Coordinating lead author: Bas Arts

Lead authors: Marie Appelstrand, Daniela Kleinschmit, Helga Pülzl and Ingrid Visseren-Hamakers

Contributing authors: Richard Eba'a Atyi, Thomas Enters, Kathleen McGinley and Yurdi Yasmi

Abstract: Politics are not only about interests and institutions but discourses as well. Discourses are (dominant) ideas, concepts and categorisations in a society that give meaning to reality and that shape the identities, interests and preferences of individuals and groups. The assumption of this chapter is that forest discourses are constitutive to global forest politics. Three forest-related types of discourses are distinguished: meta discourses that relate to global economics, politics and culture; regulatory discourses that deal with the regulation and instrumentation of policy issues; and forest discourses that shape forest issues and policies in specific ways. On the basis of a scientific literature review, the main discourses within these three categories (meta, regulatory and forest discourses) as well as three regional forest discourses (Africa, Asia and Latin-America) are analysed. This analysis leads to a number of policy messages: (1) policy makers should try to understand and embrace discursive complexity (instead of artificially reducing it); (2) awareness of this discursive complexity improves global forest negotiations; (3) orchestrated collective action might lead to discursive change; and (4) there is a need for new, open, discursive arenas to improve global forest policymaking.

Keywords: Global forest policy, meta discourse, regulatory discourse, forest discourse, discursive arenas.

4.1 Introduction

CORE

It is generally accepted that the social and political sciences have undergone an "argumentative turn" (Fischer and Forrester 1993), meaning that, increasingly, scientists are taking the roles of ideas and discourse in political processes just as seriously as, for example, the roles of interests and institutions (Schmidt 2005). Words matter, as both mediums for and means of politics (Hajer 1995; Van den Brink and Metze 2006). Some scientists also claim that discourses *constitute* politics, and hence, conceptually, have precedence over interests, institutions and outcomes (Foucault 1994). Whatever one's approach (see Box 4.1 for an overview of the main discourse theoretical approaches), the argumentative turn justi-

fies the dedication of a chapter on forest discourses in this report.

This chapter shows that global discourses on forests have indeed shaped international policymaking over time and moreover that discursive change has gone hand-in-hand with policy change (Pülzl 2010). Moreover, it makes clear not only that discourses shape the thoughts, actions and identities of people (although this often remains unacknowledged), but also that political actors (try to) shape policy discourses strategically. In addition, policy discourses mediate choices of instrument (e.g. the neo-liberal discourse favours voluntary market instruments over state regulation).

In daily usage, discourse is often equated to 'mere discussion'. The meaning of the concept in political science, however, is very different. Hajer (1995: 44) for example, defines discourse as:

"An ensemble of ideas, concepts, and categorizations that are produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities."

This is just *one* of many definitions. In the broad review of literature on forest discourses presented in this chapter, we discuss various discursive approaches and definitions. Yet Hajer's definition offers a broadly shared 'anchor' for discourse analysis. A forest discourse can be considered as a set of ideas (e.g. 'forests as carbon stocks'), concepts (e.g. 'sustainable forest management' – SFM) and categorisations (e.g. forests versus non-forests) that are created and changed in forest-related social practices – such as global forest policy or forest sciences – and which give meaning to forests as both physical and social phenomena.

Crucial for discourse theory is not whether such ideas, concepts and categorisations are true or false but that they *exist* – shaped by certain social practices to help make sense of the physical and social worlds. It is also crucial that discourses are not considered to be 'objective givens' but, rather, 'historical constructs' of language-in-use, societal norms, various types of knowledge (e.g. scientific, professional and lay) and power mechanisms in a society over long time frames (Fischer 2003; Fischer and Forrester 1993). Hence, discourses are neither 'objective truths' nor 'false ideologies' but exist at the interface of politics, science, values and knowledge.

Discourses, like institutions, generally exhibit a so-called 'long durée' (Giddens 1984): that is, they can be very stable and they seldom change overnight. This does not, however, exclude discursive change, e.g. through agency. Discursive change agents are those actors, groups or coalitions that are able to reframe a certain discourse (Benford and Snow 2000; Schmidt 2008). The Brundtland Commission, for example, reshaped the sustainability discourse in the 1980s. Hence influential actors may change discourses, when, for example, their interventions resonate in the media, in science and in politics. So the relationships between discourses and actors is dialectical. Discourses shape the perspectives of actors, while the latter, in turn, can reshape the former. We assume a similar dialectical relationship between discourses and regulatory instruments. In a given period, the choice of instrument (e.g. protocol, fund, voluntary market) is not made in a discursive vacuum but is informed by the ideas, concepts and categorisations of the regulatory instruments that are dominant at the time.

Based on existing scientific literature this chapter presents a longitudinal analysis of global forest(related) discourses and their dynamics since the 1960s. We distinguish three types of discourses: (i) meta discourses that relate to global economics, politics and culture in general and that have affected forest-specific discourses (Section 4.2); (ii) regulatory discourses that deal with the regulation and instrumentation of global issues, including forests (Section 4.3); and (iii) forest discourses that have shaped international forest governance arrangements (Section 4.4). For each type of discourse, the role of actors in discursive dynamics is scrutinised (to the extent that literature is available). In Section 4.3, the dialectics between regulatory discourses and instrument choices in international forest governance are also analyced. Finally, we draw some conclusions on global forest discourse analysis in general and on global forest policymaking in particular (4.5). Media analysis however indicates that the global forest discourse is highly biased towards the Western world (see Kleinschmit 2010) and we assume the same for the scientific literature. Therefore, three text boxes provide African, Asian and Latin-American perspectives (see boxes 4.2, 4.3 and 4.4).

In undertaking this study we generally followed the 'IPCC model'; that is, we reviewed and integrated the *existing* scientific literature on forest(-related) discourses. Hence, readers should keep in mind that this chapter does not present a discourse analysis but, rather, a review of the literature on global forest(related) discourses. The basic method used for data collection and analysis, was a literature search based on Google Scholar, Scopus and ISI Web of Sciences using the key terms 'global', 'forest', 'discourse', 'policy', 'regime', 'actor' and 'instrument' (and their combinations and synonyms). This methodology implies that the overview of forest(-related) discourses is probably incomplete. Only those discourses (as well as actors and instruments related to those discourses) referred to in the existing scientific literature on global forest policy are listed and analysed below. Nonetheless, because only a relatively small part of the literature has a fully global perspective, scholarly literature using 'lower-level' conceptions of forest discourse is included as well.

4.2 Meta discourses

Based on our literature search, we reconstructed the emergence, fall and existence-in-parallel of a number of meta discourses that relate to global forest policy. In Figure 4.1 the environmental meta discourses are depicted in yellow. Overlapping those are the economic and governance meta discourses (in blue) and the regulatory discourses (in red). The meta discourses are discussed below; the regulatory discourses are addressed in Section 4.3.

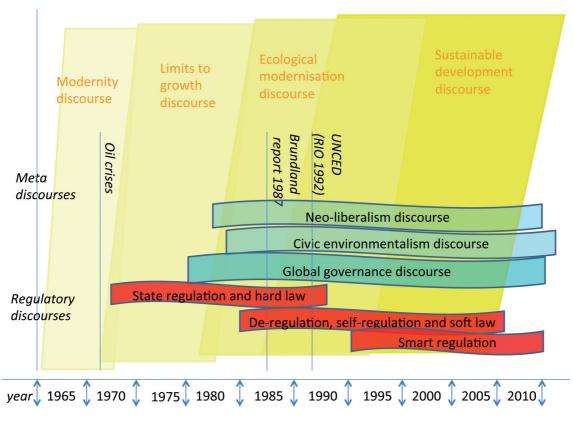


Figure 4.1 Meta and regulatory discourses.

Box 4.1 Discourse-theoretical approaches

There is no one discourse theory. Several approaches build on various ontologies, epistemologies, theories and methodologies, with a basic distinction between 'thin' and 'thick' discourse-theoretical approaches. Thin approaches consider discourse as one factor among others, such as agency, resources and rules, to explain politics. Hence, a distinction is made between the discursive and the non-discursive. Examples of thin approaches are frame analysis, theories of deliberative democracy and discursive-institutionalism; the latter, for example, considers discourses as sets of innovative ideas that can cause institutional change in a society. Thick approaches, on the other hand, do not distinguish between the discursive and the non-discursive. They consider that all reality is discursive and therefore socially constructed because it is impossible to escape a social system of meaning in order to directly observe reality. Hence, both the physical and social worlds are to be considered 'discursive

practices'. Critics of such views argue that, for example, a person will fall if he or she steps out of the window of a skyscraper, even if he or she believes otherwise. Adherents of thick approaches counter that the point is not that gravity does not exist but that observers do not have direct access to its 'material reality'. Examples of thick approaches are Foucault's post-structuralist philosophy, Fairclough's critical discourse analysis, and the work of scholars of the Essex School, such as Laclau, Mouffe and Howard. For Foucauldians, discourses are disciplinary ensembles of language, knowledge and power that produce the generally accepted objects and subjects of a society (the 'normal') and exclude the others (the 'abnormal').

