

**International forest governance regimes:  
Reconciling concerns on timber legality and forest-based livelihoods**

K.F. Wiersum<sup>1</sup>, G. Lescuyer<sup>2</sup>, S. Nketiah<sup>3</sup> and M. Wit<sup>4</sup>

<sup>1</sup> Forest and Nature Conservation policy group, Wageningen University, P.O. Box 47,  
6700 AA Wageningen, The Netherlands

<sup>2</sup> Centre de coopération Internationale en Recherche Agronomique pour le  
Développement (CIRAD), Yaounde, Cameroon and Center for International Forestry  
Research (CIFOR), Yaounde, Cameroon

<sup>3</sup> Tropenbos International, Kumasi, Ghana

<sup>4</sup> Tropenbos International, Wageningen, the Netherlands

**DRAFT (Please do not quote without authors' permission)**

This study was partly funded by the European Commission (project 'PRO-Formal: Policy and regulatory options to recognise and better integrate the domestic timber sector in tropical countries in the formal economy').

## **Evolution in forest regimes**

Traditionally, national governments have had the task of formulating the norms and rules (policies) for managing forests as well as implementing the related procedures and programmes. The policies focused on governing the forestry sector, which was characterized by a closed corporatist structure consisting of a tightly defined group of professionals from the government and the timber industry (Westoby, 1989). But this conventional focus on national forest regimes based on governmental rules and procedures have greatly changed in the last thirty years. Prompted by global concerns about the high rates of deforestation and lack of sustainable forest management in tropical countries since the 1990s much attention has been given to the development of a global forest regime. Such a regime is characterized by a set of convergent principles, norms, rules, procedures and programmes for governing the interaction between people and forest resources (Rayner *et al.*, 2010). The development of such a global forest regime should be accomplished through an inclusive approach towards good forest governance (Rayner *et al.*, 2010; Arts and Visseren-Hamakers, 2012). This governance approach is based on the consideration that forest conservation and sustainable management involves the reconciliation of different ecologically, economically and socially oriented forest values held by various stakeholder groups. This requires multi-stakeholder processes for decision-making on and implementation of forest use and management, with specific attention to the equitable access of different stakeholders to these processes (Lemos and Agrawal, 2006; Rayner *et al.*, 2010).

### *Forest governance between globalization and localization*

The different values of forests are not only expressed by various stakeholders, but are also manifested at different geographical levels. Hence, good forest governance involves not only a multi-stakeholder process but also a multi-scalar process. The emerging global forest regime has to deal with the two contrasting developments of globalization and localization (Wiersum, 2000). The trend towards globalization of forest regimes was clearly expressed during the UNCED conference of 1992. This conference emphasized the need to prevent further deforestation and loss of biodiversity by up-scaling of the national forest policies and developing a global forest regime. It adopted a Non-legally Binding Authoritative Statement on Principles for a Global Consensus on the Management of All Types of Forests. Since this conference, much attention has been given to further develop these forest principles in a formal international treaty (Humphreys, 1999), but without much success (Humphreys, 2006).

Simultaneous with this trend in globalization in forest governance, there was also a trend towards localization of forest governance. This resulted from the global recognition of the need to develop new decentralized forms of forest management and to stimulate community involvement in forest conservation and management (Ostrom 1990; Arnold, 2001). The basic principle underlying this development was that not only governments and professional forestry organizations but also local communities should be involved in setting norms and rules for forest use and management and in implementing those. This concern was earlier expressed in the Brundtland Report of the World Commission on Environment and Development: “*The pursuit of sustainable development requires a political system that secures effective participation in decision-making... This is best*

*secured by decentralising the management of resources upon which local communities depend, and giving these communities an effective say over the use of these resources. It will also require promoting citizen's initiatives, empowering peoples' organisations, and strengthening local democracy"* (WCED, 1987, chapter 2). These concerns were based on several normative considerations (Wiersum, 2000):

- The notion that forest values are expressed at different levels of society. They are not only represented by global environmental concerns (such as biodiversity conservation and climate change mitigation), national economic and environmental concerns, but also by local livelihood concerns.
- The principle of justice in profiting from forest resources and services, which is reflected in norms such as participation, empowerment and equity.
- The notion that a participatory approach allows for transparency and accountability in implementing forestry rules and regulations.
- The notion that people who are directly dependent on forest resources are best motivated to manage them sustainably and that participatory approaches contribute to effective forest management.

