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Politic Constellation of Forest Management on Climate Change in Indonesia

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Abstract

Indonesia's involvement in various international agreements expects to engage sustainable forest management. Indonesia adopted several international conventions, as well as United Nation Framework on Climate Change Convention. Nevertheless, forest management problems do not diminish. National policies in response to the Convention are constructed. Diverse interests are contested during raising of climate change policy processes, either in the forum of the Convention or the national policy. Actors within interests fabricated discourses and networks to establish certain narrative. This research highlights narrative of climate change that is deforestation and forest degradation would be able to reduce by incentive mechanism, while narrative of Indonesian forest management is by fairness tenure. The underlying problem of forest governance, particularly tenure governance does not being a prioritizing for forest management in Indonesia.

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There is constellation magnitude of politic for policy change in regards economic interest and to eradicate climate disaster interest. Actors within interests play central role in the policy making process whereby works the bargaining power, circulate the knowledge, generate the networks, or coalesce discourse as power of politic within certain narrative.

Keywords: Forest Policy; International Climate Change Relation; Sustainable Forest Management.

1. Introduction

Policy-making influenced by global political power, particularly in the power of a global actor interest [1]. Facing conserve forest, since 1972 Indonesia has ratified various international conventions, to address national policies towards sustainable forest management. International agreements prioritize and benefit to national interests [2].

It has been more than four decades the ratification of international treaties. Sustainability of forest is facing many problems and conflicts. Illegal logging progressively more widespread [3] even illegally circulating in cross country [4] tenure conflicts of society increasingly wide open and some have involved international actors [5] reduce in biodiversity; rising endangered species [6] chance the illegal trade of endangered species in cross country [7] discourse of "the Forest First" dominates [8] forest communities remain poor and marginalized [9]; even deforestation and forest degradation persist to elevate [3].

In 1994, by the Law No. 6 of 1994, the President ratified the Convention on Climate Change. Ten years later, the President enforces the Kyoto Protocol through the Law No. 17 of 2004. Since the ratification, policies in the field of forestry progressing quickly respond to the Climate Change Convention. Associated with the ratification of the Convention on Climate Change, persistent issues of forest management, in the time of ratification of the Convention has been adopted since 1972; generate a question: would ratification be able to encourage national policies towards sustainable forest management? Furthermore this research to analyze the politic constellation of Indonesia forest management on Climate Change Convention. The purpose of this research are: (1) analyzing the politic of Indonesia state related to the Climate Change Convention (2) analyzing the ability of climate change convention to drive for policy changes to address the root problems of forest management in Indonesia.

2. Methods

To answer the policy making is a political process [10, 11, 12] excavated by understanding the International Development Studies (IDS 2006) process of policy formulation. The debate on climate change negotiation process, extracted from the data and information covering the instrument discussion and debates that occur daily records, obtained from the secretariat of the Convention on Climate Change and the International Institute for Sustainable Development (IISD), that describe actors, interests, narrative, network and so politics which works onto. Similarly, associated with the Climate Change Indonesian policy, explored from the policies that is created by the Government of Indonesia to respond to the Convention, as well as documents regarding the drafting process. To deepen the excavation of the results of the findings, key informant interviews were conducted to clarify the findings of the analysis carried out by researchers. The key informant represent of the government

and NGOs. Consistency and coherence reflects the authentication information and the reflectivity of the reality/value research. This study was conducted over 24 months from May 2012 to April 2014.

3. Results and discussion

3.1. Contestation of Discourse

This research shows that international climate change constructs two different discourses in which play an important role in contested issues. These are green development discourse and conservationism discourse. Proponent of development discourse is developments/industries countries; while conservationism discourse is least developing/developing countries. These discourses have several argumentations as shown in Table 1. Both of discourses are constructed by economic frame, shaped by narrative of an economic towards an environment view, as storyline shown in table 2. The green development discourse argue that economic save an environment, obviously a stabilize atmosphere earth temperature from global warming. On the other hand the conservationism discourse assume that economic degrade an environment.

Central argument of green development discourse is that the forest natural resources as capital development to support economic growth for human welfare. Economic growth may increase human welfare, providing energy for humans to save the environment. Through Science and technology built by forest resources, the human be able to manage the environment. Conservationism discourse assumes that the forest is a buffer environmental quality of human life. Forest exploitation will damage the quality of the environment. Without a good quality of environment, the results of the development will be not working in vain because of the disasters caused damage to the environment.

