ST SEVIER

Contents lists available at ScienceDirect

Forest Policy and Economics

journal homepage: www.elsevier.com/locate/forpol



Assessing forest governance from a 'Triple G' perspective: Government, governance, governmentality* $^{^{*}}$



Bas Arts

Forest and Nature Conservation Policy Group, Wageningen University, The Netherlands

ARTICLE INFO

Article history: Received 15 March 2013 Received in revised form 29 April 2014 Accepted 1 May 2014 Available online 6 June 2014

Keywords: Forests Government Governance Governmentality

ABSTRACT

This paper aims to assess the emergence of the concept of forest governance in the field of forest policy analysis. This assessment is mainly theoretical in nature. The various meanings and main criticisms of forest governance will be dealt with. In so doing, the paper applies the so-called 'Triple G' perspective (government, governance, governmentality). Firstly, the paper explains the emergence of the forest governance concept from the shortcomings of forest government, or 'state forestry' (overexploitation, policy failure, corruption). In a next step, it also criticises the concept of forest governance, now using a governmentality perspective. This latter view assumes that control by the state and self-governance by people go hand in hand. It thus challenges one of the key assumptions in many governance studies, namely that the state has substantially withdrawn from the forest sector and that forest politics has been relocated from the state to the market and to society.

© 2014 Elsevier B.V. All rights reserved.

1. Introduction

Assessing forest governance – the topic of this special issue – can be done in various ways. An obvious interpretation would be the measurement of the performance of forest governance practices, such as decentralised or participatory forest management, in one or more countries. Questions such as whether these practices are (cost)effective or have gained sufficient support from target groups can be starting points of such research. Another type of empirical assessment might be an analysis of the (assumed) shift from government to governance – a transition from state-driven to non-state governance arrangements – in the forest sector and whether such a shift has indeed taken place on the ground.

However, this paper assesses forest governance from a theoretical perspective (although theory is always informed by empirics, so references to policy practices are part of this paper). It assesses the emergence of the concept of forest governance in the field of forest policy analysis, its various meanings and the main criticisms it has received so far. In doing so, it applies a so-called 'Triple G' perspective. While beginning with the characteristics and shortcomings of forest

Government (or 'state forestry'), the paper then analyses the emergence of the forest *Governance* concept. In a third step, it draws upon *Governmentality* studies to criticise some of its basic assumptions, namely that the state has substantially withdrawn from the forest sector and that forest politics has been relocated from the state to the market and to society. Definitely, the function and the role of the state have changed in governing forest sectors today, compared to some decades ago, but the question is whether power structures have changed to the extent and in ways as often claimed. This is not to say that the concept of forest governance should be dismissed, or declared obsolete, but that it should be used more reflexively, open to confrontations with other approaches, such as governmentality.

This paper acknowledges that the forest governance literature has opened our eyes to new phenomena, which the previous state-oriented theories tended to overlook, but that it maybe went too far in generalizing its claims. Changing focus to 'alternative' theories might then help to put things into new perspective. Therefore the paper assesses forest governance from the so-called 'Triple G' perspective. Its structure also follows this logic, dealing with sections on forest government (the emergence of state forestry and its shortcomings), on forest governance (theories behind the new concept), and on forest governmentality (criticising the forest governance concept), respectively. Finally, the paper draws some conclusions.

2. Forest government

Forests have been considered public goods – and their related problems 'public bads' – for a long time. As early as the Middle Ages, deforestation and forest degradation led to the introduction of game

This paper builds on the chapter: Arts, B. and I. Visseren-Hamakers (2012), Forest governance: a state of the art review. In: B. Arts, S. van Bommel et al. (2012), Forest people interfaces. Wageningen Academic Publ., pp. 241–257. It has been re-ordered and re-written based on the author's own texts of the original work as well as on the author's key note on forest governance at the IUFRO All Division 9 Conference, Sarajevo, Bosnia-Herzegovina, May 2012. Therefore, the co-author of the original work Visseren-Hamakers agrees that this paper is published under the name of the first author.

E-mail address: bas.arts@wur.nl.

^{*} This article belongs to the Special Issue: Assessing Forest Governance.

reserves for the nobility, the protection of forests on steep slopes to combat erosion, and active management of timber resources for the construction of naval ships in many regions in Europe (Umans, 1993). Later, after the onset of industrialisation in Europe, many national forest laws were introduced in the 19th century as a response to the rapid depletion and degradation of forest resources and as a means for gaining state revenues from forests through taxation and public land ownership (Scott, 1998). These laws required the use of (elements of) scientific forestry, with its sustainable yield principle and silvicultural methods and tools (monocultures of commercial species, forest zoning, rotational harvesting, replanting, afforestation, etc.) (Jeanrenaud, 2001; Wiersum, 1995). For example, Belgium introduced a forest law in 1847 which provided for government subsidies to forest owners - both communities and individuals - in order to stimulate tree planting. Also, many of these laws were meant to regulate forest ownership and forest-related conflicts (Krott, 2005). Often, ownership resided with the state, although many countries accepted private ownership of forestlands as well. However, the old 'forest commons', with their customary rights and responsibilities for rural communities, which had existed for centuries in many European regions, started – or were forced – to disappear due to the modernisation process (Jeanrenaud, 2001). While scientific forestry brought gains in terms of increased timber production and employment, both ecological and social issues related to forests were marginalised for too long in this paradigm, which forced the forest sector to change towards the principles of sustainability (Sands, 2013; Wiersum, 1995).