These notions resulted in the recognition that there is a need to match the commercially oriented forestry sector with a socially oriented forestry systems aimed at rural development and provision of basic needs. It stimulated the development of location-specific forms of participatory forest management in the form of social and community forestry (Arnold, 2001; Charnley and Poe, 2007). These forestry systems are distinct from conventional production forestry by focusing primarily on the forest-related needs of rural communities in the form of forest resources used for daily and cultural purposes as well as income generation (Arnold, 2001; Scherr *et al.*, 2003). This approach was strongly stimulated by the formulation of the UN Millennium Development Goals (MDGs) in 2000. The linking of MDG 1 on reducing extreme poverty and hunger by one half with MDG 7 on ensuring environmental sustainability by 2015, resulted in focused attention on policy options for combining forest conservation and poverty alleviation of forest dependent people (Wunder, 2001; Sunderlin *et al.*, 2005).

These new initiatives on decentralising forest management and governance involved several processes. At the one hand it consisted of a process of bureaucratic decentralisation of management authority to lower levels of the governmental bureaucracy and devolution of management authority to local communities. It also involved a (partial) privatization of forestry development activities to civil society organisations and commercial firms (Lemos and Agrawal, 2006). This last process resulted in a variety of initiatives by non-governmental organisations to stimulate sustainable forest management (Humphreys, 2004). This included the development of a variety of new partnerships between local communities and commercial enterprises and/or civil society organisations for managing forests and selling forest products and services (Ros-Tonen *et al.*, 2008). Despite all these innovations if forest governance in many places the traditional forest sector regime based on forest exploitation by commercial timber enterprises in government controlled forests still prevails.

*Emergence of a fragmented forest regime complex*

The simultaneous processes of globalization and localization resulted in a growing pluriformity in forestry regimes characterized by a variety of multi-actor partnerships (Lemos and Agrawal, 2006; Visseren-Hamakers and Glasbergen, 2007). This growing pluriformity is reflected in a growing number of international programmes for stimulating specific forms of forestry. These different programmes often reflect the different norms and principles of specific forest regimes. Consequently, it is now considered that rather than a global forest regime, a fragmented forest regime complex has been developed, characterized by a hybrid of principles for regulating and controlling forest conservation and use (Humphreys, 2006; Rayner *et al.*, 2010). The emergence of this regime complex brings with it new questions of whether the different regimes act in isolation, or whether there are gradually emerging new assemblages at the interface of the different regimes. Due to the multi-scalar nature of forest governance such interactions may not only take place at global level, but also at the national level (Smouts, 2008; Bernstein and Cashore, 2010). The national forest policies may serve as an interface between global principles and their location-specific implementation.

### **The role of timber legality verification as a tool for global forest governance**

In the early 21<sup>st</sup> century a new concern emerged in global forest governance regarding the need to ensure timber legality. In the first place, within the context of global environmental concerns it became acknowledged that illegal logging and related trade is a daily practice in many timber-producing countries and contributes towards forest degradation (Brack, 2003). In the second place, within the context of international policies for structural adjustment of the finances of developing countries several timber exporting countries were encouraged to increase revenue earning, e.g. by better controlling the payments of timber exploitation and export fees. The interaction between these environment and development concerns resulted in international programmes to stimulate better timber legality control (FAO, 2005; Tacconi, 2007; Brown *et al.*, 2009). An essential feature of the new timber legality programmes is the development of a clear and consistent set of legality standards in the timber producing countries. Under the global principles of state sovereignty this is considered a basic task of national governments; consequently, the principles of governmental norm setting in forest exploitation became re-emphasized.