Sources: Arts and Buizer 2009; Benford and Snow 2000; Fischer 2003; Foucault 1994; Pülzl 2010; Schmidt 2005, 2008; Van den Brinck and Metze 2006.

4.2.1 Modernisation

The modernisation discourse was mostly popular in the middle of the 20th century. According to Eisenstadt (1966), modernisation is both a type of change and a response to change (see also Halpern 1966). Thus, modernisation and its related development theories are based on the idea of economic growth, industrialisation, control over natural and social resources (including forests), and social change (Tipps 1973). According to this discourse, resources should be transferred from the agrarian sector to the industrial sector, which will lead to structural transformation (Rostow 1960 in Umans 1993: 28). Critics (e.g. Shils 1965) argue, however, that modernisation draws on Western values and views traditions as a barrier to virtue and progress. The modernisation discourse was mainly triggered by American elites.

4.2.2 Limits to growth

The 'discourse of limited growth' (Dryzek 1997) is a critical response to the modernisation trajectory, which produced an 'ecological crisis' (Berger et al. 2001). This crisis started to be acknowledged in the late 1960s and early 1970s. Before then, natural resources were seen as an indefinite resource (Porter and Brown 1991); they were strongly linked to the national or home environments and thus did not gain much global political attention (e.g. Dauvergne 2005: 11-12; Pülzl and Rametsteiner 2002). This discourse can be considered a radical discourse in the sense that it suggests absolute limits to growth. It holds that the carrying capacity of the Earth's ecosystem has been surpassed and that the planet's resources are (nearly) depleted. It provides specific solutions to global problems that focus mainly on technical fixes and political elites rather than on people and communities (Dryzek 1997: 34, 129). Critics (e.g. Sills 1975) however argued that the assumptions of this discourse are flawed.

A number of publications supported the elevation of environmental issues to the global (change) agenda, including "Silent Spring" (Carson 1962), "The Tragedy of the Commons" (Hardin 1968), "The Population Bomb" (Ehrlich 1968), "The Limits to Growth" (Meadows et al. 1972) and "Small is Beautiful" (Schumacher 1973). The emergence of the discourse was also linked to a number of global events, such as the United Nations Conference on the Human Environment (Stockholm, 1972), the creation of the United Nations Environment Programme (UNEP), the establishment of national environmental ministries, and the oil crisis (Pülzl 2010).

4.2.3 Ecological modernisation

This discourse, which has been influential in the past two decades, embraces the dominant socio-economic paradigm of technological progress within capitalist political economies and argues that economic growth and development can be achieved while protecting the environment. The ecological modernisation discourse has helped raise, within industrialised countries, the acceptance of environmental problems and the need for action (Bäckstrand and Lövbrand 2006). The identification of ecological modernisation originated with German social scientists (Huber 1982; Jänicke 1985 in Dryzek 1997: 141) and a meeting of the Organisation for Economic Co-operation and Development (OECD) in 1984.

From the perspective of ecological modernisation, environmental policymaking follows an approach in which nature is seen as both a resource and a pollutant recycler. It questions the limits-to-growth discourse by depicting environmental degradation as a solvable problem and - unlike sustainable development - does not necessarily argue for economic redirection (Dryzek 1997: 141-144). It is also strongly intertwined with the idea of a shift 'from government to governance' (see below), facilitating an enhanced role for the private sector and voluntary regulation. In sum, the ecological modernisation discourse calls for a 'decentralised liberal market order that aims to provide flexible and cost-optimal solutions to the environmental problem' (McGee and Taplin 2009; see also Berger et al. 2001).

Prominent actors in the promotion of ecological modernisation have included the World Bank, the OECD and corporate bodies (McAfee 1999). Support for this discourse is also growing among mainstream conservation organisations such as the International Union for Conservation of Nature (IUCN), the World Resources Institute (WRI) and the World Wide Fund For Nature (WWF) and among scientists and environmental policymakers. However, it has also created political space for counter-discourses of peasant and indigenous peoples' movements, with more radical non-governmental organisations (NGOs) challenging the 'techno-optimist' and 'eco-imperialist' claims of ecological modernisation.

4.2.4 Sustainable development

The sustainable development discourse became popular with the publication of "Our Common Future", although the idea emerged well before then (e.g. IUCN 1980). A second important event, which further facilitated the institutionalisation of this discourse, was the United Nations Conference on Environment and Development (UNCED), which was held in Rio de Janeiro in 1992. The sustainable development discourse is characterised by the following (Adger et al. 2001; Baker et al. 1997; Holmgren 2008; Jordan 2008; Lélé 1991; Pülzl 2010): (i) it does not acknowledge fixed limits to growth; (ii) it requires inter-generational and intra-generational satisfaction of one's needs (hence, equity among generations); (iii) the managerial notion of regulation prevails, since the dominant belief of UNCED was that global environmental problems are solvable through coordinated public and private action; (iv) the management, conservation and use of resources are not viewed as contradictory; and (v) other concerns, such as public participation, global equity and technology transfer from developed to developing countries are taken into consideration.

This discourse substantially overlaps with the ecological modernization discourse. Some authors (e.g. Hajer 1995; Pülzl 2010) argue that the former is part of the latter, and others (e.g. Dryzek 1997) treat them as separate. We decided to distinguish among them, however taking their strong overlap into account. One reason to differentiate between the two is that sustainable development exhibits a broader worldview than ecological modernisation – it's both more *global* in nature (taking into account the concerns of developing countries) and more *inclusive* (in addition to economic and ecological issues, it deals with social issues as well) (Arts 1994).

The scientific literature widely recognises the important role of the "Our Common Future" and NGOs, in the development and strengthening of the sustainable development discourse (Arts 1998; Hau-fler 1993; Humphreys 2008).

4.2.5 Neo-liberalism

The neo-liberalist discourse can be characterised as a meta discourse, because it influences a range of other discourses. Humphreys (2009) describes neo-liberalism as a highly political-ideological discourse (although there is a link with economics as a science - e.g. monetarism), attributing the following three principles to the neo-liberal discourse: (i) the increasing role of markets; (ii) the enhanced role of the private sector; and (iii) voluntary, legally non-binding regulation. In other words (see Jessop 2002), neo-liberalism seeks for market expansion, the deregulation of markets and the privatisation of state-owned enterprises and services. Accordingly, the role of corporate non-state actors in governance activities is increasingly advocated and expanded (McCarthy 2006: 99 in Toke and Lauber 2007: 679). The neo-liberalist discourse has been highly influential in international negotiations on various topics, including forests.

Several authors discuss the role of actors who represent the neo-liberal discourse in international regimes. For example, the neo-liberal discourse has been furthered by multinational corporations, who have promoted international regulatory convergence, standard setting and policy harmonisation (Dahan et al. 2006). According to Kamat (2004), a neo-liberal consensus exists within the Bretton Woods institutions - the World Bank and the International Monetary Fund (IMF) - and the World Trade Organization (WTO). Kamat also states that these institutions try to regulate civil society. On the one hand, these institutions are *pluralising* the term 'NGO' by also including market, industry and business actors in it. On the other hand, they depoliticise NGOs through their donor policies, causing community-based NGOs to move away from education and empowerment programmes towards more technical managerial approaches to social issues (Kamat 2004). Humphreys (1996, 2008) states that even though NGOs have sometimes successfully influenced international negotiations (see 'global governance' below), they have not been able to influence the dominance of the neo-liberal discourse.

4.2.6 Civic environmentalism

The discourse of civic environmentalism became popular in the 1992 with UNCED. Associated with this discourse is language of 'stakeholders' and 'participation', which entered the international arena accompanied by terms such as democratic efficiency, bottom-up approaches and governance arrangements (Bäckstrand and Lövbrand 2006). Authors differentiate between various types of NGOs and civic environmentalism. Humphreys (2004), for example, distinguishes outsider tactics of "system transformation oriented NGOs" from insider tactics of more collaborative, "system reformation oriented NGOs". Bäckstrand and Lövbrand (2007) divide the discourse of civic environmentalism into radical and reformist civic environmentalism. The former advocates a fundamental transformation of consumption patterns and existing institutions to realize a more eco-centric and equitable world order. The reformist civic environmentalism discourse suggests that increased stakeholder participation can enhance the legitimacy and accountability of multilateral institutions (McGee and Taplin 2009). Brosius (1999) describes reformist civic environmentalism as a discourse that excludes moral or political imperatives in favour of techno-scientific forms of intervention.