The European system of forestry and forest policy was exported to most of its colonies (Neumann, 1997; Rangarajan, 1996; Scott, 1998), where a strong symbiosis of state forestry and scientific forestry emerged, for example in Indonesia, Ghana and India. Although country systems varied strongly (Vandergeest and Peluso, 2006), forest reserves were generally issued and declared state property, particularly where the rich forests and valuable timber trees were located, and plantation economies and concession systems were introduced. These systems, which generally (and often violently) excluded local people from their lands, and suppressed traditional forest institutions, have remained in place in many countries in the post-colonial era (Jewitt, 1995; Peluso, 1994). However, although built upon modern ideas of scientific forestry, most of these plantation and concession systems have brought neither sustainable forestry nor justice for forest-dependent people (Bose et al., 2012). Deforestation and forest degradation have continued in many regions around the world (FAO, 2010), particularly in the global South, while forest-related land and resource conflicts have continued (Marfo, 2006). In many cases, colonial and post-colonial states proved to be bad managers of the forests, in various ways: (1) by exploiting the resource to the extreme, often in conflict with local needs and the state's own conservation objectives, (2) by issuing concessions to private companies or public enterprises, without any effective monitoring mechanism in place, (3) by accepting - or even informally promoting - practices of corruption in forest value chains and timber markets; and (3) by being absent as a manager, particularly in remote areas, leaving the forests open to whatever (illegal) use (Bunker, 1985; Irland, 2008; Repetto and Gillis, 1988). This situation led – both in past and present – to opposition by local communities and social movements, who have fought for land and forest rights; to protests by conservationists, who have emphasized the need for forest conservation; and to pressure by international donors, who have advocated sustainable forest management (Bose et al., 2012; Peluso, 1994; Rayner et al., 2012). For all these reasons, many developing countries around the world have recently reformed public forest policy and law, a process which is generally referred to as 'forest governance' (Agrawal et al., 2008; Broekhoeven et al., 2012; FAO, 2011; Glueck et al., 2005). Such reforms have placed greater emphasis on forest decentralisation, on governing forests through markets and on community involvement in forest management (see next section).

The shift from forest government to forest governance in practice has been paralleled by scholarly debates on what governance arrangement can be considered most appropriate to achieve sustainable forest management. Since Hardin's (1968) seminal work The Tragedy of the Commons, scientific discussion has particularly continued on how to properly govern 'common pool resources' (CPRs). These resources are characterised as being rival (consumption of the resource by A renders consumption by B impossible) but non-exclusive (both A and B have access to the resource). Examples are 'open access regimes' like fishery grounds, village forests or common grasslands, the latter being the example that Hardin uses. He assumes that each herdsman will be inclined to optimise private gains, and to continuously add livestock to the grassland, thus undermining its carrying capacity as a collective outcome in the long term – hence a tragedy of the commons is born. To overcome this tragedy, access to the CPR should be restricted, either through state regulation or through private ownership. Although Hardin refers to both options, state regulation was generally considered the most promising mechanism to stop a tragedy of the commons in practice, probably because it matched the tradition of state forestry so well (see Scott. 1998).

Since then, however, Hardin's theory and assumptions have been strongly criticised. One of the most-well known critics is Nobel laureate Elinor Ostrom, who in her book *Governing the Commons* (1990) showed that local community institutions can be very successful in managing CPRs. She used many examples around the world to substantiate this claim, from forest and grazing institutions in the Swiss Alps to the institutions of Zanjera irrigation systems in the Philippines. However, whether such local, communal institutions are robust depends on a number of characteristics, or 'design principles', which Ostrom derived from a comparison of these successful cases, such as clearly defined boundaries of the resource, participation of resource users in decision-making, rules that fit the local conditions, monitoring of rule compliance, sanctions against non-compliance and conflict resolution mechanisms.

Also, Ostrom criticised Hardin's simplistic idea of rationalism in his tragedy of the commons thesis, questioning whether choices by individuals are only based on cost–benefit calculation and utility maximisation. Instead, Ostrom builds upon the notions of *bounded* rationality and *institutional* choice (Ostrom, 2011). Not only is rationality bounded, because people often lack crucial information to make good decisions, but it is also mediated by the rules of the game in a specific social setting. This implies that the choices made by individuals are deeply influenced by institutions, hence by rules, norms, beliefs and values that are valid for a specific group of people. Individuals do not only choose the option that maximises their own gains, but the one that is also 'appropriate' in a given community.

