



1. Introduction: Research Background and Guiding Questions

The political contention that considers forests to be mere economic assets to achieve state welfare has slowly changed into a more conservative view since the Ninth World Forestry Congress in Mexico in 1985 rightly acknowledged that there has been severe tropical forest destruction and environmental deterioration around the globe. Since then, several international agreements to address specific forestry issues have been drafted and established as solid forms of forest governance (Humphreys, 2006). According to the Global Forest Expert Panel/GFEP (Glück et al., 2010), the core component of the international forest governance arrangements is “*international multilateral intergovernmental treaties and agreements which directly address forests, either focusing on sustainable forest management or more specific goals, such as biodiversity conservation or climate change mitigation; and have achieved, or have the potential to achieve, significant effects on forests.*” The GFEP further identified eight policy instruments as core components of the international forest regime complex, namely (i) Non-legally binding instruments on all types of forests (NLBI), (ii) the International Tropical Timber Agreement (ITTA), (iii) forest certification schemes, (iv) world trade agreements (WTAs), (v) forest law enforcement, governance and trade (FLEGT), (vi) the Convention on Biological Diversity (CBD), (vii) the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and (viii) the climate change regime (Glück et al., 2010).

International actors implemented those forms of international forest governance and their policy instruments in certain states. These included nation-state actors, intergovernmental organisations, treaty secretariats, multilateral financial institutions, regional and other multilateral organisations, nongovernmental organisations, and business and industry (Chasek et al., 2013), with the later addition of international bureaucracies and science networks (Biermann and Pattberg, 2012). However, the efforts of those actors to influence domestic forest policy faced many challenges. Lindstad and Solberg (2010) studied these challenges by determining the effect of international policy processes on forest protection in Norway using Underdal’s approach (2002). This approach requires three points of reference as a basis from which to measure influence, namely, the *initial situation*, a condition without a regime; the *actual situation*, an endpoint at which a regime performs within a certain time; and the *agreement’s objective*, the point where a regime’s performance is intended to be. They then calculated an effectiveness index using a formula proposed by the Oslo-Potsdam Solution (Helm and Sprinz, 2000), and found that a numerical value such as the effectiveness index increased confusion instead of providing enlightenment. In addition, this index could not separate the many influences resulting from national and international factors and, in addition, it could not provide clear figures for the cause-effect relationship and was only able to reflect a limited number of regimes in a regime complex.

Bernstein and Cashore (2012) argue that forest regime effectiveness is too complicated to measure, since regimes have multiple channels of influence and represent a complex (not a one-way) interaction between global and domestic politics. They then propose a shift in focus of study, from *effectiveness* to *influence*, and they develop four pathways of influence, specifically: international rules; international norms and discourse; markets; and direct access to domestic policy-making processes (Bernstein and Cashore, 2000, 2012). Wilson (2003) used the framework of four pathways later on to track transnational influence on the conservation of boreal ecosystems in Canada, and he found that each of them “works” in various degrees and reckoned that it seems to be used continuously. Since then there has been abundant research studying the influence of international forest-related regimes in specific



countries, for example: the influence of international actors in changing Brazil's position on climate change (Kasa, 2013), how the business sector led to the institutionalisation of unsustainable timber practices in Russia (Ulybina and Fennell, 2013), how multilevel governance motivated and facilitated knowledge transfer and learning in climate change negotiations (Rietig, 2014), how third-party organisations influence timber regulation in Sweden (Johansson and Keskitalo, 2014), the relevance of global and regional land use regimes in Indonesia (Sahide et al., 2015a), and the mapping of international actors' positions in domestic forest-related issues in Bangladesh (Rahman and Giessen, 2014), Argentina (Burns and Giessen, 2014) and Indonesia (Wibowo and Giessen, 2015a).

Although one may know a specific path has been used in influencing domestic forest policy, the ways in which international forest actors and governance work at a domestic level are unclear, as are the ways in which local bureaucracies respond to ideas until they are finally implemented, rejected or changed. In addition, an international forest policy instrument may be in intense competition with others. At this point, it is important to study in depth how local bureaucracies interact and form coalitions in response to international forest governance and its policy instruments, and what the results of this response are.