Several authors highlight the consequences of the reformist civic environmentalism discourse for the roles of NGOs. Lemos and Agrawal (2006), for example, emphasise the fact that outsiders and disempowered groups continue to have few opportunities for participation. Grassroots environmental movements are displaced by 'moderate' environmental NGOs (such as WWF and IUCN), and by large transnational institutions. Visseren-Hamakers (2009) warns that a more fundamental critique may become increasingly unaccepted in the longer term if the dominance of moderate NGOs continues. Falkner (2003) concludes that the involvement of NGOs in private governance alters their role and identity as non-state actors. They may become 'coopted', which would undermine their ability to play a 'conscience-keeping' role (Yamin 2001).

4.2.7 Global governance

Traditionally, global regulation has been used as a synonym for intergovernmental arrangements, ruled by sovereign nation states (Arts 2006). Since the 1970s, however, the role of the state as the prime sovereign agent of international (environmental) governance has declined. Instead, globalisation has enhanced public participation and increased the diversity of actors shaping environmental governance (Lemos and Agrawal 2006). Also, the diversity of rules - public, private, binding and voluntary - governing the environment has grown (Cashore 2002). Various authors (e.g. Martello and Jasanoff 2004) explain the rise of environmental governance at the global level in different ways. Some (Meidinger 1997) link it to transnationalism and the growth in global civil society; others (e.g. Falkner 2003) view the development of the 'late' capitalist forces as the source. Part of the global governance discourse is the quest for good governance. There is a broad consensus about its essential elements (Rametsteiner 2009): rule of law, accountability and transparency, participation, and effectiveness and efficiency.

The emergence of the global governance discourse has been shaped by many actors. For example, various scholars emphasise the role of international organisations, like the United Nations and the European Union (Arts 2006; Hunphreys 2008; Lemos and Agrawal 2006), while NGOs have also played influential roles. While pressuring for the protection of (tropical) forests since the late 1970s (Sears et al. 2001), NGOs were able to include language on participation, women, traditional forest-related knowledge, benefit-sharing and land tenure security in international environmental agreements (Arts 1998). Moreover, NGOs and private-sector actors have taken leading roles in private voluntary rulemaking, such as forest certification (Cock 2008; Elliott and Schlaepfer 2001a, 2001b; Humphreys 1996; Perez-Aleman and Sandilands 2008; Sears et al. 2001). Through certification, NGO involvement

has been institutionalised, policy making has been partly delegated to the private sector, and participation has been broadened (Elliott and Schlaepfer 2001a, 2001b).

4.3 Regulatory discourses

Regulatory discourses deal with the regulation and instrumentation of policy issues. These are distinguished from meta discourses in the sense that they are more directly related to policymaking through the shaping of regulatory styles and policy instruments within sectors. Nevertheless, regulatory discourses transcend individual policy domains (like forests), too; thus, in our view, a separate section on regulatory discourses is justified. The global governance meta discourse is related to the regulatory discourse, but we consider the former to be an overarching discourse, challenging the Westphalian nation-state model at a global level. Regulatory discourses, on the other hand, focus more on the concrete 'meso level' of organising policy implementation processes (although they may be influenced by global governance ideas). Below, three regulatory discourses are distinguished, as deduced from the scientific literature. These three seem to form regulatory 'phases' or 'fashions', chronologically replacing and partly paralleling each other over time (see Figure 4.1).

4.3.1 State regulation and hard law

In the late 1960s and early 1970s, as people increasingly became aware of and protested against environmental degradation, the response of most Western states was to initiate a wide range of laws in line with a command-and-control model (Gunningham and Grabosky 1998; Kirton and Trebilcock 2004). Thereby, these states were the main actors responsible for the development of the discourse. Even though this form of steering has never fully succeeded in supplanting other forms of social control, such as education, information, and voluntary agreements, it was the predominant legal discourse in early environmental politics and for a long time shaped environmental policy formulation. This form of steering is linked to the limits-to-growth meta discourse, which holds that natural resources are scarce and in need of protection.

A landmark for the 'greening' of global policy was the United Nations Conference on the Human Environment in Stockholm in 1972, which was the starting point of global environmental regulation. It was followed by the ratification of key environmental agreements in the 1970s such as the Ramsar Convention, the World Heritage Convention and the Convention on International Trade in Endangered Species (McDermott et al. 2007; Pülzl 2010). Dimotrov (2005) argues that, in general, states have internalised the "norm of environmental multilateralism", which implies that the neglect of important environmental issues, such as deforestation, can no longer be justified nor international environmental cooperation avoided. However, the reliance on intergovernmental regulation and hard law became subject to increasingly strong criticism. By the late 1970s it was evident that much command-and-control regulation had not performed the way in which policymakers had intended. In various cases it was found to be both ineffective and powerless (e.g. Elliott and Thomas 1993).

4.3.2 De-regulation, self-regulation and soft law

During the 1980s, neo-liberal tendencies in both politics and science turned against the existing topdown regulation system and advocated extensive de-regulation. The self-regulation of the market and voluntary policy instruments were believed to be more effective and efficient than the old 'rigid' regulation system (Humphreys 2008; Osborne and Gaebler 1992). As pointed out by Gunningham and Grabosky (1998), however the traditional legal type of steering succeeded in mitigating environmental deterioration in several areas (including forests). But this simple fact was downplayed by the discursive hegemony of neo-liberalism.

An important example of self-regulation in global environmental policy is corporate social responsibility (CSR). This discourse started in the United States of America and Europe in the 1970s (Charkiewicz 2005) and was developed by religious organisations, research institutes and NGOs. The 2002 World Summit on Sustainable Development in Johannesburg saw the consolidation of the global discourse on CSR in what was known as the "Global Compact" and in other partnerships between the United Nations and corporations. According to critics, CSR implies a further 'hollowing out' of the state. Charkiewicz (2005) claims that while it may position NGOs inside the corporate orbit, it simply offers them a "voice without influence".

The discourse on de-regulation has also affected global forest regulation. At UNCED a number of participants pushed for the creation of a legally binding agreement on forests (Humphreys 1996; Poore 2003; Pülzl 2010; Schneider 2006). No such agreement has so far been reached, however. Instead, two 'soft law' instruments on forests were produced: Chapter 11 of Agenda 21 and the Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests. In addition, the voluntary Intergovernmental Panel on Forests (IPF) was launched soon after UNCED to further the global forest dialogue (which proceeded in the Intergovernmental Forum on Forests, IFF, and the United Nations Forum on Forests, UNFF, later on). Over time, new voluntary rules were designed (including criteria and indicators for SFM and the Non-legally Binding Instrument on All Types of Forests). In line with these bottom-up approaches, forest certification was advocated by both NGOs and (part of) the corporate sector as a new 'non-state market-driven governance system' (Cashore 2002).

4.3.3 Smart regulation and instrument mixes

De-regulation has often not lived up to its promises. Gunningham and Grabosky (1998) therefore advocate a regulatory "third way" that positions itself between traditional top-down regulation and fashionable de-regulation. They call it "smart regulation", a term that has received considerable attention in the (scientific) policy literature (Howlett and Rayner 2004; Van Gossum et al. 2010). It refers to finding 'smart' solutions to complex policy problems, based on cleverly designed instrument mixes, both governmental and binding and non-governmental and voluntary, in order to create win-win solutions in specific policy areas. Smart regulation has particularly been applied to environmental policy, including forest policy (Van Gossum et al. 2009).

4.4 Forest discourses

All discourses *directly* connected to global forest policy are described here. Meta and regulatory discourses, as distinguished above, affect the initialisation and direction of forest discourses; similarly, forest discourses can play a role in shaping meta and regulatory discourses. For analytical reasons, forest discourses are here described consecutively, although in reality they are difficult to separate because they interact, overlap and compete with each other. Figure 4.2 depicts the intensity of the respective forest discourses in the period 1960–2005 (based on the literature review).

4.4.1 Industrial forestry

The industrial forestry discourse links forests to economic development, prioritising the production function of forests and seeking economic profit on the basis of the sustainable yield of the resource (Umans 1993). This discourse was supported by 'scientific forestry', which aimed to maximise the long-term economic return (Farrell et al. 2000). In line with the meta discourse on modernisation, foresters believed that the selection of fast-growing tree species as well as the harvesting of tropical wood in developing countries would trigger economic growth through the creation of wood-processing industries, thereby sustaining local livelihoods (Umans 1993: 28).

This discourse was dominant in the 1960s, especially in developing countries, where Western foresters advocated industrial forestry and Western companies attained large timber concessions. According to Umans (1993: 28), however, this discourse met with considerable criticism. Modernisation was perceived a threat to (small-scale) agriculture and considered contradictory to the 'limits to growth' discourse that dominated the 1970s.