The process of focusing on timber legality as an essential national component of the global forest regime complex, poses major challenges. It raises the question of whether this focus on a specific policy tool represents a simplification or even a 'race to the bottom' in the global efforts to stimulate good forest governance (Cashore and Stone, 2012; Kishor and Lescuyer, 2012). It also raises the question of how timber legality is related to other forest governance principles, e.g. in respect of localization and livelihood concerns. This question is of special relevance, as in discussions to promote the verification of timber legality, the issues of small-scale informal logging practices have received little attention, even though in the late 1980s the specific characteristics of small-scale, artisanal timber harvesting and processing systems were noted (Forestry Department, 1987; De la Cruz, 1989). In addition, also the ambiguity between notions on timber legality and notions on forests contributing to poverty alleviation was identified

(Kaimowitz, 2003). However, most discussions on stimulating timber legality are still primarily focused on the industrial forestry sector, and realisation that many people are involved in artisanal systems for producing timber to local markets came only recently (Wit *et al.*, 2010). The artisanal timber sector mostly operates under informal, and sometimes even illegal, arrangements, because licensing procedures for small-scale producers are absent or difficult to comply with. Present programmes to promote legality in the formal forestry sector may therefore result in even more pronounced legal duality between the formal timber sector and the artisanal timber sector. Although timber legality programmes may positively impact on local livelihoods, it may also have major negative effects (Table 1). Failure to give attention to the characteristics of small-scale artisanal timber exploitation systems in timber legality programmes may increase poverty among the local people who are involved in informal, but *de jure* illegal logging practices as part of their daily livelihood strategies (Owusu *et al.*, 2010; Ramcilovic-Suominen and Hansen, 2012). The question of how to balance concerns on timber legality and forest-based livelihoods is therefore receiving recent attention in the international forest policy discussions.

**Table 1**

Potential impact of timber legality programmes on local livelihoods (after Owusu *et al.*, 2010)

Potential positive effects	Potential negative effects
-Improvement in forest conditions increasing natural livelihood assets	-Less employment in (and income from) illegal logging, which also provides wood for many informal sector actors
-Legalization of small-scale forest activities provides opportunities for secured livelihood activities	-Enforcement of ‘anti-poor’ aspects of forest laws: <ul style="list-style-type: none"> <li>• Legal denial of customary forest use rights</li> <li>• Enforced ban on illegal small-scale artisanal timber production practices</li> <li>• Focus on technical issues of timber production and tracking systems without consideration of benefit sharing mechanisms</li> </ul>
-Increased attention for forest-related rights of local people and better enforcement of these rights	-Empowerment of a government bureaucracy that condoned illegal forest activities over the past decades
-Better control over equitable distribution of timber benefits among different local stakeholders	might result in a lack of administrative transparency and justice
-Increased attention for informal and formal means to solve forest conflicts	
-Improved multi-stakeholder dialogue for good governance	

### **The FLEGT Action Plan as an example of an international programme stimulating timber legality**

One of the main international programmes to stimulate timber legality is the EU FLEGT (Forest Law Enforcement, Governance, and Trade) Action Plan (Brack, 2005). The programme stimulates the formulation of a Voluntary Partnership Agreement (VPA) between the EU and selected tropical countries that directly or indirectly provide timber to the European market. This VPA identifies the national legal framework and the

compliance monitoring system that ensure that all timber exports from the country to the EU have been legally acquired, harvested, transported, and exported. As illustrated by its name, the FLEGT programme explicitly aims at combining legality principles with governance principles (Van Bodegom *et al.*, 2008). In order to promote good forest governance, the programme encourages the formation of multi-stakeholder platforms in the VPA countries for defining national criteria for timber legality and law enforcement, and for monitoring the implementation of legality schemes (European Commission, 2007). It is expected that this will result in better transparency and accountability in forest exploitation and trade. In this way, the EU expects that the FLEGT Action Plan will assist in the gradual development of a sustainable forest management regime (European Commission, 2007).

As the FLEGT regime concerns timber exports to Europe, the main focus of the FLEGT principles and norms is on commercial timber as produced within the traditional forest sector. Although the policy specifies that timber legality standards should include measures to deal with adverse impacts on indigenous and local communities and poor people that depend on forests, in the EU/FLEGT documents no reference is made to the legal position and role in local livelihoods of artisanal timber exploitation and trade for domestic use. Nonetheless, in the process of formulating VPAs at the national level this issue has emerged as requiring further attention. For instance, in the first legally ratified VPA between the EU and Ghana, it was stated that the national timber legality programme should not only concern industrially produced export timber, but also artisanal timber for the domestic market (Owusu *et al.*, 2010). Also in Liberia, Cameroon and the Republic of Congo domestic timber production has been included in the FLEGT/VPA documents.

