in addressing sustainable rubber. Private companies may also seek to avoid facing legal requirements of sustainability, where and if they exist, instead preferring the voluntary nature of private initiatives. However, governments can play important roles in advancing sustainability in the Mekong Region. For example, relevant components of SNR guidelines could be applied to government policy to help ensure that rubber producers follow them. Governments can also

Smallholder cup lump rubber waiting to be collected on a roadside, northern Laos

update policies and laws on land, labour, agriculture and forestry to reflect the aims of SNR initiatives, which has potential to improve practices in other sectors as well.

Address past unsustainable practices and plan for future expansion. Though some of the most destructive social and environmental impacts of rubber plantations in the Mekong Region occurred during the period of expansion, the SNR initiatives focus on the present, in which there is less pressure on land and the environment. However, in order to ensure that the initiatives are viewed as legitimate and not treated as greenwashing exercises, it is crucially important that they address unsustainable practices that occurred during previous rounds of expansion, land acquisition and deforestation. Robust conflict resolution and remediation mechanisms are essential. There are various solutions that would address previous injustices, including land restitution, support for local livelihoods and forest restoration. Additionally, due to the inherent volatility of the global rubber market as well as predicted supply chain issues, it is likely that prices will increase again in the future. Plantations will likely expand into new frontiers in response and SNR initiatives need to plan for these future land pressures. It is also worthwhile to optimise locations of future planting to minimise pressure on forests and farmer land rights.

Develop clear, viable paths of implementation. All the initiatives need to focus on setting out a clearer path for implementation. Currently, they do not have comprehensive and strategic plans for implementation and rely on ad hoc strategies. This is especially the case for the CCCMC and VGIA which are highly reliant upon NGOs for implementation and risk losing private sector buy-in. Comparatively, the GPSNR has a clearer strategy for implementation although the details of how it will operate are still being worked out. As significant advances towards sustainability will take a long time, it is essential to set out a clear and viable path towards achieving them. These pathways need to be developed through engagements among the multiple types of actors involved so that they reflect consensus and buy-in. They also need to recognise that "one size does not fit all" and account for local adjustments to avoid being exclusive and inaccessible.

Create robust mechanisms of accountability and transparency. As SNR initiatives are voluntary, it is important to have robust systems for holding them accountable. The three initiatives reviewed do not pursue a chain of custody approach that would certify sustainable rubber by tracing it along the supply chain. However, other forms of certification and evaluation may be appropriate for ensuring accountability and transparency regarding changes in practices. For example, the initiative could specify a way to evaluate and verify changes in company practices, which is part of the GPSNR strategy. It is important to develop approaches for transparently determining that improvements toward sustainability have been made. This will include effective and organised monitoring and evaluation systems by third-party actors. It is important that external actors involved can access relevant information to assess changes and the degree to which they achieve sustainability goals.

5.2 Recommendations for civil society

Carefully and strategically engage in SNR initiatives. Civil society plays a critically important role in any multi-actor sustainability initiative. It is important that civil society actors consider their role carefully and strategically to best advance the interests of sustainability. For example, civil society should be careful in how they offer legitimacy to rubber producers. This should be done only when companies have earned it by making changes and it should be withdrawn when companies fail to change or do not fulfil their promises. This is essential for civil society groups to avoid supporting greenwashing.

Avoid doing rubber companies' sustainability work for them. In some instances, such as in the implementation of the CCCMC and VGIA initiatives, companies rely on civil society to help them implement the guidelines and principles. Civil society organisations may conduct assessments, training or capacity building or more generally help build sustainability systems. The same can happen with smallholders who might become reliant upon donor support to comply with standards. This may be because the work of achieving sustainability certification is outside of their area of expertise or because they rely upon the financing that civil society groups access to fund this work. This can be counterproductive as it leads companies to rely upon civil society in order to practice sustainability and this is not viable in the long term. Additionally, it could prevent companies from making substantive changes in their practices, corporate policies and culture. This was the case for a Chinese company interviewed in northern Laos implementing the CCCMC guidelines that was completely reliant upon an NGO partner and as a result had little understanding of or commitment to sustainability principles. Additionally, reliance upon NGOs may impede companies' development of new streams of funding to pay for sustainability projects. When the cycle of donor-funded initiatives inevitably ends, there is a risk that companies' sustainability projects may wind down.