Due to her radically different perspective on whom the best governor of natural resources potentially is – not the state, but the community – Ostrom's work has been very influential in criticising state forestry and in researching new modes of forest governance, as expressed in the International Forestry Resources and Institutions (IFRI) research programme, which she started about 20 years ago and which still continues after her recent passing (Wollenberg et al., 2007).

3. Forest governance

As a consequence of the practical shortcomings of and theoretical criticisms on state forestry, 'forest governance' has become one of the buzzwords in forest policy analysis. A recent *Google* search produced about 350,000 hits, *Google* Scholar about 7000 hits, *Scopus* about 250 hits and ISI Web of Sciences about 150 hits (March 2014). These numbers have doubled in only five years or so (Breeman et al., 2009). In much literature, the concept refers to new modes of governing that go beyond the confines of the state (Pierre, 2000; Van Kersbergen and Van Waarden, 2004; Van Tatenhove et al., 2000). Examples are network-like arrangements, self-regulation by businesses, (public–)private partnerships, and markets for ecosystem services and certification programmes (Agrawal et al., 2008; Kickert et al., 1997; Kolk, 2000). Some authors refer to this development as a 'shift from government to governance' (Rosenau and Czempiel, 1992), implying that authority and competencies have

moved away from the state to other bodies, like international organisations, NGOs and businesses (Pierre and Peters, 2000). These new modes are believed to be more capable of managing public 'goods and bads' related to forests than state forestry (see previous section).

Besides this strict interpretation of forest governance as *new* modes of governing, a much broader conceptualization is very current in the literature (Kooiman, 1993). This broader definition refers to the many ways in which public and private actors from the state, market and/or civil society govern public issues, autonomously or in mutual interaction (Arts and Visseren-Hamakers, 2012). This definition thus includes both conventional government on the one hand and new governance arrangements beyond the state on the other. Hence, governance may at the same time refer to governing *by*, governing *with* and governing *without* the state. To 'govern' can of course mean many things, including forcing others, persuading others or exchanging resources with others to let them do things in accordance with certain public policy objectives (Dunn, 2003). All are implied in whatever type of governance, strict or broad, and often in hybrid combinations.

Both perspectives – broad and strict – can be nicely illustrated with the 'governance triangle' of Lemos and Agrawal (see Fig. 1). The figure as a whole refers to broad governance; steering processes can be executed by any institution - state, market or civil society - and by various combinations. But for the strict interpretation we have to chop off the head of the King (to paraphrase Foucault; see below), so governing practices executed by the state alone are excluded from the definition (because that should be seen as government as opposed to governance). What remain are the autonomous governing practices of the market and the civil society, e.g. in forest certification or in private conservation projects, as well as the partnerships among them in such initiatives. But partnerships with the state are also taken on board. So the state is definitely not out of the picture, but its role and function has (to be) changed in the new modes of governance. Instead of being the authority from the top, the commander or the controller, the state has now become an (more) equal partner vis-à-vis private and civic ones in new governance networks and partnerships.

Fig. 1 particularly emphasizes the multi-actor character of forest governance (state-market-community). However, as important is the *multilevel* character of forest governance (Held and McGrew, 2002; Hooghe and Marks, 2001). Governance is practiced not only within the boundaries of the nation states, but also in the realm of international politics too, often referred to as 'global forest governance' (Arts et al., 2009; Giessen, 2013; Werland, 2009). Within this field of study, some

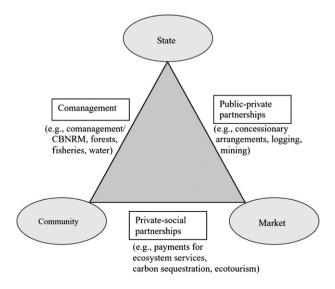


Fig. 1. The governance triangle. *Source*: Lemos and Agrawal (2006, p. 310).

scholars use the term 'multilevel governance' (or MLG). Originally, this concept was introduced in the realm of European studies to refer to the unique character of EU policy-making, consisting of European institutions on the one hand and Member States on the other (Hooghe and Marks, 2001). Later, the MLG concept was also used in other fields of study than the EU to argue that the old and strict distinction between local, national and global politics has become blurred, and hence outdated (Held and McGrew, 2002). Also, the original government-centred approach to MLG by Hooghe and Marks has been broadened to include non-state actors as well. After all, local authorities and NGOs are believed to affect global and European politics, whereas global agreements and European directives are conceptualised as having impacts on local practices (Arts, 2004).