Thus, the objective of the EU-FLEGT policy for stimulating the development of law enforcement in timber producing countries by a national process of good forest governance at national level has created scope for developing new policy assemblages at national level. In several countries principles from other international forest policies, e.g. in respect of forests contributing to poverty alleviation, became added. This demonstrates how different elements from the various components of the global forest regime complex may become integrated at national level.

### **The contents of this special issue**

This special issue of the Forest Policy and Economics presents a series of articles that explore the question of whether the emerging timber verification programmes have a limited scope by focusing on principles and norms for the operation of the industrial forestry sector characterised by timber exploitation by forest business enterprises, or whether they contribute towards a gradual evolution of an innovative new policy assemblage that balances timber legality and forest livelihood requirements. It presents the results of several recent studies that investigated the characteristics of the FLEGT timber legality programmes and of artisanal timber production systems. The articles focus on the position of the timber legality policy within the global forest regime complex and on the role of community forest management and artisanal timber trade in timber legality.

They highlight major issues that are of relevance when considering how concerns on timber legality and forest-based livelihoods can be related.

*The position of timber legality within the global forest regime complex*

The first four articles address the question of how timber legality issues are framed and negotiated, and how the timber legality policy is related to other international forest policy programmes. They assess how the different stakeholders engaged in the timber legality programme interpret the basic principles and norms of the programme and how alliances may develop advocating specific approaches towards timber legality policies. The first two articles assess the narratives and opinions of the stakeholders involved in the FLEGT process on what norms and principles play a central role in the multi-scalar FLEGT programme. They are based on a discursive-institutional approach (Arts and Buizer, 2009) and acknowledge the multiple meanings that may be attributed to timber legality policies and standards. In the first article Turnhout and Van Heeswijk assess the discursive structure of both the EU-FLEGT Action Programme and the VPA process in Indonesia by considering basic policy principles such as sustainability, participatory governance and role of the state. They distinguish two main trends in orientation of international policies: a trend of neoliberalism and ecological modernization emphasizing voluntary instruments, participation and marketization, and a trend in which the nation state remains a very powerful actor. They conclude that FLEGT is first and foremost shaped by state oriented discourses that promote regulatory instruments and a narrow interpretation of legality. Concerns on sustainability and participatory considerations are present, both in the EU and in the Indonesian context, but they come in a secondary position. The second article by Wiersum and Elands follows-on on this analysis by focusing on what specific norms regarding timber legality played a role in developing the national legality standards. It presents the opinions of people actively engaged in the VPA process in Ghana and Indonesia about which norms regarding timber legality, law enforcement and social safeguards were considered. Almost half of the respondents considered that the VPA process had an integrative approach. A large majority of the other respondents, mainly from Indonesia, considered that it had a limited or traditional forest sector focus. And a small number of respondents, all from Ghana, considered that it gave focused attention to social responsibility issues. The authors attribute the differences in opinions between Ghana and Indonesia to differences in organisation of the VPA process in the two countries. The results reflect the finding of Turnhout and Van Heeswijk that the FLEGT process is basically shaped by the notion of the state as primary actor in dealing with timber legality, and therefore different countries may interpret their responsibility in developing a timber law enforcement programme in different ways. From the findings on both the discursive structure and the types of legality standards considered in the VPA process in Indonesia, the authors observe that in his country relatively little attention was given towards balancing concerns on timber legality and forest-based livelihoods. But this issue received much more attention in Ghana. The socially-inclusive approach of the VPA process in Ghana is reflected by the decision to include the domestic timber market in the national VPA programme. In the third article Marfo discusses how this notion emerged as a result of the building of new coalitions between different categories of stakeholders. By using the Advocacy Coalition Framework (Sotirov and Memmler, 2012) he demonstrates how the Ghana VPA process

did not consist of a linear process of application of the EU concerns on the legality of export timber, but rather was used to mobilize resources for including national forest policy concerns.

The attention given in Ghana to linking timber legality and livelihood issues is an example of how concerns from separate components of the global forest regime complex may be linked at national level to form new policy assemblages. It illustrates how principles from the fragmented international regime complex may become integrated in a consistent national policy. The question of how the different concerns of the fragmented international regime complex are dealt with at national level is further investigated in the article of Ochieng *et al.* They assess how in Ghana the VPA policy interacts with the climate mitigation policy of reducing emissions from deforestation and forest degradation (REDD+). The FLEGT and the REDD programmes form a clear example of the fragmented global forest regime complex. Nonetheless, the article demonstrates how during the process of introducing the policies in Ghana several interactions between the two regimes emerged. These findings complement the data by Wiersum and Elands about the development of new forest policy assemblages at national level.