4.4.2 Woodfuel crisis

The woodfuel discourse became prominent in local (African) areas in times of war and drought. Its global popularity started with the oil crisis in the early 1970s. Eckholm (1975) termed it 'the other energy crisis' of the 1970s. The argumentation at that time was that an increasing number of people in developing countries were becoming dependent on woodfuel for their energy needs; this would lead to a devastating depletion of forest resources, with huge negative consequences for local livelihoods (Arnold et al. 2006). In this way, the woodfuel discourse linked up with the discourse on deforestation (Cline-Cole 2007; see below). In the mid-1980s, however, it was argued that the nature and impact of the woodfuel crisis was overestimated (Arnold et al. 2006) and interest in this particular discourse declined, although it was later reframed into a discourse on wood energy in general and, most recently, into a discourse on innovative wood-based bio-fuels (Cline-Cole 2007).

4.4.3 Deforestation

Deforestation emerged as a global forest discourse in the 1980s and focused mainly on the destruction of tropical rainforests (Humphreys 1996). A collective metaphor used at the time for rainforests was that they were "the lungs of the world" (Adger et al. 2001). The content of the deforestation discourse changed over time, however. In the 1980s the discourse centred around the view that farmers were the main causers of tropical deforestation (Zhouri 2004). By 1990s however, famers had come to be perceived as victims, while logging companies and related transnational interests were identified as the main causes of tropical deforestation (Cline-Cole 2007).

Also in the 1990s, the deforestation discourse broadened in two ways. First, northern temperate and boreal forests were perceived to also be subject to deforestation (Pülzl 2010). Second, the discourse shifted towards the meta discourse on sustainable development and was linked to related issues such as biodiversity loss, poverty reduction and climate change. During the first decade of the 21st century, the discourse shifted again towards avoiding deforestation by compensating actors if they reduce deforestation (Singer 2008) mainly as a means to reduce carbon dioxide emissions.

In the emergence of the deforestation discourse, Western NGOs played influential roles. Stott (1999) even argues that NGOs (re-)invented the term 'tropical rainforest' using it to refer to virgin, undisturbed, old-growth forests in the tropics. Stott (1999) argues that the concept is a myth, since such forests are neither thousands of years old nor free from historicalcultural influences, and that the term represents a Western agenda.

4.4.4 Conservation in protected forest areas (forest parks)

The discourse on forest conservation was high on the international political agenda in the 1980s (Singer 2008). The scientific discourse on forest parks (legally designated protected forests) oscillates between the question of whether parks, fences and fines adequately protect biodiversity and the extent to which local residents should be involved in decision-making processes, should take on management responsibilities, and might wisely use some of the natural resources in protected areas (Hayes 2006). The advocates on 'people-free' parks focused on the protection of biodiversity by prohibiting human access . For many years this contested perspective dominated. At global level, however, the discourse on forest conservation became strongly influenced by sustainable forest management ideas after 1987. Now the 'sustainable use of forest resources' became part of the forest conservation agenda. Parks and people were no longer exclusively separated.

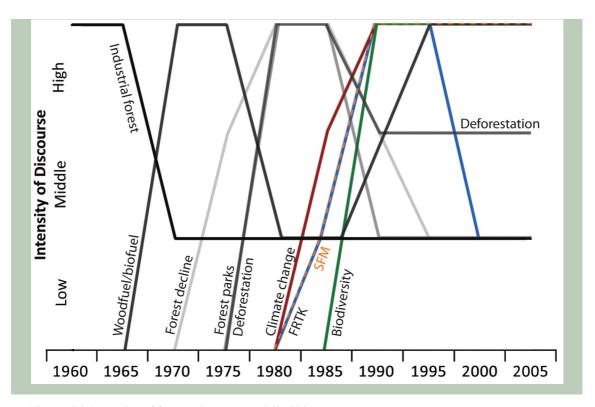


Figure 4.2 Intensity of forest discourses 1960–2005.

Box 4.2 Forest discourse in Africa

During the colonial era, European colonists greatly admired Africa's tropical forests for their exotic nature and complexity. They embarked on programmes of forest conservation, which resulted in the protection of large areas of forest. Most existing protected areas on the continent were created during the colonial period. After independence, however, in most African countries the views and discourses on forests underwent a series of changes driven by the quest for rapid economic development.

In the 1960s, the growth of the agricultural sector was very high on the agendas of all the newly independent African countries. For most, economic development was to be achieved through the production of cash crops such as cocoa, coffee and cotton and natural forests were considered simply as land reserves for agricultural expansion. In Cameroon, for example, natural forests were seen as potential areas for cocoa cultivation; the government facilitated land ownership for those people able to increase the value of rural lands by cutting down forests to establish cocoa farms, and international investors were invited to invest in industrial farms.

During the 1970s and the 1980s, partly because of the timber firms that were established to take advantage of cheap logging rights, the political elite started to identify the forest industry as a substantial contributor to national economies through enhanced foreign exchange earnings. In some Central African countries (e.g. Cameroon, Congo and Gabon), projects initiated with the support of the donor community conducted national forest resource inventories to enable better planning of forest industry development. In parallel, feasibility studies were undertaken for the establishment of large-scale timber-processing firms for the production of plywood, veneer and pulp.

After UNCED a new discourse was initiated that emphasised the need for sustainability in the management of African forest resources. Political stakeholders became eager to show their awareness of the key role they could play in both the sustainable management of natural resources and the development of the human societies they represented. An important moment in this discourse was the First Central African Heads of State Summit on Forests, which was held in March 1999 in Yaoundé, Cameroon. In the resultant Yaoundé Declaration, the Heads of State proclaimed: "The Heads of States proclaim: ...their commitment to the principle of biodiversity conservation and the sustainable management of the forests ecosystems of Central Africa...the right of their peoples to be able to count on the forest resources to support their endeavors for economic and social development"

Box 4.3 Forest discourses in Asia

Until the mid 1970s, most Asian countries were characterized by widespread poverty and economic growth was a top priority. Many countries used their vast and rich natural forests as engines of growth. Investments in forest industries increased dramatically, and the sector generated much-needed revenue to fund national development and the fight against poverty. During much of the 1970s and 1980s, forests were valued almost exclusively for their timber.

A significant shift began to take place in the mid 1990s as, increasingly, forests came to be valued for their environmental and ecosystem services. With this new valuation, efforts to restore and protect forests gained momentum. To some extent, this turnaround was triggered by the outcomes of the UNCED in 1992, and national governments began to realise that overexploitation had massive environmental and economic impacts. Logging bans became fashionable; in many countries, they are still in place. Most countries - and particularly China, Viet Nam and India - have also expanded protected areas and planted billions of trees on degraded lands. Most Asian forests are formally owned by the state. Hundreds of millions of rural people, however, are dependent on forests for their livelihoods, and thousands of domestic and international investors want to obtain land for development. As many actors simultaneously lay claims to

forests, conflicts inevitably arise, often involving local communities and indigenous peoples against forest industries and governments. In the past, local resistance to forest exploitation was often labelled as 'anti-government' or 'anti-growth'. When deforestation rates increased dramatically during the 1980s and 1990s it was therefore only a small step for local people to be branded forest destroyers. Shifting cultivation was, and to some extent still is, identified by governments, forest industries and development agencies as the main cause of deforestation.

By the 1990s, anthropologists had begun to show that blaming shifting cultivators for deforestation was both unfair and ungrounded. Shifting cultivation can be a sustainable practice that does less damage to forests than commercial logging operations. Traditional and indigenous knowledge became increasingly valued, with various local forest management systems described and recognised as sustainable and beneficial to biodiversity conservation. Widespread forest fires in 1997 also made clear to the world that small-scale farmers were not the main culprit, but large-scale plantation development was. Ultimately, local people came to be viewed as part of the solution to deforestation and forest degradation and as potential guardians of the forest.

4.4.5 Forest decline

The discourse on forest decline started in the late 1970s, hitting its peak in the mid 1980s. The starting points of the discourse were emerging environmental issues in Central and Eastern Europe (Hajer 1995; Hinrichsen 1987), and in the eastern part of North America (Skelly and Innes 1994). Forest decline was part of the acid-rain debate, in which acidic depositions produced by industry and traffic were held to negatively affect forests. The pollution prevention and precaution approach became the dominant policy on acid rain and thus the forest-decline discourse was linked to the ecological modernisation meta discourse (Hajer 1993). The forest-decline discourse coincided with growing interest in environmental issues (Kleinschmit 2010). Although the discourse is no longer hegemonic, the term forest death and even its original German variant Waldsterben is still used, albeit no longer restricted to acid rain (Krumland 2004).

4.4.6 Sustainable forest management

The SFM discourse is congruent with the meta discourse on sustainable development. It drew attention away from developing countries with tropical rainforest towards global threats to forests, raising issues such as participation, the distribution of production and consumption, and financial assistance and technology transfer from developed to developing countries (Holmgren 2008). The emphasis of SFM changed over time, away from timber production as the dominant use towards a broader understanding of the role of forests and their multiple-use management (e.g. Wang and Wilson 2007). This has especially been true at the global political level, where forests are increasingly understood as part of the global ecosystem and the importance of their global functions is gaining recognition. However, although the SFM discourse was meant to turn attention away from tropical rainforest countries, it has been criticised from within such countries for perceived Western bias (Bending and Rosendo 2003; Boyd 2009; Palmujoki 2009).