A final, but rather different category is 'good governance', which is the advocacy of reform of the public sector and/or of corporate management in accordance with a number of normative criteria, such as costeffectiveness, transparency, accountability and participation, among others advocated by the European Union (EU), the International Monetary Fund (IMF) and the World Bank (Kjaer, 2004; Woods, 2000). Examples of 'good governance' programmes are new public management (NPM), which applies business principles to public administration for improved cost-effectiveness, and corporate social responsibility (CSR), which applies principles of responsible government to business practices for improved accountability. Such approaches are also applied in the forest sector, particularly advocated by the Food and Agriculture Organization (FAO, 2011). Here the term 'good forest governance' has become en vogue (see Table 1 for an overview of governance conceptualizations).

One of the icons of forest governance is participatory forest management, or PFM (an umbrella term for initiatives like community forestry, community-based forest management, collaborative forest management and joint forest management). The central idea behind PFM is that local management of forests, either by communities themselves or jointly with regional forest departments, is more effective in conserving and sustainably using forest resources than central management by the state, because people are (again) granted (a sense of) ownership, and hence responsibility, over forest resources (Blomley et al., 2008; Charnley and Poe, 2007; Mustalahti and Lund, 2010; Wiersum, 2009). India, Nepal, Mexico, Bolivia, Kenya and Tanzania have pioneered different forms of PFM from the early 1990s onwards. Many countries, from Ethiopia to Albania, followed later. All these countries, often with the help of donors, have set up new participatory institutions for the local management of forests, often following Ostrom's design principles in various ways and degrees.

PFM is not the only new forest governance mode, however. Agrawal et al. (2008), for example, refer to the broader term *decentralisation* – of which PFM is part – and to *certification* of forest lands and products. Besides PFM, decentralisation involves the de-concentration of administrative competencies and/or the transfer of political authority from the central state to subnational administrations (Ribot et al., 2006). The local administration gains technical competencies and/or formal authority from the central state and is to be held accountable by local communities in executing these. Decentralisation is therefore believed to bring politics closer to the people, to increase policy effectiveness and to enhance democratic checks and balances at regional and community levels. This trend has become very influential in the forest sector

Table 1 Four conceptualizations of governance.

Conceptualization	Description
Governance 'broad'	Governing by, with and without the state
Governance 'strict'	Governing beyond the confines of the state
Multilevel governance	Governing at multiple levels (local to global)
Good governance	Reform programmes for improving governance

worldwide, although some question both the intentions and performance of such decentralisation programmes in forestry (see below). Overall, decentralisation is an example of forest governance *with* or *without* the state, because it may include local forest departments, local communities, or both.

Forest certification has also become a dominant stream in current forest governance (Cashore et al., 2004; Cashore and Stone, 2012; Visseren-Hamakers and Glasbergen, 2007). This entails a marketbased mechanism of independent labelling and monitoring that guarantees to both consumers and producers that timber products originate from sustainably managed forests and from legal sources. One of the first organisations in this field was the Forest Stewardship Council (FSC), established in 1993. Because this was an NGO-led initiative, with rather stringent requirements on sustainability, other industry initiatives followed later, the Programme for the Endorsement of Forest Certification (PEFC) being the largest today. Together, these two initiatives now cover more than 400 million ha of forests around the world – about 10% of the world's forests – and thousands of companies and products, although most of these are located and traded in the global North. Certification is a good example of forest governance without the state, since both FSC and PEFC are private initiatives. A public aim (sustainability) is pursued through private means (market transactions). Nonetheless, states do play roles in forest certification. For example, governments can enhance certification by subsidising certified companies, through tax exemptions for certified forest owners, or through public procurement policies. However, governments are hesitant to prefer one certification standard over another, arguing that this would oppose WTO rules.

An emerging new forest governance mode is payment for ecosystem services, or PES (Constanza et al., 1987; Farber et al., 2002). The core idea is that forest and other ecosystems provide services to society, such as water regulation, soil protection and climate change regulation, that are currently not accounted for in the economic system or in policy. Giving the provision of these services a (shadow) price allows them to compete more equally with services that are already accounted for, such as timber production. An application of PES in forest governance is REDD + (Levin et al., 2008). This acronym stands for 'Reducing emissions from deforestation and forest degradation in developing countries', while the '+' stands for the sequestration of carbon through forest conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (UNFCCC, 2010). Since deforestation and forest degradation are said to contribute to about 15 to 20% of the climate change problem, avoiding these phenomena helps to mitigate climate change. The main idea of REDD + is that developing countries are paid for their forest conservation and management practices by earning carbon credits and trading these on international carbon markets, while developed countries can buy these credits to implement their international commitments under the post-Kyoto Agreement. Currently, REDD + is being piloted in a number of projects through bilateral initiatives (e.g. between Norway and Indonesia) and multilateral initiatives (through the UN and the World Bank). REDD + is a good example of market governance without the state, at least in the longer run. The ultimate aim is to have selfgoverning markets for trading credits on ecosystem services. However, governments are still crucial for REDD + today, for the design of the system and for its initial functioning (being rule makers, donors and buyers of credits).