*The role of community forest management and artisanal timber trade in timber legality*

The next four articles discuss relations between the FLEGT programme and programmes for stimulating the development of decentralised forestry systems such as community forestry. These articles are based on the notion that timber legality policies are basically demand oriented and add normative criteria to the traditional financial criteria in decision-making regarding the buying of timber by importing countries. These timber procurement policies act as stimulants to timber producing countries to develop effective timber legality policies and enforcement. At the national level, these policies are superimposed on the existing policy framework for regulating forest management. The last twenty years much attention has been given in forest policy towards the restructuring of the forestry sector to better represent livelihood concerns. The development of different forms of participatory forest management was stimulated as a means for socially-responsible use and management of forest resources. An important question is how the new timber legality policies relate to these diversified forestry systems. The first article of Eba'a *et al.* on the impact of the international procurement policies on the forestry sector of Cameroon demonstrates how at national level several timber production systems co-exist that are characterized by a variety of exploitation rights on either state or community forest lands. The authors explore the impacts of the VPA on these different forest production systems and estimate the costs for implementing the required management and control practices for different types of forest management. The article demonstrates that the positive impact of the FLEGT Action Plan will be especially felt in the industrial forest concessions that harvest timber products for exports to international markets. But they are lower in the case of community forestry systems. The authors also demonstrate that the livelihoods of small forest producers may be adversely affected by the international procurement policies.

The policies for involvement of local communities in forestry activities do not only aim at developing community forest management programmes, but also at stimulating

participation of local people in state forest management. They are based on the notion that forestry should be performed in a socially-responsible manner with attention being given to management practices that positively impact on the forest-related livelihoods of local people. This includes the proper resolution of forest-based conflicts. Derkyi and co-authors describe the prevalence of such forest conflicts on the basis of a case study of the Tano Offin Globally Significant Biodiversity Area (GSBA) within the Tano Offin Forest Reserve in Ghana. The creation of this GSBA restricted access to farming land and forest resources for the inhabitants of the village that still were officially admitted within the borders of the reserve. Most forest-based livelihood activities such as farming beyond the admitted farms, chainsaw milling and commercial extraction of non-timber forest products (NTFPs) are formally illegal. Nonetheless, these practices still prevail due to poverty, limited livelihood options and scarcity of farming land. Due to the restricted access to farm lands there are few options to change to alternative livelihoods, and the strengthening of law enforcement will likely further restrict the villagers' access to forest resources. Consequently, attention should be given to the development of social safeguards which allow local people living within the reserve to continue their forest-based livelihoods. The concept of social safeguards was introduced in the Ghana FLEGT/VPA. It is further elaborated in the article of Ros-Tonen *et al.* that assesses the experiences in Ghana with the modified taungya system. The article discusses the possibility of providing local people the opportunity to profit from forestry practices by engaging in reforestation activities and interplanting food crops in the young plantations. This taungya system has been used in tropical plantation forestry for a long time (Jordan *et al.*, 1992) and recently has been further modified to better incorporate local needs. The authors assess whether the modified taungya system in Ghana can reconcile legal timber production and local livelihood needs, and whether it can be interpreted as forming a social safeguard for local people in maintaining local use rights in commercial forests.

In considering the impact of timber legality programmes on local livelihoods it is not only important to consider the role of local people in timber production, but also their role in timber exploitation and trade. Within the domestic timber system the exploitation and trade of the locally-produced timber are mostly in the hands of local people using artisanal rather than professional practices (Wit *et al.*, 2010). Hence, when considering the livelihood impact of timber legality and law enforcement the position of these local actors needs attention. The article by Lescuyer *et al* provides the results of a recent survey to better understand the socio-economic characteristics of these artisanal people and their role in the rural economies of Central Africa. They demonstrate the significance of the micro-enterprise small-scale logging sector in several central African countries in respect to number of people involved and generation of rural incomes. However, these activities are informal and mostly no proper timber harvesting permits are used. The article illustrates the importance of including artisanal timber exploitation and trade in timber legality programmes. This should include both legalization and professionalization of artisanal logging enterprises as well as enhancing the capacities of local people to control access to the local timber resources.