This dissertation seeks to explain this by using the example of Indonesia. Indonesia was selected as a country for study for three reasons. *First*, as a developing country, it is very influenced by international actors in terms of gaining financial support from foreign countries and international funding resources. *Second*, deforestation resulting from the development of forest plantations for pulp, paper and palm oil generates market resistance to those products, which influences the government's other decisions pertaining to forests. *Third*, the forestry sector is facing heavy pressure from agricultural, mining and plantation sectors, as local governments seek sources of income to fund their local development by converting forests to other more marketable sectors, resulting in intense competition among new and old state agencies. The REED+, One Map, and forest certification politics are selected as case studies for further analysis since the three cases have been identified as the most relevant forest issues in Indonesia (Wibowo and Giessen, 2015a). For this examination, this dissertation proposes its guiding question to be:

How do forest-relevant bureaucracies respond to new international forest governance?

In order to answer this main question, we suggest four other specific questions, namely:

- What policy instruments of international forest governance are trying to influence forest domestic policy?
- Who are the important domestic, non-domestic, and international actors involved in the policy process that pertain to specific forest issues?
- How do the main forest-related bureaucracies respond to forest policy introduced by other actors?
- What are political factors that influence the success of new forest-related policy?

These specific questions will be answered in a cumulative PhD dissertation consisting of 10 peer-reviewed publications. The brief descriptions of each work and contributions of the author of this dissertation (indicated in bold here and in the other articles in the list) and other individual authors to the constitutive publications (Article 1-5) are detailed below.

Article 1: **Wibowo, A., & Giessen, L.** (2015). Actor positions on primary and secondary international forest-related issues relevant in Indonesia. *Journal of Sustainable Development*, 8(3):10-27. This article identifies timber legality, climate change (including the REDD initiative) oil palm plantation and its environmental aspects, harmonisation of wood and forest certification schemes, land use change, forest and species conservation, and deforestation and decentralized forest governance as the



seven most relevant forest issues in Indonesia. Giessen developed theory and hypotheses of the study, and developed the methodology and methods. Wibowo adapted and applied the theory and hypotheses to the case, adapted and applied the methodology to the case, and produced case findings regarding international forest policies in Indonesia.

Article 2: **Wibowo, A., & Giessen, L.** (2015). Absolute and relative power gains among state agencies in forest-related land use politics: The Ministry of Forestry and its competitors in the REDD+ Programme and the One Map Policy in Indonesia. *Land Use Policy*, 49, 131-141. This article shows that the two forest-related policies involving many state agencies do not work well because there is no strong leading agency responsible for them. Giessen developed theory and hypotheses of the study, and developed the methodology and methods. Wibowo adapted and applied the theory and hypotheses to the case, adapted and applied the methodology to the case, and produced case findings regarding international forest policies in Indonesia.

Article 3: **Wibowo, A., Sahide, M.AK, & Giessen, L.** (2015). From voluntary private to mandatory state governance in Indonesian forest certification: Reclaiming authority and legitimacy by bureaucracies. Article submitted to *Global Environmental Change*. This explains the strategy of the Ministry of Forestry in increasing its influence over stakeholders along the value chain of domestic timber business by utilising its authority in the Indonesia-EU FLEGT-VPA negotiation. Giessen developed theory and hypotheses of the study, and developed the methodology and methods. Wibowo adapted and applied the theory and hypotheses to the case, adapted and applied the methodology to the case, and produced case findings regarding international forest policies in Indonesia. Sahide applied methodology to the case and produced case findings on Indonesian bureaucracies using international regimes.

Article 4: Pratiwi, S., **Wibowo, A., & Giessen, L.** (2015). Third-party certification of forest management in Indonesia: Analysing stakeholders' recognition and preferences. *Jurnal Manajemen Hutan Tropika [Journal of Tropical Forest Management]*, 21(2), 65–75. This describes the certification schemes preferred by industries and the criteria they use in selecting such schemes. The author contributed in the formulation of research questions, organising the research method, and discussing the results. Giessen developed theory and hypotheses of the study. Giessen and Wibowo developed the methodology and methods. Wibowo and Pratiwi adapted and applied the theory and hypotheses to the case, adapted and applied the methodology to the case, and produced case findings regarding international forest policies in Indonesia.

Article 5: **Wibowo, A., Pratiwi, S., & Giessen, L.** (2015). Comparing forest certification and timber legality systems in Indonesia: Complementary or competitive? *Environmental, Development and Sustainability*, under revision. This compares two international and one national forest certification scheme with the timber legality verification systems in Indonesia, using the Forest Certification Assessment Guide (FCAG), and concludes that each of those schemes are in competition and tries to delegitimise the others. The author contributed data analysis and the formulation of the conclusion. Giessen developed theory and hypotheses of the study. Giessen and Wibowo developed the methodology and methods. Wibowo and Pratiwi adapted and applied the theory and hypotheses to the case, adapted and applied the methodology to the case, and produced case findings regarding international forest policies in Indonesia.