A more radical discourse, which centres on ecosystem management, is linked to SFM. This discourse, which originated in North-America in the 1970s, considers that nature is not only useful but also has intrinsic values (Dekker et al. 2007).

4.4.7 Forest biodiversity

The biodiversity discourse was cleaved by the diverging interests of developed and developing countries (Forte 1999). Since UNCED the biodiversity discourse has been associated with the discourse on social justice (Zhouri 2004). Besides conservation objectives, the issue of forest biodiversity has been intrinsically linked to access to resources and technology as well as to benefit-sharing in the sustainable use of forests. Since a global instrument for biodiversity, but not for forests, was agreed upon, forest biodiversity is dealt with globally mainly under the umbrella of the Convention on Biological Diversity (1992). However, critical scholars argue that the global agenda is driven by 'traditional forestry' because the focus has been on tradable biological and genetic resources - just as previously it was on timber (Forte 1999; McAfee 1999). Forte (1999) recognises a decreasing intensity in the biodiversity discourse, explained by a shift from the 'old' argument of protecting biodiversity for itself towards an argument of conserving tropical forests to address climate change. On the basis of this argumentation, some authors frame the global forest biodiversity discourse as ecological neo-liberalism, driven by supranational environmental institutions like the World Bank (McAfee 1999).

4.4.8 Forest-related traditional knowledge

The discourse on forest-related traditional knowledge mainly focuses on developing countries and their indigenous peoples and local communities living in forests. A major issue is the protection of intellectual property rights (Rosendal 2001). The discourse is closely linked to issues such as biopiracy, bio-prospecting, sustainable use and indigenous peoples as conservationists (Newing 2009). Besides the 'simple' knowledge about forests and their useful products, this discourse addresses the symbolic meaning of forests - such as forests as 'cultured spaces' or as 'wilderness' that remains beyond human control (Nygren 1999). The convergence of the discourse on forest-related traditional knowledge and the discourse on SFM has been emphasised by several scholars (e.g. Humphreys 2004). However,

the importance of the former decreased during the late 1990s.

An alliance of forest peoples, developmental NGOs and conservationists played an influential role in the emergence of the forest-related traditional knowledge discourse in the early 1990s (Newing 2009), building a public image of indigenous peoples as 'natural conservationists' who have important traditional knowledge. By mid 1990s, however, the compatibility between biodiversity conservation, development and indigenous peoples was increasingly being called into question. This was due largely to the further recognition of indigenous rights by the United Nations, which reduced the reliance of indigenous peoples on the alliance (Newing 2009).

4.4.9 Forests and climate change

Climate change gained international attention in the mid 1980s (Cohen et al. 1998). Since then 'forests in the context of climate change' has been part of a managerial discourse (Boyd 2009; Decasper Chacón 2009). Discussion on the Clean Development Mechanism (CDM) and reduced emissions from deforestation and degradation (REDD) are examples of attempts to find economically efficient solutions for several problems at once: deforestation, forest degradation, livelihoods and climate change (Boyd 2009). The global debate on forests and climate change currently focuses on REDD, which was placed on the global agenda in 2005 by the Coalition for Rainforest Nations (Papua New Guinea, Costa Rica and some other countries), supported by environmental NGOs (Boyd 2009). Ariell (2010) argues that the current debate on REDD is influenced by, among other things, the neo-liberalism discourse. Other critics are worried that biodiversity and livelihoods will be neglected or even sacrificed in an effort to maximise carbon budgets, or that REDD will diminish the incentives to change consumption patterns in developed countries in order to reduce carbon dioxide emissions (Lemos and Agrawal 2006).

4.4.10 Illegal logging

Another forest discourse emerged in the late 1990s when illegal logging became a major issue in international forest governance. The term was first mentioned in international negotiations in 1996 (McAlpine 2003) and again by the G8 Action Programme on Forest in 1998 (Humphreys 2008). By 2001, donors spearheaded by the United States Department of State, United Kingdom Department of International Development and the World Bank had

Box 4.4 Forest discourse in Latin America

In Latin America the development of forest policy instruments reflects changes over time in the legal and forest discourses. Early forest legislation was oriented predominantly toward forest extraction. For example, Ecuador's first forest law, enacted in 1875, declared public forests open to exploitation by all; an amendment in 1913 established taxes on the harvest of industrial wood. Nonetheless, the implementation of early forest laws was limited throughout the region and their influence on forested landscapes was minimal compared to the influence of agro-development policies that promote forest clearance for access to land and title.

By the mid 1900s, most Latin American countries had developed forest legislation that defined forest areas for protection and production, regulated forest harvests, taxed forest production, and established incentives for reforestation. Awareness of deforestation in Latin America and its impacts not only on economic but also environmental and social values grew domestically and globally during the 1960s and 1970s. This growing awareness was reflected in the contemporary public discourse, which included debate on 'protection versus production' and the development of forest policies that increasingly incorporated production, protection and conservation elements. Such forest policies principally took a command-and-control approach to forest use, and their influence was limited by a lack of enforcement.

Although most Latin American countries had, by the early 1990s, embraced and in many cases surpassed a goal of incorporating 10% of the total land area in protected areas, forest loss continued, as did pressures on the forest sector; this, in turn, often gave rise to increasingly complex forest management regulations at the domestic level. Such regulations echoed an increasing recognition of ecological and social forest values common to the international forest discourse and related agreements (e.g. Agenda 21, the Forest Principles and the International Tropical Timber Agreement – ITTA) at that time. For example, as indigenous and community forest rights became more prominent in the global forest discourse, conflicts emerged throughout Latin America between legal and customary access to forest resources, often leading policymakers to integrate indigenous and community rights into national forest policies and other related policies.

During the 1990s an effort was made to decrease state involvement in forest control, for example through the devolution of public forest lands, the development of fiscal incentives for sustainable forest management and reforestation, and the promotion of forest certification; nevertheless forest loss and degradation persisted in the region. In the early 2000s, new approaches to forest governance appeared that increasingly incorporated multiple instruments and actors in the administration of forests and their uses. In 2010, governmental forest regulation remains a key instrument in overall forest policy in most Latin American countries, as demonstrated by the recent and ongoing development of new forest laws across the continent. Notably, these new laws reflect a broader focus that aims to balance the production of forest goods and the protection of forest services. Moreover, forest policy processes have shifted from being predominated by governmental organisations towards a more pluralistic institutional structure that also incorporates the private sector and civil society.

convened on a process known as forest law enforcement and governance (FLEG) (Singer 2008). FLEG is designed to encourage the enforcement of forest laws in tropical countries and the eradiction of illegal timber from the domestic markets of importing countries. Participatory forms of governance have also been encouraged by FLEG (Bass and Guéneau 2005).

The G8 and World Bank have played major roles in developing the illegal logging discourse in general. Subsequently, the World Bank played an important role in the development of the Forest Law Enforcement and Governance processes in particular, and the European Union took up the issue in its Forest Law Enforcement, Governance and Trade (FLEGT) action plan (Gulbrandsen and Humphreys 2006). A number of NGOs have incorporated it in their campaigns, and the issue is also being addressed through bilateral and regional collaboration (Bass and Guéneau 2007).

4.5 Conclusions

This chapter reviewed the changes in global discourses and their related impacts on actors and policy instruments that have shaped international forest governance since the 1960s. Based on this longitudinal analysis, a number of conclusions can be drawn on forest(-related) discourses; actors; policy instruments; policy making; and public policy analysis.

4.5.1 Forest(-related) discourses

Various meta discourses that relate to forest policy as well as to other environmental policy areas are found in the scholarly literature: they are discourses on modernisation, limits to growth, sustainable development, ecological modernisation, neo-liberalism, civic environmentalism and global governance. These evolved over time and are rather well described in the scientific literature. Some discourses (e.g. ecological modernization and sustainable development) are said to be overlapping, some (e.g. limits to growth and sustainable development) are mutually exclusive, and others (e.g. sustainable development and neo-liberalism) are inclusive and seem apparently not contradictory. While the discourses on limits to growth, ecological modernisation and sustainable development succeeded each other with relatively little overlap, those on neo-liberalism, civic environmentalism and global governance have taken place more-or-less simultaneously. Three relevant regulatory discourses (regulation, de-regulation and smart regulation) were identified in the global forest policy literature; although they were initiated in sequence, they still exist in parallel and in combination.