3.2. Narrative of Forest Management in Indonesia

In Indonesia home country, the problem of deforestation and forest degradation in the scale of 1.17 million ha/year to 3.51 million ha/year [3, 13] is the failure indicator for forest management. The symptoms widespread tenure conflicts, not only access even the ownership, its more open; extend to move on the issue of human rights and latently. Tenure conflict is more escalating. Agricultural Development Commission (KPA) argues, that since the year 2009 until the year 2013 agrarian conflicts increase 3 times [14]. The forestry sector occupies the highest position, even an increase in land area as much 6 times compared to before year 2009. The most actors involved are private corporations or states corporations with the local community. The location of the conflict spread across 32 provinces. This happens from the accumulation of poor forest governance and land issues [15] dualistic scale of the map in the same location, the dualistic view between forestry and agriculture, dispute the authority of the central government and local governments, egosectoral [16] and corruption [17]. Legislation and management policies of land are not formulated clearly, disputably, overlap, even conflict between the policy; the policy deteriorate the other policies [17].

Tenure is associated with land access and ownership. Analysis of this research carried out on the level of rights to land, such as alienation rights, exclusion rights, management rights, the right to take the product and access rights [18].

Table 1: Discourses and Its argumentations in the Climate Change Conferences

	Green developmentalism discourse: Economic growth save an environment	Conservationism discourse: Economic growth degrade an environment
Central argumentation	The forest natural resources as capital development to support economic growth for human welfare. Economic growth may increase human welfare, providing energy for humans to save the environment particularly stabilize a climate. Through Science and technology built by forest resources, the human be able to manage the environment.	The forest is a buffer environmental quality of human life, particularly stabilization of climate. Forest exploitation will damage the quality of the environment. Without a good quality of environment, the results of the development will be not working in vain because of the disasters caused damage to the environment.
Arguments in the economic context	• Economic growth will damage the environment to a certain critical point, after that, growth actually increase the quality of the environment. • Social discount is negative, assuming the value of well-being in the time dimension	• Economic growth and the accumulation of wealth is the cause of environmental degradation. Economic growth is continuously damaging the environment • Social Discount is positive, assuming the uncertainty in the time dimension
Argumentations in the climate change context	• Heating /cooling of the Earth is a function of space and time • Science is currently not sufficiently able to infer events 100 years • A sharp rise in the temperature of the earth is not proven • Heating the Earth had no significant impact (negligible) to humans, because the human excellent adaptability. Evolution is the human defense system of the natural limitations. • Warming of the climate is the phenomenon of macro-cosmos (the geometry of the earth to the sun), solar radiation and the effect of turning on atmosphere. • Heating of the earth even extreme is a natural cycle of the planet (the evolution of the ice age cycles, growth century etc.) • The situation is local climate. In one region within certain limits do not affect other areas. At the same time, one can experience the cooling region, while in other regions warming.	• GHG emissions per capita is a function of time • With the knowledge of modeling and simulation, the state of the next 100 years can be predicted. • Earth heats up and sharpened since year 1900s • Global warming caused by anthropogenic (human) cause catastrophic • Heating of the earth's (scenario disaster / calamity, catastrophic scenario, alarmist scenarios) • Climate influence globally. The climate in the south may affect the climate in the north and vice versa, because the air is an integral atmosphere space.

Source: Primary Data Analysis, 2014; elaborate Wittmer dan Birner, 2006; Jacobs, 2012

In reference to the Schlager and Ostrom, the results of the analysis of narrative tenure briefly describe as Table 2. Narrative of forest management tenure revealed a weakening of the rights of the community to access, take benefit of forest products, or farming in forest areas. Policy makers of the Indonesian Government made efforts to deprive the rights of land [5]. Economic relations, social and historical relations were broken by the presence of concession [19, 20, 21]. The assemble narrative is a tenure narrative that reduces up to remove the rights of communities to forest products and forest areas, furthermore the tenure conflicts and deforestation are persevered. There are several attempts to provide space for the community, however, re-countered by following policy. Community resistance become latently arise [22]. The narrative consistently affirmed by key informants, revealed that nearly a century, there is a tendency of tenure policy maker actor has no desire to reformulate tenure policies in forest management in Indonesia. Policies actually allowed, somehow constructed overlapping, unclear, ambiguous, inconsistent, conflict with other policies that do not synergize to achieve forest sustainability. Thus, the issue of tenure is not a matter of priority in forest management in Indonesia.