Much of the governance literature is based on the (implicit) assumption of 'the retreat of the state', or 'the hollowing out of the state' (Albrow, 1996; Pierre, 2000; Strange, 1996). For example Pierre and Peters (2000) distinguish three types of displacement of state power and control in the new governance era: *upward* to international organisations, *downward* to subnational authorities and *outward* to semipublic bodies and private markets. Hence, power and authority are (substantially) relocated from the national state to international and subnational organisations on the one hand as well as to semi-public

and private ones on the other. However, this 'power relocation thesis' can be challenged, both empirically and theoretically.

4. Forest governmentality

Irrespective of all governance rhetoric, scholars have observed the enduring practice of 'state forestry' in many of the new governance initiatives. For example, evaluations of PFM show that conflicts between forest officials and communities over valuable timber resources, land rights, forest monitoring and the like continue in many cases and that hardly any 'real' transfer of management and use rights and decisionmaking power from the state to local communities has occurred (Pulhin and Dressler, 2009). In addition, Ribot et al. (2006) claim that although various countries have launched forest decentralisation programmes, the national governments involved have regularly obstructed the full implementation of such programmes in order to retain control, particularly over high-value timber forests. And REDD + seems to strengthen state forestry rather than participatory or decentralised forest management (Phelps et al., 2010). The amounts of money potentially involved, the need for complex carbon accounting, and the international requirements for accountability, monitoring and verification all point at the need of a centralised approach of REDD +, thus potentially disempowering communities, private landowners and local governments.

The 'power relocation thesis' is challenged in theoretical terms too. For example Hirst (2000) claims that the state has remained dominant in those fields where it is traditionally considered 'the sovereign', such as the legitimate monopolization of collective violence, internal and external security, taxation and currency, law and order and social consensus building (although we may observe some shifts in these fields too, like UN peace forces, private armies, the introduction of the Euro in the EU, and private initiatives to maintain law and order in neighbourhoods). Even more so, the power of the state has *increased* in some domains, the internet being a good example (Knill and Lehmkuhl, 2002). All this points at the fact that we do not witness a general retreat of the state, in the light of governance, but a *transformation* of the state (Arts et al., 2009).

A theoretical notion that does justice to this hybrid situation, to the control of society by the state on the one hand and to the diffusion of power in society on the other, is the concept of 'governmentality' (Dean, 2010; Foucault, 2000). Foucault coined this term – that literally means the 'reason of state' - to understand the emergence and functioning of modern statehood. Crucial in this transformation has, according to him, been a fundamental change in the nature and orientation of state power. Whereas the traditional Kingdom is based on the idea that the bureaucracy should just serve the interests and power of the King and his family, the modern state takes the well-being of its population as its main raison d'etre. However, this caring should be done in ways that do not undermine the legitimacy and survival of that same state. Therefore people should be raised as responsible citizens that accept the state on the one hand, but experience themselves as free subjects who are taken care for at the same time. Thus government by the state and self-government by individuals are intrinsically intertwined. Through discourses, practices and technologies of (self)governance in the family, the school, the army, the factory, the office, etc., a society produces certain subjects and identities, but these are self-confirmed, embraced and strategically used by citizens at the same time. So government is not so much about governing others, but about letting others govern themselves by creating 'responsible' subjects ('conduct of conduct'). Therefore, power is to be conceived differently than in mainstream political analysis: not as authority embodied in a state, a president or a king, who give orders to docile citizens, but as disciplinary practices that are shaped both by (hegemonic) regulatory logics and (in principle) free subjects.

Two branches of governmentality studies are particularly relevant for forest governance, one on political reform and neoliberalism (Rose and Miller, 2010; Triantafillou, 2012; Pulhin and Dressler, 2009) and one on the environment (Agrawal, 2005; Bose et al., 2012; Peluso, 1994). The first branch theorises about governance reform as 'control at a distance' by the state. Governance reform is not so much meant to seriously transfer authority to lower administrative tiers, or to communities, but to maintain control in a different manner. This can be realised, for example, through performance measurement and reporting obligations at the level of de-central authorities or communities vis-à-vis the central state. Governance and administrative reform also offers ample opportunities for states to decentralise their unresolved policy problems and financial deficits, while maintaining central control over valuable assets and resources. Hence, what seems empowerment of and increased autonomy for de-central authorities and communities at first glance, is actually driven by the central state to dispose of its wicked problems.

The second branch of literature focuses on the creation and selfconfirmation of environmental subjects and of forest-related identities by states and NGOs. Agrawal (2005) speaks of 'environmentality' and Bose et al. (2012) of 'forest governmentality' to capture these processes. Whereas in the past traditional forest dwellers were often identified as encroachers and backward people, today they are suddenly considered noble savages and guardians of the forests, holding valuable indigenous knowledge on how to manage the forests more sustainably. And whereas the former legitimised the violent exclusion of such people from their forest lands, their new identities define them as interesting vehicles for implementing participatory forest policy programmes, both by governments and NGOs. In the latter case, power is not so much directly and visibly exercised by the state, excluding people from their lands, or by NGOs, enforcing certain norms upon them, but through the creation of 'forest-friendly' subjects and identities in environmental discourses, societal institutions and social practices.