These meta and regulatory discourses relate to other, more specific forest discourses on industrial forestry; the woodfuel crisis; deforestation; conservation in forest parks; forest decline; sustainable forest management; forest biodiversity; forest-related traditional knowledge; forests and climate change; and illegal logging. Some are relatively local (e.g. woodfuel) or focus on a specific group of countries (e.g. forest-related traditional knowledge), while others are more global (e.g. sustainable forest management). Some discourses have been reframed (e.g. the discourse on woodfuel and deforestation), some have lost importance (e.g. industrial forestry and forest decline), and others (e.g. conservation of forest parks) have been absorbed by the hegemonic sustainable forest management discourse.

4.5.2 Actors

From a discourse-theoretical point of view, discourses are said to influence actors' roles and perceptions and the other way around. However, we did not find many examples of scholarly work that directly linked actors' behaviour to discursive dynamics (or vice versa). The following roles of actors in the development of discourses feature prominently in the literature: (1) the role of NGOs in for example the sustainable development, illegal logging and forest certification discourses; (2) the role of international institutions such as the World Bank and the International Monetary Fund in the shaping of neo-liberalism and global governance; (3) the influence of business on for example the certification and CSR discourses; and (4) the roles of developed and developing countries in inhibiting the negotiation of a legally binding convention on forests.

Based on the literature review it can be concluded that discursive change can bring about changes in the types of actors that are involved in global forest governance. This governance system was dominated by states until the 1980s, the period during which the limits-to-growth discourse was hegemonic. The roles of non-state actors (including both private and civil-society actors) have grown significantly since the 1980s, when the ecological modernisation and sustainable development discourses were starting to dominate. The role of the Bretton Woods institutions in global environmental and forest politics has also become more prominent and they have been active in the development of policies that fit the neo-liberalism and ecological modernisation discourses well. However, the current hegemonic discourses tend to exclude specific types of actors, such as those NGOs with more radical perspectives and political critiques. They are increasingly being replaced by (more) moderate NGOs, whose strategies better match the current discourses on sustainable development and global governance.

4.5.3 Policy instruments

Three developments in the choice of policy instruments in global forest policy making can be observed in the literature. In the early 1970s, governments preferred command-and-control instruments for regulating environmental degradation. These were in line with discourses on woodfuel, deforestation and forest conservation. During the 1980s, however, the deregulation discourse which held that market forces would take care of the environment, became vogue, in line with neo-liberal ideas. In the 1990s there was a shift towards governance and so called 'smart regulation' which seeks to apply more pluralistic approaches to environmental protection. These changes in the choice of global instruments has gone hand-in-hand with a shift from hard to soft law. In the 1970s and beginning of the 1980s, legally-binding treaties that relate to protection issues (e.g. Ramsar Convention on Wetlands, Convention on International Trade in Endangered Species and Wild Fauna and Flora -CITES and ITTA) were concluded. In the 1980s and early 1990s, legally-binding instruments referring to both protection and management issues were agreed on (e.g. Convention on Biological Diversity - CBD, United Nations Framework Convention on Climate Change - UNFCCC and United Nations Convention to Combat Desertification - UNCCD), but a globally

binding forest treaty could not be concluded. More recently, several soft-policy instruments on forest use, management and conservation have been concluded by governments or initiated by civil society groups (forest certification schemes).

4.5.4 Policy making

What policy-relevant insights and lessons can policymakers draw from this chapter? It is difficult to directly retrieve useful policy recommendations from a review of scientific literature in which different (and often opposing) authors, approaches and policy perspectives are integrated. This is even more the case for discourse-theoretical perspectives, which generally do not lend themselves to 'linear' recommendations (i.e. 'if policy A, then effect B'). Nonetheless, we deem the following messages to be relevant:

- 1. Understanding and embracing complexity: Our review makes it clear that international forest governance is so complex because it is fuelled by and nested in many meta, regulatory and forest discourses that are taking place simultaneously. Although discourses may come and go, many exhibit a long durée, so that ever more forest(related) discourses exist in parallel over time. Policy actors may be influenced by all of them often subconsciously - or they may deliberately pick and choose ideas and arguments from them, for example to make choices on certain legal instruments. Hence, global forest policy making is far from coherent and consistent. This is not due to a lack of rationality in the system, but a consequence of (unacknowledged) discursive diversity. Hence, it seems better to acknowledge and embrace this discursive complexity than to try to reduce it artificially.
- 2. Awareness of discourses can improve negotiations: As discourses impact on actors' understandings and the way they rationalise policy problems, they also guide the formation of actors' interests and preferences. Neither interests nor preferences are written in stone. Scholars have shown that the influence of discourses on actors' perceptions of problems, preferred instrument choices and employed practices is substantive. Regularly, actors unconsciously identify themselves closely with certain (meta-)discourses, influencing the manner in which they frame issues. Thus, improved awareness about the development of discourses, relations among discourses, and one's own 'discourse attachments' can help policymakers to put current negotiations into perspective, to more easily take the lessons learned from earlier policy

initiatives into account, and to link forest negotiations to other discussions and meta discourses, thereby improving the negotiation process.

- 3. Discourses can be reframed collectively: Once actors are able to distinguish between discourses (e.g. neo-liberalism or SFM) and their employed mechanisms they can try to reframe the dominant discourses so that they resonate with their own policy preferences, thus granting such preferences more legitimacy and authority to the latter. To do this requires collective action and long-term commitment. Some scholars have developed 'framing strategies' to better relate individual and group frames to societal discourses (Benford and Snow 2000) Reframing can also be used to create synergies among actors. For example, global forest policy might need a new collective frame in order to overcome opposites in the current policy arena, to re-energise policymaking and to meet challenges such as climate change and competing claims on forest resources.
- 4. Need for open and deliberative arenas: In order to make such reframing processes possible, open discursive arenas' that allow the participation of relevant state and non-state actors, are needed to enable the deliberations and social learning necessary to create a new global forest policy that is future-proof. Here, participation should not be a hollow phrase. All relevant arguments should be heard, not only those of the 'usual suspects'. A global forest policy that is capable of meeting future challenges needs all the creativity and intelligence that it is possible to mobilise. This is not to say that a one-solution-fits-all outcome should be the result or that this will be possible or desirable once all arguments are on the table. On the contrary, the complexity of the forest issue and the need for future-proof policies require reflexive learning and adaptive management that enables experimenting, allows multiple pathways and accepts failure as part of a learning process that enables progress.

4.5.5 Public policy analysis

Given the high number of publications we encountered in the literature, discourse analysis is rather popular among forest policy scholars. We found, however, that the scholarly literature is fragmented with regard to the use of discourse-theoretical approaches. While some authors use the term discourse as a label for 'discussion', others employ diverse theoretical concepts that stem from various schools in a sometimes unsystematic manner. This creates confusion. This urges for more attention to be granted to theoretical concepts and methodological techniques. In addition, the scholarly literature is biased towards certain topics (e.g. neo-liberalism). Scholars should broaden their views and become (more) embedded in the general discourse theoretical literature as well as in the broader international relations literature.

Our review also shows that discursive shifts have rarely been analysed systematically. Nor did we find many references to discursive change agents, such as epistemic communities (Haas 1992) in the forest policy literature. This is particularly surprising given that scholars have concluded that scientific expertise has considerably framed other environmental debates (e.g. on climate change). Also, while individual leaders, such as Maurice Strong, Mustafa Tolba and Gro Harlem Brundtland, played particular important roles in global environmental governance (O'Neill 2009), the role of leadership has not been analysed in relation to forest policy. Thus, further research is necessary to systematically explain the shifts in forest discourses that have taken place, as well as to understand the policy roles played by scientists and individual leaders.

References

- Adger, Neil W., Tor A. Benjaminsen, Katrina Brown, and Hanne Svarstad. 2001. Advancing a political ecology of global environmental discourses. *Development and Chance* 32(4): 681–715.
- Ariell, Amelia. 2010. Forest Futures: A Causal Layered Analysis. Journal of Futures Studies 14(4): 49–64.
- Arnold, Michael J.E., Gunnar Köhlin, and Reidar Persson. 2006. Woodfuels, Livelihoods, and Policy Interventions: Changing Perspectives. *World Development* 34(3): 596–611.
- Arts, Bas. 1994. Dauerhafte Entwicklung: eine begriffliche Abgrenzung. Peripherie – Zeitschrift für Politik und Ökonomie in der Dritten Welt 54(August): 6–27.
- Arts, Bas. 1998. *The Political Influence of Global NGOs. Case Studies on the Climate and Biodiversity Conventions*. Utrecht: International Books.
- Arts, Bas. 2006. Non-state actors in global environmental governance – new arrangements beyond the state. In *New Modes* of Governance in the Global System – Exploring Publicness, Delegation and Inclusiveness, ed. Mathias Koenig-Archibugi and Michael Zürn. Hamshire: Palgrave Macmillan, 177–200.
- Arts, Bas, and Marleen Buizer. 2009. Forests, discourses, institutions: A discursive-institutional analysis of global forest governance. *Forest Policy and Economics* 11(5–6): 340–347.
- Bäckstrand, Karin, and Eva Lövbrand. 2006. Planting trees to mitigate climate change: contested discourse of ecological modernization, green governmentalism and civic environmentalism. *Global Environmental Politics* 6(1): 50–75.
- Bäckstrand, Karin, and Eva Lövbrand. 2007. Climate Governance Beyond 2012: Competing Discourses of Green Governmentality, Ecological Modernization and Civic Environmentalism. In *The Social Construction of Climate Change: Power, Knowledge, Norms, Discourses*, ed. Mary E. Pettenger. Aldershot: Ashgate Publishing, 123–147.
- Baker, Susan, Maria Kousis, Dick Richardson, and Stephen Young. 1997. The Politics of Sustainable Development. Theory, Policy and Practice within the European Union. London: Routledge.