The main contributions of each work to this study are given in Table 1.



Table 1: Overview of publications and their contributions to this study

No	Publication	Theory development	Development of methodology	Novel results
1	Wibowo, A., & Giessen, L. (2015). Actor Positions on primary and secondary international forest-related issues relevant in Indonesia. <i>Journal of Sustainable Development</i> , 8(3):10-27.		X	X
2	Wibowo, A., & Giessen, L. (2015). Absolute and relative power gains among state agencies in forest-related land use politics: The Ministry of Forestry and its competitors in the REDD+ Programme and the One Map Policy in Indonesia. <i>Land Use Policy</i> , 49, 131-141.	X		X
3	Wibowo, A., Sahide, M.A.K., & Giessen, L. (2015). From voluntary private to mandatory state governance in Indonesian forest certification: Reclaiming authority and legitimacy by bureaucracies. Article submitted to <i>Global Environmental Change</i> .	X		X
4	Pratiwi, S., Wibowo, A., & Giessen, L. (2015). Third-party certification of forest management in Indonesia: Analysing stakeholders' recognition and preferences. <i>Jurnal Manajemen Hutan Tropika [Journal of Tropical Forest Management]</i> , 21(2), 65–75.			X
5	Wibowo, A., Pratiwi, S., & Giessen, L. (2015). Comparing forest certification and timber legality systems in Indonesia: Complementary or competitive? <i>Environmental, Development and Sustainability</i> , under revision.			X

We selected findings from the works listed above to answer the specific research questions posed in advance, and structured them according to following sections:

- Theoretical framework on bureaucratic politics, domestic politics in response to international forest regimes, theory of power, and the concept of absolute and relative power gain;
- Methodological framework for data collection and analysis of international forest issues relevant in Indonesia, the role of influential actors in specific cases, bureaucracies respond to forest policy introduced by other actors, and power dynamics of actors involved;
- Results, highlighting the selection of international forest governance forms by domestic bureaucracies, the effort bureaucracies make to restore their authority over forests, the international influence on forest politics, the forming of super bureaucracy and its suspension, and symbolic forest policy; and
- Strategic options for selected actors. Based on scientific findings, this last chapter offers strategic policy suggestions for selected policy actors. Two major national agencies affected by international forest regimes, the Ministry of Environment and Forestry and Lembaga Ekolabel Indonesia, serve as examples for the transfer of findings to political practice.

A detailed picture of these forest politics assignments could be used to explain the cause of forest policy failures in the past or estimate the degree of success of future forest policy processes and/or implementation from the perspective of bureaucratic politics. Therefore it could be useful information for other countries. The studies in this dissertation contribute an explanation of how international actors choose and forge alliances to implement their forest-related policy agendas in Indonesia.



2. Theoretical Framework

This study drew on the theory of international influences and bureaucratic politics. It analysed domestic consequences at national level, focusing on the power structures among the main actors, and not on policy content as such. Below is a brief description for each of the concepts and theories used in this dissertation, and a summary of their uses in publications, presented in Table 3.

2.1. Bureaucratic politics

Bureaucratic politics theory is used to accommodate a broader palette of actors that may be influencing forest policies at national level. According to Bauer et al. (2012: 28), *bureaucracies* are “agencies that have been created by governments or other public actors with some degree or permanence and coherence and beyond formal direct control of single nation governments and that act in the international arena to pursue a policy.” *Bureaucracies* are different from *organisations*, which are institutional arrangements built upon normative frameworks, members, and bureaucracies as administrative core institutions; and *institutions*, which are merely sets of principles and norms (Bauer et al., 2012: 28-29).

Bureaucracies have a formal goal in serving the public interest and an informal goal in surviving and in expanding organisational interests, like maximising power, budget and staff; where organisational interests are prioritised if formal and informal goals cannot be achieved simultaneously (Niskanen, 1974; Krott et al., 1990; Peters, 2002; Allison and Zelikow, 1999). Although this seems to be logical, the behaviour of a bureaucracy as noted above is not homogenous, since it depends on the capability of each bureaucrat to gain personal benefit (Blais and Dion, 1990). As an initial assumption, this study accepts that Niskanen’s view is widely applicable. To pursue those dual goals, bureaucrats could act as political institutions and administrative bodies (Krott, 2005). As political institutions they are equipped with legitimacy, public mandate, financial resources and competent staffs; and as administrative bodies, bureaucracies have expertise and information, administrative ideology, decision-making power, alliances, permanent positions, and a disregard for politics.