If we take the above critical perspectives on board, the following two observations on forest governance seem justified (compare: Winkel, 2012). Firstly, decentralisation of forest management is not so much the transfer of authority from the government to local authorities, but 'control at a distance' by the state to solve wicked policy problems locally, which tends to reaffirm power relations and structures instead of changing them. Secondly, community participation in forest governance is not so much an increase of decision-making power for ordinary people, but the shaping of environmentally responsible subjects and the creation of mutual consent around local forestry problems and objectives. These two observations turn many of the governance claims upside down, namely that governance implies (more) local participation, ownership and empowerment than the conventional regulatory approaches. On the contrary, the new governance modes seem new tools for the state to solve some of its public policy problems and at the same time maintain central (although indirect) control. Again, the state has not retreated or hollowed out, but changed its strategies and tactics in the 'new' governance era. This should make us cautious about accepting too optimistic or too naïve governance claims of devolution, autonomy and empowerment.

5. Conclusion

This paper assesses forest governance from a 'Triple G' perspective: government, governance and governmentality. It documents how forest governance has emerged from the shortcomings of state forestry and (post)colonial forestry. However, this has not implied a full shift from government to governance, as is often claimed in the literature. On the contrary, the role of the state in forest management is still strong, irrespective of the rise of new forest governance initiatives (PFM, DFM, REDD+, etc.). A theoretical notion that does justice to both – government and governance – is governmentality. Here, control by the state and self-governance by people go hand in hand. They are two sides of the same coin of modern statehood. From this perspective, the assumption that power and authority have been relocated from the

national state to other actors and administrative levels – an assumption that is present in much of the (forest) governance literature – is not justified. Instead, governance is to be seen as another 'tool of (self)government', to solve complex policy problems at the local level without losing (too much) central control.

However, a governmentality perspective on forest governance substantially differs from the mainstream governance literature, or from the more conventional government-oriented policy literature. Different questions are asked, different concepts are used, different empirics are investigated and different answers are found (Winkel, 2012). This raises the question of their compatibility. Some scholars might object to the 'eclectic' approach of this paper, because the three G's originate from different philosophies of science (Arts, 2012). Whereas much of the classical policy analysis literature favours a positivist approach to science, in which only observable and measurable variables are considered 'true' scientific knowledge, a substantial part of the governance literature is built on interpretive theory, such as social-constructivism and argumentative analysis. Adversely, governmentality studies originate from post-structuralism, in which critical discourse analysis is considered key to knowledge production. These perspectives hold different, sometimes even conflicting, assumptions about society, politics, science, truth and knowledge (Crotty, 1998). However, according to a pragmatist approach to science, such different perspectives are not necessarily problematic (Maxcy, 2003). The question in pragmatism is not so much whether perspectives fully match - ontologically, epistemologically and methodologically -, but whether they jointly enrich our understanding of a phenomenon. I believe - in line with this view - that the 'Triple G' perspective offers a more in-depth and reflexive analysis of the forest policy field than solely focusing on the concept of forest governance in isolation.

Acknowledgement

The author would like to thank the two anonymous reviewers and Ingrid Visseren-Hamakers for their valuable comments and suggestions and Joy Burrough-Boenisch and William Cook for the language editing.

References

Agrawal, A., 2005. Environmentality: Technologies of Government and the Making of Subjects. Duke University Press, Durham and London.

Agrawal, A., Chhatre, A., Hardin, R., 2008. Changing governance of the world's forests. Science 320, 1460–1462.

Albrow, D., 1996. The Global Age. State and Society Beyond Modernity. Polity Press, Oxford.

Arts, B., 2004. The local-global nexus: NGOs and the articulation of scale. J. Econ. Soc. Geogr. 95 (5), 498–511.

Arts, B., 2012. Forests policy analysis and theory use: overview and trends. For. Policy Econ. 16 (1), 7–13.

Arts, B., Visseren-Hamakers, I., 2012. Forest governance: a state of the art review. In: Arts, B., van Bommel, S., et al. (Eds.), Forest–People Interfaces. Wageningen Academic Publ, pp. 241–257.

Arts, B., Lagendijk, A., Van Houtum, H. (Eds.), 2009. The Disoriented State: Shifts in Governmentality, Territoriality and Governance. Springer, Dordrecht.

Blomley, T., Kerstin, P., et al., 2008. Seeing the wood for the trees: an assessment of the impact of participatory forest management on forest condition in Tanzania. Oryx 42

Bose, P., Arts, B., Van Dijk, H., 2012. 'Forest governmentality': a genealogy of subject-making of forest-dependent 'scheduled tribes' in India. Land Use Policy 29, 664–673.