- Bass, Steven, and Stéphane Guéneau. 2007. Global Forest Governance: Effectiveness, Fairness and Legitimacy of Market-Driven Approaches. In *Participation for Sustainability in Trade*, ed. Sophie Thoyer and Benoit Martimort-Asso. Aldershot, England; Burlington, VT: Ashgate, 161–183.
- Bending, Tim, and Sergio Rosendo. 2003. Forest Policy and the global portrayal of forest dwellers: understanding the role of environmentalist discourses in Brazil and Malaysia. CSERGE Working Paper EDM 03-17.
- Benford, Robert D., and David A. Snow. 2000. Framing Processes and Social Movements: An Overview and Assessment. Annual Review of Sociology 26(August): 611–639.
- Berger, Gerald, Andrew Flynn, Frances Hines, and Richard Johns. 2001. Ecological Modernization as a Basis for Environmental Policy: Current Environmental Discourse and Policy and the implications on Environmental Supply Chain Management. *Innovation* 14(1): 55–72.
- Boyd, Emily. 2009. Governing the Clean Development Mechanism: global rhetoric versus local realities in carbon sequestration projects. *Environment and planning* A 41(10): 2380–2395.
- Brosius, Peter J. 1999. Green Dots, Pink Hearts: Displacing Politics from the Malaysian Rain Forest. American Anthropologist, New Series 101(1): 36–57.
- Carson, Rachel. 1962. *Silent Spring*. New York: Houghton Mifflin.
- Cashore, Benjamin. 2002. Legitimacy and the Privatization of Environmental Governace: How Non-State Market-Driven (NSMD) Governance Systems Gain Rule-Making Authority. *Governance* 15(4): 503–529.
- Charkiewicz, Ewa. 2005. Corporations, the UN and Neo-Liberal Bio-politics. *Development* 48(1): 75–83.
- Cline-Cole, Reginald. 2007. Woodfuel Discourses and the reframing of wood-energy. *Forum for Development Studies* 34(1): 121–153.
- Cock, Andrew Robert. 2008. Tropical forests in the global states system. *International Affairs* 84(2): 315–333.
- Cohen, Stewart, David Demeritt, John Robinson, and Dale Rothman. 1998. Climate change and sustainable development: towards dialogue. *Global Environmental Change* 8(4): 341–371.
- Dahan, Nicolas, Jonathan Doh, and Terrence Guay. 2006. The role of multinational corporations in transnational institution building: A policy network perspective. *Human Relations* 59(11): 1571–1600.
- Dauvergne, Peter. 2005. Research in global environmental politics: history and trends. In *Handbook of Global Environmental Politics*, ed. Peter Dauvergne. Cheltham: Edward Elgar Publishing, 8–32.
- Decasper Chacón, Sandra M. 2009. *REDD: taking the Climate Change into Forests? En Environmentality Analysis.* Master en etudes du développement. Genève: Institut de Hautes Etudes Internationales et du Development.
- Dekker, M., Ester Turnhout, Bram Bauwens, and Frits Mohren. 2007. Interpretation and implementation of Ecosystem Management in international and national forest policy. *Forest Policy and Economics* 9(5): 546–557.
- Dimitrov, Radoslav S. 2005. Hostage to Norms: States, Institutions and Global Forest Politics. *Global Environmental Politics* 5(4): 1–24.
- Dryzek, John S. 1997. *The Politics of the Earth: Environmental Discourses*. Oxford: Oxford. University Press.
- Eckholm, Erik. 1975. *The Other Energy Crisis, Firewood*. Washington: Worldwatch Institute.
- Ehrlich, Paul 1968. *The population bomb*. New York: Ballantine Books.
- Eisenstadt, Shumuel N. 1966. *Modernization: Protest and Change*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Elliott, Christopher, and Rodolphe Schlaepfer. 2001a. Understanding forest certification using the Advocacy Coalition Frame-

work. Forest Policy and Economics 2 (3-4): 257-266.

- Elliott, Christopher, and Rodolphe Schleapfer. 2001b. The advocacy coalition framework: application to the policy process for the development of forest certification in Sweden. *Journal of European Public Policy* 8(4): 642–661.
- Elliott, Donald E., and Thomas, Michael E. 1993. Chemicals. In *Sustainable Environmental Law*, ed. Celia Campbel-Mohn, Darry Breen and William J. Futrell. St Paul, Minnesota: Environmental Law Institute.
- Falkner, Robert. 2003. Private Environmental Governance and International Relations: Exploring the Links. *Global envi*ronmental politics 3(2): 72–87.
- Farrell, Edward P., Erwin Führer, Dermot Ryan, Folke Andersson, Reinhard Hüttl, and Pietro Piussi. 2000. European Forest ecosystems: building the future on the legacy of the past. *Forest Ecology and Management* 132(1): 5–20.
- Fischer, Frank. 2003. *Reframing Public Policy. Discursive Politics and Deliberative Practices*. Oxford: Oxford University Press.
- Fischer, Frank, and John Forrester, ed. 1993. *The Argumentative Turn in Policy Analysis and Planning*. Durham: Duke University Press.

Foucault, Michel. 1994. Power. New York: The New Press.

- Forte, Janette. 1999. Emerging local and global discourses on NTFP use and study: a view from Guyana. In Seminar Proceedings NTFP Research in the Tropenbos Programme: Results and Perspectives, ed. Mirjam. A.F. Ros-Tonen. Wagningen: The Tropenbos Foundation, 33–43.
- Giddens, Anthony. 1984. The constitution of society. Outline of the Theory of Structuration. Cambridge: Polity Press.
- Gulbrandsen, Lars H., and David Humphreys. 2006. International Initiatives to Address Tropical Timber Logging and Trade. A Report for the Norwegian Ministry of the Environment. FNI Report 4/2006. The Fridtjof Nansen Institute.
- Gunningham, Neil, and Peter Grabosky. 1998. Smart Regulation: designing environmental policy. Oxford: Clarendon Press.
- Haas, Peter M. 1993. Epistemic Communities and the Dynamics of International Environmental Co-Operation. In *Regime Theory and International Relations*, ed. Volker Rittberger, with the assistance of Peter Mayer. Oxford: Clarendon Press, 168–201.
- Hajer, Maarten. 1993. Discourse coalitions and the institutionalization of practice: The case of acid rain in Great Britain. In *The argumentative turn in policy analysis and planning*, ed. Frank Fischer and John Forester. London: UCL Press, 43–75.
- Hajer, Maarten. 1995. The Politics of Environmental Disocurse, Ecological Modernization and the Policy Process. Oxford: Clarendon Press.
- Halpern, Manfred. 1966. The Revolution of Modernization in National and International Society. In *Revolution*, ed. Carl J. Friedrich. New York: Atherton Press, 178–214.
- Hardin, Gardin. 1968. The Tragedy of the Commons. *Science* 162: 1243–1248.
- Haufler, Virginia. 1993. Crossing the Boundary between Public and Private: International Regimes and Non-State Actors. In *Regime Theory and International Relations*, ed. Volker Rittberger, with the assistance of Peter Mayer. Oxford: Clarendon Press, 94–111.
- Hayes, Tanya M. 2006. Parks, People and Forest Protection: An Institutional Assessment of the Effectiveness of Protected Areas. World Development 34(12): 2064–2075.
- Hinrichsen, Don. 1987. The forest decline enigma. *BioScience* 37(8): 542–546.
- Holmgren, Lisa. 2008. Framing Global Public Policy on Forests. Sustainable Development and the Forest Issue on the UN Agenda 1972–2007. Doctoral thesis No. 2008: 2. Uppsala: SLU.
- Howlett, Michael, and Jeremy Rayner. 2004. (Not so) "smart regulation"? Canadian shelfish aquaculture policy and the

evolution of instrument choice for industrial development. *Marine Policy* 28(2): 171–184.