Giessen et al. (2014) show that utilitarian (economic) bureaucracies compete with specialised bureaucracies in international forest and forest–environmental policy negotiations, which suggests that the economic interests of the state figure strongly in forest-environmental negotiations. Based on this propensity, one can argue that competition for budget allows ministries in charge of economic tasks (e.g., ministry of economics) to have more power in deciding which foreign ideas should be adopted. In contrast, as environmental issues are discussed with increasing intensity in the arena of international negotiations, bureaucracies with environmental duties (e.g., ministry of the environment and ministry of economy) also have more power to justify their programmes in order to succeed within “the global agenda”. Based on this thought, this dissertation theorises that bureaucracies compete to secure external support due to internationalisation of forest issues, which can also be used to increase legitimacy, power source, and bargaining positions for strategic tasks at a domestic level.

2.2. Domestic politics' response to international forest regimes and influential local actors

In response to a policy agenda introduced by foreign actors, domestic bureaucracies have the options to reject, fully accept, partially accept, or change such an agenda. The decision depends greatly on the



degree to which they receive benefits like increased staff, working plans, and formal tasks (Peters, 2002). In general, policy process carried out by bureaucracies in response to new policy agendas will go through five stages of a policy cycle (Howlett and Ramesh, 1995:13), namely, agenda-setting, policy formulation, decision-making, policy implementation and policy evaluation. Prior to reaching the decision-making stage, any idea could be changed if it does not match the interests of the bureaucracies.

Major policy changes in a country may occur if external political, economic and social conditions change significantly (Giessen, 2011), through processes involving, among others, policy learning; ideas and discourses; policy entrepreneurs and experts; policy networks, subsystems and their bureaucracies; external shocks and crises; internationalisation trends; veto players; ruling political parties; and institutional change (Giessen et al., 2014). These are the starting points for changes that allow bureaucracies to contact international actors, negotiate their interests, set up coalitions, arrange mutual agendas, and finally, gain power. Power and information become important factors used by bureaucracies to achieve conflict resolution between actors in forest utilisation conflicts (Krott, 2005).

International forest policies intended for implementation on the ground should involve provincial and district governments, non-governmental organisations, local people, and forest-related associations in the policy-making process, as these are influential stakeholders in forest affairs (Nurrochmat et al., 2015a). In addition, the success of recent forest policy developments demands the participation of local people, respect for indigenous people rights, and openness toward public input (Bernstein and Cashore, 2012), which are closely linked with those non-state actors. That is why, despite the fact that this dissertation focusses on the bureaucratic politics surrounding forest resources, the above actors are always taken into account in the analyses to some extent.

2.3. Theory of power

As mentioned earlier, bureaucracies can only run any policy if they are equipped with the "fuel" which political literature calls *power*. After analysing various power theories by Weber (1972), Giddens (1984), Arts and van Tatenhove (2004), Lukes (1974), Dahl (1957) and Simon (1981); Krott et al. (2014) presented the actor-centred power (ACP) approach as a new analytical framework for assessing bureaucratic obstacles faced by forestry programmes. Krott et al. (2014) define power as a *social relationship in which actor A has the ability to alter the behaviour of actor B without recognising B's will*. In other words, power could be the ability to shape a programme according to one's own interests, even against resistance from other actors. According to Krott et al. (2014), power consists of three elements, and it can be ascribed to one actor or it can be distributed among several, equal actors. The first element of power, *coercion*, is defined as altering the behaviour of the subordinate by force. In a social relationship, coercive power is associated mainly with bureaucracy, where the people provide the bureaucracy with a mandate through law for it to implement any agreed rules and to reinforce such rules by applying sanctions to those who disobey them. The second element is *(dis)incentives*, which is defined as advantages or disadvantages introduced to alter the behaviour of the subordinate. Authorities could direct others' behaviour by introducing a disadvantage, e.g., the revocation of permits for forest concessionaires, for those who fail to perform harvesting operations in an ecologically sound manner. Advantages could also change subordinates' behaviour because all actors naturally desire to maximize their benefits. The last element of power is *dominant information*, which means unverifiable information. Information can be classified as pure information, which can be easily verified by recipients, and selected information, which recipients can verify only with difficulty, or not at all, due to a lack of capacity, lack of will, or distrust in the information provider.