Breeman, G., Goverde, H., Termeer, K., 2009. Governance in de groen-blauwe ruimte. red Handelingsperspectieven voor landbouw, ruimte en water. Van Gorcum, Assen.

Broekhoeven, G., Savenije, H., Scheliha, S. (Eds.), 2012. Moving forward with forest governance. ETFRN News, 53. Tropenbos International, Wageningen.

Bunker, S., 1985. Underdeveloping Amazon: Extraction, Unequal Exchange and the Failure of the Modern State. University of Chicago Press, Chicago.

Cashore, B., Stone, M., 2012. Can legality verification rescue global forest governance?: analyzing the potential of public and private policy intersection to ameliorate forest challenges in southeast Asia. For. Policy Econ. 18 (2), 13–22.

Cashore, B., Auld, G., Newson, D., 2004. Governance Through Markets — Forest Certification and the Emergence of Non-state Authority. Yale University Press, New Haven & London. Charnley, S., Poe, M., 2007. Community forestry in theory and practice: where are we now? Annu. Rev. Anthropol. 36. 301–336.

Constanza, R., d'Arge, R., et al., 1987. The value of the world's ecosystem services and natural capital. Nature 387, 253–260. Crotty, M., 1998. The foundations of social research. Meaning and Perspective in the Research Process, SAGE, London.

Dean, M., 2010. Governmentality. Power and Rule in Modern Society. Sage, London. Dunn, W., 2003. Public policy analysis. An Introduction. Pearson Prentice Hall, New Jersey.

FAO, 2011. Framework for Assessing and Monitoring Forest Governance. FAO, Rome.

FAO, 2010. Global Forest Resources Assessment 2010. FAO, Rome.

Farber, S., R.Constanza, R., M.Wilson, M., 2002. Economic and ecological concepts for valuing ecosystem services. Ecol. Econ. 41 (2002), 375–392.

Foucault, M., 2000. Power. In: Faubion, J. (Ed.), Essential Work of Foucault 1954–1984. Penguin Books, London.

Giessen, L., 2013. Reviewing the main characteristics of the international forest regime complex and partial explanations for its fragmentation. Int. For. Rev. 15 (1), 60–70.

Glueck, P., Rayner, J., Cashore, B., 2005. Change in the governance of forest resources. In: Mery, G., Alfaro, R., Kanninen, M., Labovikov, M. (Eds.), Forest in the global balance: changing paradigms. World Series, vol. 17. International Union of Forest Research Organizations (IUFRO), Helsinki, pp. 51–74.

Hardin, G., 1968. The tragedy of the commons. Science 162 (3859), 1243-1248.

Held, D., McGrew, A., 2002. Governing Globalization. Power, Authority and Global Governance. Polity Press, Cambridge.

Hirst, P., 2000. Democracy and Governance In: Pierre, J. (Ed.), (2000), Debating Governance. Authority, Steering and Democracy. Oxford University Press, Oxford, pp. 13–36.

Hooghe, L., Marks, G., 2001. Multi-level Governance and European Integration. Rowman and Littlefield. Lanham.

Irland, L., 2008. State failure, corruption and warfare: challenges for forest policy. J. Sustain. For. 27 (3), 189–223.

Jeanrenaud, S., 2001. Communities and forest management in Europe. WG-CIFM Report. Jewitt, S., 1995. Europe's 'others'? Forestry policy and practices in colonial and postcolonial India. Environ. Plan. D: Society and Space 13 (1), 67–90.

Kickert, W., Klijn, E., Koppejan, J. (Eds.), 1997. Managing Complex Networks. Strategies for the Public Sector. SAGE, London.

Kjaer, A., 2004. Governance. Polity Press, Cambridge.

Knill, C., D.Lehmkuhl, D., 2002. Private actors and the state: internationalization and changing patterns of governance. Governance 15 (1), 41–63.

Kolk, A., 2000. Economics of Environmental Management. Pearson Education Ltd, Edinburg.

Kooiman, J., 1993. Modern governance. New Government–Society Interactions. Sage, London.

Krott, M., 2005. Forest Policy Analysis. Springer, Dordrecht.

Lemos, M., A.Agrawal, A., 2006. Environmental governance. Annu. Rev. Environ. Resour. 31, 297–325.

Levin, K., McDermott, C., Cashore, B., 2008. The climate regime as global forest governance: can Reduced Emissions from Deforestation and Forest Degradation (REDD) initiatives pass a 'dual effectiveness' test? Int. For. Rev. 10 (3), 538–549.

Marfo, E., 2006. Powerful Relations: The Role of Actor-empowerment in the Management of Natural Resource Conflicts: A Case of Forest Conflicts in Ghana. (PhD Diss) Wageningen UR.