- Huber, Joseph. 1982. Die verlorene Unschuld der Ökologie. Neue Technologien und superindustrielle Entwicklung. Frankfurt: S. Fischer.
- Humphreys, David. 1996. Forest Politics. The Evolution of International Cooperation. London: Earthscan Publication.
- Humphreys, David. 2004. Redefining the Issues: NGO Influence on International Forest Negotiations. *Global Environmental Politics* 4(2): 51–74.
- Humphreys, David. 2008. Logjam. Deforestation and the Crisis of Global Governance. London: Earthscan Publication.
- Humphreys, David. 2009. Discourse as ideology: Neo-liberalism and the limits of international forest policy. *Forest Policy and Economics* 11(5–6): 319–325.
- IUCN (1980), World Conservation Strategy. Living Resource Conservation for Sustainable Development. Gland: IUCN.
- Jessop, Bob. 2002. Liberalism, neoliberalism, and urban governance: a state theoretical perspective. *Antipode* 34(3): 452–472.
- Jordan, Andrew. 2008. The governance of sustainable development: taking stock and looking forwards. *Environmental Planning C: Government and Policy* 26(1): 17–33.
- Kamat, Sangeeta. 2004. The privatization of public interest: theorizing NGO discourse in a neoliberal era. *Review of International Political Economy* 11(1): 155–176.
- Kirton, John J., and Michael J. Trebilcock. 2004. *Hard Choices* and Soft Law in Sustainable Global Governance. Aldershot: Ashgate.
- Kleinschmit, Daniela. 2010. Confronting the demands of a deliberative public sphere with media constraints. *Forest Policy* and Economics. Doi: 10.1016/j.forpol.2010.02.013.
- Krumland, Daniela. 2004. *Beitrag der Meiden zum politischen Erfolg.* Frankfurt a.m: Peter Lang Verlag.
- Lele, Sharachchandra M. 1991. Sustainable Development: A Critical Review. *World Development* 19(6): 607–621.
- Lemos, Maria Carmen, and Arun Agrawal. 2006. Environmental Governance. Annual Review of Environment and Resources 31(November): 297–325.
- Martello, Marybeth Long, and Jasanoff, Sheila. 2004. Introduction Globalization and environmental Governance. In *Local and Global in Environmental Governance*, ed. Sheila Jasanoff and Marybeth Long Martello. Massachusetts: MIT, 1–30.
- McAfee, Kathleen. 1999. Selling Nature to save if? Biodiversity and the rise of green developmentalism. *Environment and Planning D: Society and Space* 17(2): 133–154.
- McAlpine, Jan L. 2003. Conservation diplomacy one government's commitment and strategy to eliminate illegal logging. *International Forestry Review* 5(3): 230–235.
- McDermott, Constance L., Aran O'Carroll, and Peter Wood. 2007. International Forest Policy – the instruments, agreements and processes that shape it. UN Department of Economic and Social Affairs, United Nations Forum on Forests Secretariat.
- McGee, Jeffrey, and Ros Taplin. 2009. The role of the Asia Pacific Partnership in discursive contestation of the international climate regime. *International Environmental Agreements* 9(3): 213–238.
- Meadows, Donella H., Dennis L. Meadows, Jørgen Randers, and William W. Behrens III. 1972. *The limits to growth*. New York: Universe Books.
- Meidinger, Errol E. 1997. Look Who's Making the Rules: the Roles of the FSC and ISO in International Environmental Policy. *Human Ecology Review* 4(1): 52–54.
- Newing, Helen S. 2009. Traditional knowledge in international forest policy: contested meanings and discourses. *Journal of Integrative Environmental Sciences* 6(3): 175–187.
- Nygren, Anja. 1999. Local knowledge in the environment-development discourse: From dichotomies to situated knowledges. *Critique of Anthropology* 19(3): 267–288.
- Osborne, David, and Ted Gaebler. 1992. Reinventing government:

how the entrepreneurial spirit is transforming the public sector. Reading, Mass.: Addison-Wesley.

- Palmujoki, Eero. 2009. Global Principles for sustainable biofuel production and trade. *International Environmental Agreements: Politics, Law and Economics* 9(2): 135–151.
- Perez-Aleman, Paola, and Marion Sandilands. 2008. Building Value at the Top and the Bottom of the Global Supply Chain: MNC-NGO Partnerships. *California Management Review* 5(1): 24–49.
- Poore, Duncan. 2003. Changing Landscapes. The Development of the International Tropical Timber Organization and its Influence on Tropical Forest Management. London: Earthscan
- Porter, Gareth and Brown, Janet Welsh. 1991. *Global Environmental Politics*. Boulder, CO: Westview Press.
- Pülzl, Helga. 2010. Die Politik des Waldes. Wien: Böhlau Verlag.
- Pülzl, Helga, and Ewald Rametsteiner. 2002. Grounding international modes of governance into National Forest Programmes. *Forest Policy and Economics* 4(4): 259–268.
- Rametsteiner, Ewald. 2009. Governance Concepts and their Application in Forest Policy Initiatives from Global to Local Levels. *Small-scale Forestry* 8(March): 143–158.
- Rosendal, Kristin G. 2001. Overlapping International Regimes: The Case of the Intergovernmental Forum on Forests (IFF) between Climate Change and Biodiversity. *International Environmental Agreements: Politics, Law and Economics* 1(4): 447–468.
- Schmidt, Vivien A. 2005. Institutionalism and the state. In *The State: Theories and Issues*, ed. Colin Hay, David Marsh and Michael Lister. Basingstoke, UK: Palgrave Macmillian.
- Schmidt, Vivien A. 2008. Discursive institutionalism: the explanatory power of ideas and discourse. *Annual Review of Political Science* 11: 303–326.
- Schneider, Thomas, W. 2006. A non-legally-binding Instrument as an Alternative to a Forest Convention. Work Report. Federal Research Center for forestry and Forest Products, Hamburg.
- Schumacher, Ernst F. 1973. Small is Beautiful. A study of economics if people mattered. London: Blond & Briggs.
- Sears, Robin R., Liliana M. Dávalos, and Gonçalo Ferraz. 2001. Missing the Forest for the Profits: The Role of Multinational Corporations in the International Forest Regime. *Journal of Environment & Development* 10(4): 345–364.
- Shils, Edward. 1965. *Political Development in the New States*. New York: The Free Press.
- Sills, David L. 1975. The environmental movement and its critics. Human Ecology 3(1): 1–41.
- Singer, Benjamin. 2008. Putting the National back into Forest-Related Policies: the International Forests Regime and National Policies in Brazil and Indonesia. *International Forestry Review* 10(3): 523–537.
- Skelly, John M., and Innes, John L. 1994. Waldsterben in the Forests of central Europe and eastern North America: Fantasy or Reality? *Plant Disease* 78(11): 1021–1032.
- Stott, Philip. 1999. Tropical Rain Forest: A Political Ecology of Hegemonic myth making. *IEA Studies on the Environment* No. 15.

- Tipps, Dean C. 1973. Modernization Theory and the Comparative Study of Societies: a Critical Perspective. *Comparative Studies in Society and History* 15(March): 199–266.
- Toke, David, and Volkmar Lauber. 2007. Anglo-Saxon and German approaches to neoliberalism and environmental policy: The case of financing renewable energy. *Geoforum* 38(4): 677–687.
- Umans, Laurent. 1993. A Discourse on Forest Science. Agriculture and Human Values 10(4): 26–40.
- Van den Brink, Margo, and Tamara Metze. 2006. Words Matter in Policy and Planning; Discourse Theory and Method in the Social Sciences. *Netherlands Geographical Studies* Vol. 344, Utrecht: Netherlands Graduate School of Urban and Regional Research.
- Van Gossum, Peter, Bas Arts, and Kris Verheyen. 2009. "Smart regulation": can policy instrument design solve forest policy aims of forest expansion and sustainability in Flanders and the Netherlands. *Forest Policy and Economics*. In press. doi: 10.1016/j.forpol.2009.08.010.
- Van Gossum, Peter, Bas Arts, and Kris Verheyen. 2010. From "Smart regulation" to "Regulatory arrangements". *Policy science*. In press. DOI: 10.1007/s11077-010-9108-0.
- Visseren-Hamakers, Ingrid J. 2009. Partnerships in biodiversity governance: An assessment of their contributions to halting biodiversity loss. *Netherlands Geographical Studies* Vol. 387. Utrecht: Copernicus Institute for Sustainable Development and Innovation.
- Wang, Sen, and Bill Wilson. 2007. Pluralism in the economics of sustainable forest management. *Forest Policy and Economics* 9(7): 743–750.
- Yamin, Farhana. 2001. NGOs and International Environmental Law: A Critical Evaluation of their Roles and Responsibilities. *RECIEL* 10(2): 149–162.
- Zhouri, Andrea. 2004. Global-local Amazon politics conflicting paradigms in the rainforest campaign. *Theory, Culture* & Society 21(2): 69–89.