Hold companies accountable to sustainability commitments. Compared to other crops, rubber consumers do not play a major role in demanding sustainable production. This could change if awareness about sustainability issues for rubber products increases, which may be easiest to achieve for everyday household and branded items such as the rubber used in shoes. In the meantime, civil society plays one of the most important roles in pressuring companies to pursue sustainability and holding them accountable to the commitments they make. Civil society groups can do this by assessing company activities closely to determine how well SNR principles are being implemented. Additionally, some civil society groups such as Oxfam, WWF, Mighty Earth and PanNature are cooperating closely with companies and SNR initiatives rather than critiquing their activities. However, civil society actors can change their roles to withdraw their participation or provide public critique when companies do not follow their sustainability plans or engage in further unsustainable practices. Alternatively, civil society groups can play different roles, with some cooperating more closely and others investigating and critiquing when appropriate.

Thai Hua rubber processing factory in Laos (Photo: Antoine Deligne, MRLG)

Rubber plantations at the edge of a village and paddy fields in northern Laos.

Conclusions

The historical expansion of rubber across Southeast Asia has radically transformed the region's landscapes since the late 19th century. The latest rubber crop boom since the 1990s has seen plantations expand to non-traditional growing areas of Laos, Cambodia, Thailand and Myanmar, induced by high prices and the economic liberalisation of formerly closed countries. Rubber farming has offered prospects of wealth generation and livelihood improvement but it has also produced significant social and environmental abuses. Most destructively, large-scale rubber plantations have caused the clearance of primary and secondary forests, the loss of biodiversity and the coercive and unjust acquisition of land rights. While smallholding rubber production can afford greater benefits to rural people, farmers have been affected by a volatile rubber market, especially since the precipitous drop in prices in 2011.

Research, reporting and campaigns by civil society groups and scholars have highlighted the social and environmental problems of rubber expansion and the need for change in the industry. This follows similar actions around other commodities such as cocoa, coffee, palm oil and soybeans. Rubber industry members have been motivated by risks to their reputations and investments, demands for sustainability certification from clients, potential increases in prices and sales and general trends towards sustainability in agribusinesses. A range of global and regional companies, governmental institutions and civil society groups have come together to develop different initiatives to address these problems in the sector. These initiatives come at a convenient time for the rubber industry, when prices are low and plantations are not expanding, and thus the most significant social and environmental risks are on pause. At the most fundamental level, these initiatives have sought to define what sustainable rubber means and what key principles, guidelines and standards are essential for its pursuit. As covered in detail in this report, the three main active initiatives are being established by Chinese, Vietnamese and global actors (the CCCMC guidelines, VGIA and GPSNR, respectively).

SNR initiatives have significant potential to drive change and the goal of sustainability in the rubber sector is worth pursuing. Rubber may never be a truly sustainable crop, especially if it is planted as a monoculture and there is a future increase in demand and prices that leads to further expansion into vulnerable areas. However, sustainability is an important aspirational ideal and goal for all actors related to the sector, as its pursuit alone can generate positive social and environmental change. Discussions around sustainable rubber have been an important first step for identifying the problems in the industry and potential pathways for addressing them. They have helped to outline the key elements of sustainable rubber and its defining principles. The development of guidelines and principles has brought together a diverse group of actors with different perspectives and interests to pursue a common goal. SNR initiatives have signalled to companies in the sector that they need to take sustainability seriously. Furthermore, these projects have initiated debate concerning the best ways to implement the end goal of rubber sustainability.

Despite the potential of SNR initiatives, they also face some serious limitations that raise important questions about their future development and implementation. First, they differ in terms of the strength and clarity of their guiding principles. Among the three initiatives reviewed, the GPSNR has developed the most rigorous and clearest sustainability principles. While the CCCMC guidelines and VGIA also contain strong social and environmental principles, they are ambiguous on their commitment to some of the most important issues, such as deforestation and land expropriation.