The various articles emphasize the position of FLEGT in the global forest regime complex and how its implementation at national level results in the emergence of new

policy assemblages for balancing of timber legality verification with livelihood interests. The articles demonstrate that notwithstanding difficulties in designing a global forest regime, at national level horizontal interaction between different forest regimes may well take place. At this level global forest policies obtain a country specific meaning and are further shaped by the routines and principles of national actors and embedded in national forest governance practices (Arts et al., 2013).

## References

- Arnold, J.E.M., 2001. Forests and people: 25 years of community forestry. FAO, Rome, Italy.
- Arts, B. and Buizer, M., 2009. Forests, discourses, institutions: a discursive-institutional analysis of global forest governance. *Forest Policy and Economics* 11(5-6), 340-347.
- Arts, B. and Visseren-Hamakers, I., 2012. Forest governance: a state of the art review. In: B. Arts, S. van Bommel, M. Ros-Tonen and G. Verschoor (eds) *Forest-people interfaces*. Wageningen, the Netherlands, Wageningen Academic Publishers, p. 241-257.
- Arts, B., Behagel, J., Van Bommel, S., De Koning, J. and Turnhout, E. 2013. *Forest and nature governance. A practice based approach*. Springer, World Forests Series Vol. 14.
- Bernstein, S. and Cashore, B. 2010. Examination of the influence of global forest governance arrangements at the domestic level. In: Rayner, J., Buck, A. and Katila, P. (eds), *Embracing complexity: Meeting the challenges of international forest governance. A global assessment report*. International Union of Forest Research Organizations (IUFRO), Vienna, Austria, IUFRO World Series Vol. 28, p. 111-135.
- Brack, D., 2005. Controlling illegal logging and the trade in illegally harvested timber: The EU's Forest Law Enforcement, Governance and Trade Initiative. *Review of European Community & International Environmental Law* 14(1), 28-38.
- Brack, D., 2003. Illegal logging and the illegal trade in forest and timber products. *International Forestry Review* 5(3), 195-198.
- Brown, D., Schreckenberg, K., Bird, N. et al., 2009. *Legal timber. Verification and governance in the forest sector*. London, Overseas Development Institute.
- Bodegom, A.J. van, Klaver, D., Schoubroeck, F. van, and Valk, O. van der, 2008. *FLEGT beyond T: exploring the meaning of 'governance' concepts for the FLEGT process*. Wageningen University and Research Centre, 56 pp & appendices.
- Cashore, B. and Stone, M.W., 2012. Can legality verification rescue global forest governance? Analyzing the potential of public and private policy intersection to ameliorate forest challenges in Southeast Asia. *Forest Policy and Economics* 18, 13-22.
- Charnley, S. and Poe, M., 2007. Community forestry in theory and practice: where are we now? *Annual Review of Anthropology* 36, 301-336.
- Colchester, M., Boscolo, M., Contreras-Hermosilla, M., Del Gatto, F., Dempsey, J., Lescuyer, G., Obidzinski, K., Pommier, D., Richartis, M., Sulaiman, N., Tacconi,