Maxcy, S., 2003. Pragmatic threats in mixed method research in the social sciences. The search for multiple modes of inquiry and the end of the philosophy of formalism. In: Tashakori, A., Teddle, V. (Eds.), Handbook of Mixed Methods in Behavorial and Social Sciences. Sage, London, pp. 51–89.

Mustalahti, I., Lund, J., 2010. Where and how can participatory forest management succeed? Learning from Tanzania, Mozambique, and Laos. Soc. Nat. Resour. 23, 31–44.

Neumann, R., 1997. Forest rights, privileges and prohibitions: contextualizing state forest-ry policy in colonial Tanganyika. Environ. Hist. 3 (1), 45–68.

Ostrom, E., 1990. Governing the commons. The Evolution of Institutions for Collective Action. Cambridge University Press, Cambridge.

Ostrom, E., 2011. Background on the institutional analysis and development perspective. Policy Stud. J. 39 (1), 7–27.

Peluso, N., 1994. Rich forests, poor people. Resource Access and Resistance in Java. University of California Press, Berkeley and Los Angeles.

Phelps, J., E.Webb, E., A.Agrawal, A., 2010. Does REDD+ threaten to recentralize forest governance. Science 328, 312–313.

Pierre, J. (Ed.), 2000. Debating Governance. Authority, Steering and Democracy. Oxford University Press, Oxford.

Pierre, J., Peters, G., 2000. Governance, Politics and the State. Macmillan, London.

Pulhin, J., W.Dressler, W., 2009. People, power and timber: the politics of community-based forest managementl. Environ. Manag. 91 (1), 206–214.

Rangarajan, M., 1996. Fencing the Forest: Conservation and Ecological Change in India's Central Provinces 1860–1914. Oxford University Press, Oxford.

Rayner, J., A.Buck, A., P.Katila, P. (Eds.), 2012. Embracing complexity: meeting the challenges of international forest governance. IUFRO World Series, 28.

Repetto, R., Gillis, M., 1988. Public Policies and the Misuse of Forests. World Resources Institute, Washington DC.

Ribot, J., A.Agrawal, A., 2006. Recentralizing while decentralizing: how national governments reappropriate forest resources. World Dev. 34 (11), 1864–1886.

Rose, N., Miller, P., 2010. Political power beyond the state: problematics of government. Br. J. Sociol. 61, 271–303.

Rosenau, J., Czempiel, E. (Eds.), 1992. Governance Without Government: Order and Change in World Politics. Cambridge University Press, Cambridge.

Sands, R. (Ed.), 2013. Forestry in a global context, 2nd ed. CABI, Oxfordshire.

Scott, J., 1998. Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed. Yale University Press, Cambridge Mass.

Strange, S., 1996. The retreat of the stateThe Diffusion of Power in the World Economy. Cambridge University Press, Cambridge.

Triantafillou, P., 2012. Decentralization as the exercise of power and autonomy — The case of Danish employment policyJ. Polit. Power 5 (1), 55–71.

Umans, L., 1993. A discourse on forestry science. Agric. Hum. Values 1993, 26–40 (Fall). UNFCCC, 2010. Report of the Conference of the Parties on its Sixteenth Session, Held in Cancun From 29 November to 10 December 2010.

Van Kersbergen, K., F.Van Waarden, F., 2004. 'Governance' as a bridge between disciplines: cross-disciplinary inspiration regarding shifts in governance and problems of governability, accountability and legitimacy. Eur. J. Polit. Res. 43, 143–171.

Van Tatenhove, J., Arts, B., Leroy, P. (Eds.), 2000. Political Modernization and the Environment. The Renewal of Policy Arrangements. Kluwer Academic Publishers, Dordrecht.

Vandergeest, P., Peluso, N., 2006. Empires of forestry: professional forestry and state power in southeast Asia. Part 1. Environment and History, 12, pp. 31–64.

Visseren-Hamakers, I., Glasbergen, P., 2007. Partnerships in forest governance. Glob. Environ. Chang. 17, 408–419.

Werland, S., 2009. Global forest governance: bringing forestry science (back) in. For. Policy Econ. 11 (5–6), 446–451.

Wiersum, F., 1995. 200 years of sustainability in forestry: lessons from history. Environ. Manag. 19 (3), 321–329.

Wiersum, F., 2009. Community forestry between local autonomy and global encapsulation: quo vadis with environmental and climate change payments? Paper Presented at First Community Forestry International Workshop, Pokhara, Nepal, September 15–

Winkel, G., 2012. Foucault in the forests: a review of Foucauldian concepts used in forest policy analysis. For. Policy Econ. 16, 81–92.

Wollenberg, E., Merino, L., Agrawal, A., Ostrom, E., 2007. Fourteen years of monitoring community-managed forests: learning from the IFRI experience. Int. For. Rev. 9 (2),

Woods, N., 2000. The challenge of good governance for the IMF and the World Bank themselves. World Dev. 28 (5), 823–841.