Second, the initiatives differ in terms of their mechanisms of accountability and the commitments for companies involved. Accountability mechanisms are not fully developed for any of the three initiatives, as they are all relatively recent. The GPSNR has gone the furthest by requiring that members who join its platform sign on to its policy commitments, including to develop their own sustainability policies. In the future, if companies do not make significant progress towards those commitments then they may lose their membership, although the mechanisms for this have yet to be clarified. However, the GPSNR has not been able to attract any Vietnamese companies or more than a few mainland Chinese companies. Additionally, their members do not have much exposure to rubber in the Mekong Region, where the most significant sustainability risks lie. The CCCMC guidelines and VGIA do not have a mechanism to motivate companies to follow them, apart from voluntary adoption and light government pressures on Chinese and Vietnamese companies. However, the companies linked to their initiatives are more embedded in the Mekong Region.

Third, the most significant limitation for all three initiatives is their lack of implementation. They have thus far produced few substantive changes to social and environmental practices of rubber plantations, most of which have already been established and passed the riskiest stages of development. This is partly because the initiatives were developed recently. But is also related to uncertainties concerning the appropriate model for implementing sustainability in the rubber industry, as consumer-oriented traceability certification is less applicable for rubber than for other commodities. The CCCMC and VGIA have largely been left to interested companies and civil society groups to implement through the development of detailed, locally specific handbooks and capacity building workshops and programmes. It remains unclear what will motivate these actors to continue this work in the future. The GPSNR is in the process of developing a more sophisticated implementation approach, which includes geographic risk analyses, capacity-building programmes to address such risks and evaluations of company performance in making improvements. However, the details of this model are still being developed and it has yet to be tested.

Ultimately, whether the three SNR initiatives reviewed will make significant advances in improving the sustainability of rubber production will depend on whether they are able to compel rubber buyers, producers, processors and traders to change their practices. Such changes will need to be economically sustainable in the long term both for investors and smallholder farmers. Questions remain about the continued sources of funding for these sustainability projects. Although consumers are currently not aware of sustainability issues related to rubber, this may need to change if these initiatives are to succeed. Additionally, if rubber prices increase in the future and there is greater pressure to expand plantations, sustainability efforts will be tested in ways that they have thus far been able to avoid.

Quasa Geruco training camp for village rubber tappers, Savannakhet.

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Southeast Asia is the world's largest source of naturally produced latex, and industrial rubber plantations have rapidly expanded in the Mekong countries in recent decades. The huge land footprint of rubber in the region has come with significant environmental and social costs, which have been heavily criticized, with damaging reputational consequences for the industry. Several attempts to address these issues have recently emerged in the form of voluntary guidelines on sustainable natural rubber. These varying sets of private standards, notably developed by industry representative organisations in China and Vietnam, aim to improve the social and environmental performance of outward investments by the two countries, particularly in Laos and Cambodia. More recently, they have been joined by the establishment of the Global Platform on Sustainable Natural Rubber, which has developed its own sustainability principles. This study presents the first detailed comparison of the frameworks on sustainable natural rubber, providing timely critical reflection on the emergence of the different sets of principles. It does so at the outset of their application, meaning that a full assessment of their real impacts on the ground is not yet possible. However, the study provides a grounded, clear-eyed perspective on their key areas of potential and limitations, based on interviews with industry, government and civil society actors involved in their design and initial use. The study then offers recommendations on how the guidelines could be refined and improved in practice.

The Mekong Region Land Governance Project (MRLG) aims to improve the land tenure security of smallholder farmers in the Mekong Region and has been operating in Cambodia, Laos, Myanmar and Vietnam since April 2014.

MRLG is a project of the Government of Switzerland, through the Swiss Agency for Development and Cooperation (SDC), with co-financing from the Government of Germany and the Government of Luxembourg.

For more information on MRLG, please visit:
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