Dominant information becomes an element of power because actors without valid information cannot easily make appropriate decisions. In this context, dominant information includes any information that can be provided only by a state agency and that is needed by other stakeholders. In some cases, the absence of such information for the public due to ‘unwillingness to share’ or ‘unavailability to share’ could be used to increase the bargaining position of the agency responsible for it. Table 2 gives an overview of these three power elements.

Table 2: Elements of power and their definitions, facts and examples

Element	Definition	Observable facts	Example
Coercion	Altering behaviour by force	Revocation of rights or physical action, threat of either	Removal of forest user rights
(Dis-) incentives	Altering behaviour via (dis-)advantages	Providing of, or threatening with the removal of sources of material and immaterial benefit	Financial support
Dominant information	Altering behaviour by means of unverified information	Providing of, or threatening with removal of, source of unverified information	Exclusive data from the Ministry

Source: Krott et al. (2014)

This study uses the ACP approach rather than the *three dimensions of power* by Lukes (2005), which is widely acknowledged as the main literature on the power concept (McCabe, 2013), because the ACP approach focusses on *power as property*, namely, the power to do something, regardless of whether this power is used (see Wibowo and Giessen, 2015b) for substantive discussion on both approaches). On the other hand, Lukes’ *three dimensions of power* and previous works in which he criticized, e.g., Dahl (1957) and Bachrach and Baratz (1962), are focused on *power as domination*, widely known as power over (Haugaard, 2012), which may be identified from observable (overt and covert) and latent conflicts (Lukes, 2005: 29). In brief, Krott et al. (2014) assess “in terms of what” an actor has power, while Lukes (2005) assesses “over whom” an actor has power.

2.4. Absolute and relative power gains

The concept of absolute and relative power gains is used specifically in Article 2 (Wibowo and Giessen, 2015b), when the author analyses the power dynamics of the Ministry of Environment and Forestry and other bureaucracies in Indonesian REDD+ and One Map politics. This concept allows the author to quantify the power gained by each bureaucracy within a period of time and helps to decide who the real winner is in either forest policy process. Prabowo et al. (2015) acknowledge that simultaneous use of absolute and relative power gains concept and ACP approach by Wibowo and Giessen (2015b) has been enhancing the application of ACP approach.

In short, this concept enables the user to decide the real winner among two or more actors by comparing the amount of absolute/ultimate gain it obtains from its initial capability. The ratio of both figures is called relative gain (Halas, 2008). The actor with the higher percentage of relative gain is seen as the winner, compared to other actors with lower percentages of relative gain. There are three conditions under which a player can be considered the winner. First, when it has lower capabilities but obtains the same amount of absolute gain as that obtained by others. Second, when it has capabilities similar to those of to others but obtains more absolute gain. Lastly, when it has a higher capabilities and obtains more relative gain. An example of a winner would be a younger brother who receives as



much money as his older brother from their parents, though he requires less to cover his needs than his older brother does. In the study, initial capability is a power source held by any actor, such as budget allocation, number of staff, strategic tasks, and exclusive information, whereas absolute gain refers to strategic tasks. The selection of strategic tasks as single indicator of absolute gain is based on the fact that every task should be equipped with sufficient power elements.

Table 3: Concepts and theories used in publications

Identity of publication	Bureaucratic politics	Local actors' response	Theory of power	Absolute and relative power gains
Article 1	X	X		
Article 2	X	X	X	X
Article 3	X	X	X	
Article 4	X	X	X	
Article 5	X	X	X	



3. Methodological Framework

All ten articles in this dissertation utilise well-established methods in data collection, namely observation, interviews, and document analyses. Specifically, those methods were used together with online survey to identify stakeholders' perception on forest certification schemes working in Indonesia (Article 4) and Forest Certification Assessment Guide (FCAG) to compare the standard of forest sustainability certification and timber legality verification (Article 5). Below are brief descriptions of the methods used in this dissertation.

3.1. Non-participant observations

According to Fenno (1986), observation is at the heart of political analysis since it shows the real behaviour of observed object in a certain period of time; hence what it demonstrates can be seen as the truth. Patton (2005) points out that observation, together with interview and content analysis, are useful and credible methods in qualitative research.

The author acted as a non-participant observer to record opinions, interests, and alliances made by the actors in several national and international forestry meetings between June and September 2013 in Bogor and Jakarta. The meetings included the National Conference on the Future of Production Forest Management (4 September 2013), the National Seminar on Indonesian Palm Oil (2 July 2013), the National Workshop on the Strategic Steps Post-Constitutional Court Ruling No.35/PUU-X/2012 (22 August 2013), the Indonesian Roundtable on Greening the National Development Plan (21 June 2013), National Workshop on the Forestry Law: Constitutional Court Ruling No.35/PUU-X/2012 (29-30 August 2013), Workshop on Community-Based Forest Management (25 July 2013), and several meetings of NGOs concerning forest resource governance.