- I., Vargas Rios, M. and Wells, A., 2006. Justice in the forests. Rural livelihoods and forest law enforcement. CIFOR, Indonesia.
- De la Cruz, V., 1989. Small-scale harvesting operations of wood and non-wood forest products involving rural people. FAO, Rome, FAO Forestry Paper No. 87.
- European Commission, 2007. FLEGT Briefing Notes: forest law enforcement, governance and trade. Briefing notes 1-7. Brussels, Belgium.
- FAO, 2005. Best practices for improving law compliance in the forestry sector. FAO, Rome, FAO Forestry Paper No. 145.
- Forestry Department, 1987. Small-scale forest-based processing enterprises. FAO, Rome, FAO Forestry Paper No. 79.
- Humphreys, D., 1999. The evolving forest regime. *Global environmental change* 9(3), 251-254.
- Humphreys, D., 2004. Redefining the issues: NGO influence on international forest negotiations. *Global Environmental Politics* 4: 51-74.
- Humphreys, D., 2006. Logjam. Deforestation and the crisis of global governance. Earthscan, London.
- Jordan, C.F., Gajasen, J. and Watanabe, H. (eds), 1992. Taungya: forest plantations with agriculture in Southeast Asia. CAB International, Wallingford, UK, Sustainable rural development Series Vol.1.
- Kaimowitz, D., 2003. Forest law enforcement and rural livelihoods. *International Forestry Review* 5, 199-210.
- Kishor, N. and Lescuyer, G., 2012. Controlling illegal logging in domestic and international markets by harnessing multi-level governance opportunities. *International Journal of the Commons* 6(2) 255-270.
- Lemos, M.C. and Agrawal, A., 2006. Environmental governance. *Annual review environmental resources* 31, 297-325.
- Ostrom, E., 1990. *Governing the commons. The evolution of institutions for collective action.* Cambridge University Press, Cambridge, UK.
- Owusu, O., Nketiah, K.S., Aggrey, J. and Wiersum, F. (eds), 2010. Timber legality, local livelihoods and social safeguards: implications of FLEGT/VPA in Ghana. Proceedings of an international workshop held in Ghana on 8<sup>th</sup> and 9<sup>th</sup> October 2009. Kumasi, Ghana, Tropenbos International Ghana Workshop Proceedings No. 8, 129 p.
- Ramcilovic-Suominen, S. and Hansen, C.P., 2012. Why some forest rules are obeyed and others violated by farmers in Ghana: Instrumental and normative perspective of forest law compliance. *Forest Policy and Economics*, doi:10.1016/j.forpol.2012.07.002 .
- Rayner, J., Buck, A. and Katila, P. (eds), 2010. Embracing complexity: Meeting the challenges of international forest governance. A global assessment report. International Union of Forest Research Organizations (IUFRO), Vienna, Austria, IUFRO World Series Vol. 28.
- Ros-Tonen, M.A.F., Van Andel, T., Morsello, C., Otsuki, K., Rosendo, S. and Scholz, I., 2008. Forest-related partnerships in Brazilian Amazonia: there is more to sustainable forest management than reduced logging. *Forest Ecology and Management* 256: 1482-1497.

- Scherr, S.J., White, A. and Kaimowitz, D., 2003. Making markets work for forest communities. *International Forestry Review* 5 (1): 67-73.
- Smouts, M.C., 2008. The issue of international forest regime. *International Forestry review* 10(3), 429-432.
- Sotirov, M. and Memmler, M., 2012. The Advocacy Coalition Framework in natural resource policy studies. Recent experiences and further prospects. *Forest Policy and Economics* 16, 51–64
- Sunderlin, W.D., Belcher, B., Santoso, L., Angelsen, A., Burgers, P., Nasi and R., Wunder, S., 2005. Livelihoods, forests, and conservation in developing countries: An overview. *World Development* 33 (9), 1383-1402.
- Tacconi, L. (ed), 2007. *Illegal logging: law enforcement, livelihoods and timber trade*. Earthscan, London. 302 p.
- Visseren-Hamakers, I.J. and Glasbergen, P., 2007. Partnerships in forest governance. *Global Environment and Change* 17, 408-419.
- WCED (World Commission on Environment and Development), 1987. *Our Common Future*. Report of the World Commission on Environment and Development. United Nations, New York.
- Westoby, J., 1989. *Introduction to world forestry: people and their trees*. Blackwell Publ., Oxford, UK, 228 p.
- Wiersum, K.F., 2010. Developing timber legality regimes. In: Wit, M. and J. van Dam (eds) *Chainsaw milling: supplier to local markets*. Tropenbos International, Wageningen, the Netherlands, *ETFRN News* 52, 205-212.
- Wiersum, K.F., 2000. Forest policy development between globalisation and localisation. In: B. Krishnapillay et al. (eds), *Forest and society: the role of research*. XXI IUFRO World Congress 2000, Kuala Lumpur, Malaysia, Vol. 1 Sub-plenary sessions, p. 589-605.
- Wit, M., Van Dam, J., Cerutti, P.O., Lescuyer, G., Kerrett, R. Parker Mckeown, J. (2010). *Chainsaw milling: supplier to local markets — a synthesis*. In: Wit, M. and Van Dam, J. (eds) *Chainsaw milling: supplier to local markets*. Tropenbos International, Wageningen, the Netherlands, *ETFRN News* 52, vii–xxii.
- Wunder, S., 2001. Poverty alleviation and tropical forests – what scope for synergies? *World Development* 29(11), 1817-1833.