In each occasion the author noted the main messages delivered by the governments, international organisations, academics, NGOs, indigenous people, the business sector and other participants, and considered them to be the official position of the speaker on a particular issue. During coffee break, the author interacted with the participants, gathered their "less official statements" and handled them as primary data.

The challenge in collecting data through observation was that the actors involved in many meetings were more less the same, and therefore they slowly became aware of the presence of an outsider in their circle and became more distant in their conversations with the author. On the other hand, the author was aware that "the speakers" in Indonesia's forest governance are limited to persons in the capital, with very narrow involvement of the stakeholders from the provincial and district levels. The decision-making processes on regulations or recommendations generated from the meetings produced even by fewer people.

3.2. Expert interviews

Expert interviews are the second method used to gather data from the interviewees who had already been contacted before. The author classified as "experts" those who had at least five years of experience or held a PhD degree in a specific area of Indonesian forest governance. Harrison (2013) has suggested that information gathered from interviews should be categorised as raw data and that it



should be checked against other sources. In this research, the author conducted semi-structured interviews, i.e., a conversation between interviewer and interviewee on specific predetermined topics, but one where participants are free to change the issues if they feel this is important (Longhurst, 2003).

The author uses interviews to identify the main actors and their positions on specific forest issues. Actors' positions and their prospective coalitions were gleaned from Faggi et al. (2014), Lozano (2013) and Tuppura et al. (2015). In analysing actors' positions we assumed that every actor behaved rationally, meaning that actors tried to maximize their own benefit rather than to promote a general goal, like maintaining environmental sustainability and equality. To contest norm- and interest-driven is acceptable (see: Van Schaik and Schunz, 2012; Gulbrandsen, 2003), since each actor (which can be an individual, organisation or state) has its own interests, adding to their effort to find common aspirations.

The main challenge in identifying the positions of actors (individuals who represent organisations or entities) is that they are present in many field of discussion about forestry, such as the preservation of local rights, timber legality, the REDD+ Programme, and palm oil plantation. One person could be a member of more than one organisation; hence the information about new forest policy circulates only within a limited number of people. Furthermore, the author found it difficult to separate between personal and organisational views within the interviewees' statements, therefore the author explicitly avoided the inclusion of these statements in the text.

3.3. Content analysis

Content analysis is a widely used qualitative research technique to interpret meaning from the content of text data (Hsieh and Shannon, 2005). In this book content analysis was used to analyze policy documents issued by the governments, stakeholders' opinion related to international forest issues in public media, stakeholders' position papers, and standards and systems established by relevant sources. We scrutinized total of 17 official documents issued by President and Government of Indonesia, 2 ministries and three other national bureaucracies in order to identify the power dynamics of bureaucracies in REDD+ and one map policies (Wibowo and Giessen, 2015b). As many as 19, 14, 24, and 3 standard, procedure and regulation of certification developed by FSC, PEFC, LEI and the Ministry of Environment and Forestry, respectively, were compared and assessed against FCAG framework (Wibowo et al., 2015b). In Nurrochmat et al. (2015b) we analyzed legal and sustainable timber regulations from ten ASEAN member states and seek options for beneficial timber trading inside ASEAN. Those documents were categorized and framed under corresponding theories in each article.

Specifically we used content analysis with some extend over public and professional media to identify international forest issues in Indonesia (Wibowo and Giessen, 2015a). For this we undertook two steps. First, we chose two national newspapers in the Indonesian language, the *Media Indonesia* and *Kompas*, and a national newspaper in English, namely *The Jakarta Post*. The combination of keywords *hutan* ("forest"), *kayu* ("wood"), *internasional* ("international") and *global* were inserted in each newspaper's search engine to elicit a first set of 200 relevant articles in order to identify relevant international issues within Indonesian public deliberation. Whether an article was considered to be relevant depended on the connection of its content with international forest-related issues in Indonesia. Second, based on identified keywords in the first step, the *Google* search engine was employed to find more relevant and concrete articles and comments. Only articles from public mass media were considered in order to map the public deliberation on a given issue. To explore deeper deliberations and to gather other relevant issues, the authors collected data from professional journals in the fields of