Table 2: Narrative of Indonesia Forest Management

Period	Narrative/storyline
1927-1956: Old Regime, Centralization, Exploitation of Forest Product	Dutch East Indies government/Indonesia government has the rights of alienation. Concession Permit Holders have the rights of exclusion. Communities have the rights of exclusion Analysis: Position of Concession Permit Holders rights and community rights grow land boundary conflict [18, 19, 21].
1957-1960: Old Regime, Decentralization, Exploitation of Forest Product	The Central Government has the rights of alienation. The Provincial Government has the rights of alienation. District Government has the rights of alienation. Concession Permit Holders have the rights of exclusion. Communities have the rights of alienation. Analysis: The position of community rights and Concession Permit Holders rights construct land boundary conflict. Likewise, the central government and local governments could potentially be a conflict of authority. [18, 19, 21].
1960-1970: New Regime, Centralization, Exploitation of Forest Products	The Central Government also has the right of alienation in outside Java. The Concession Permit Holders have the rights of exclusion. The community rights is not clear. Analysis: Position of Concession Permit Holders rights rise, the community rights threatened to eradicate [18, 19, 21].
1970-1990: The New Regime, Centralization, Forest	Central Government has the alienation rights in outside Java. The Concession Permit Holders have the right of exclusion. The community rights is still not clear (hazy). Analysis: Position of Concession Permit Holders rights rise, the community rights in forest areas eradicate. There is

Period	Narrative/storyline
Land Use Arrangement (TGHK)	enormous potentially conflict between the community and Concession Permit Holders [18, 19, 21].
1990-2000: Reformation, Decentralization, Limited exploitation of Forest Product, Region spatial planning/Provincial Spatial Planning/ synchronization	The Central Government has the rights of alienation. The Provincial Government has the rights of alienation. District Government has the rights of alienation. The concession permit holder has the rights of exclusion. The community has a right to manage. Analysis: The rights of the central government and local government, provincial governments and the district have the potentially conflicts of authority. Position of the Concession Permit Holders slightly deteriorates. The rights of people in forest areas strengthened. There is still a potential conflict of land boundaries [18, 19, 21].
2000-2011: Reformation, Decentralization, Appointment of Forest Management Unit	Central Government (Ministries related to Forestry) has the rights of alienation. Ministry of Agriculture, Ministry of mining has the rights of alienation. District Government has the rights of alienation. The concession permit holder has the rights of exclusion. Community rights eliminated. Analysis: The rights of the central government and local government, provincial government and district government have potentially conflict of authority. There are potential conflicts among sectors with respect to land use. Position concession rights rebound, the rights of community in forest areas removed. There is a potential conflict of boundaries between that community and concessionaires. [18, 19, 21].
2012-2014: Reformation, Decentralization, Conflict Resolution	There are the same conditions as the period 2000-2011, but the central government alienation Rights (Ministry of Forestry related) begin to be restricted. The rights of communities to use/manage the forest begin to be recognized, but not guaranteed. [18, 19, 21].

Source: Primary Data Analysis, 2014

This reflects the policy conditions such as regulatory and policy functions of the legislation is not reached [23] which is regulation successfully organize and gain public legitimacy [21] not achieved; policy which has fairness force, failed [17]. Policy functions only on mere administration, obviously the administration approaches. Narrative tends to land tenure centrally controlled by the government, more over land use policies tend to be approached by means of licensing, or protection of utilization, which negates the benefit of community [24].

On the other hand, the earth atmosphere temperature heats up due to a sharp increase in the concentration of greenhouse gases. Global warming causes a natural disaster. Forest has a role to contribute in a reduction of greenhouse gases emissions concentration [25] by which reduction of deforestation and forest degradation. Dealing with facing deforestation and forest degradation, table 3 briefly describes how the narrative of the existence forests roles towards greenhouse gas concentration in the climate change conference. Analysis performed within two periods, with the base of following the achievement of emission restriction commitments

for the countries of the Conference of the Parties of the Kyoto Protocol in 1997 and Amendments to the Kyoto Protocol in 2012.

Table 3: Narrative of Climate Change Negotiation Process

Period	Narrative/storyline
1962-1997 Commitment I, Towards the Kyoto Protocol, Annex I emission limitation	Countries aware the destruction of nature, the atmosphere temperature of earth heats up 2 ° C per century. GHGs are anthropogenic gases, cumulative and long life (even CO_2 up to 115 years). GHG produce radiative forcing, thus increasing the level of heating. There is the role of forests, which contributes 17.4% of global emissions. Resulting CO2 emissions from deforestation and decay of biomass accounted for 17.3% of global emissions. To reduce GHG emissions, insist a role of multilateral, including the commitment of developed countries. Non-Annex I countries bear the negative impact (natural disasters, social disaster) because warming of the earth atmosphere temperature. Necessary restrictions on emissions for developed countries (Annex I). Developing countries (non-Annex I Parties as members) are not required to reduce emissions. Countries with tropical forests are almost entirely not mandatory emissions reduction, whereas in the management of tropical forests, the IPCC acknowledges the substantial contribution to greenhouse gas concentrations. Contestation of developed countries versus developing countries, more powerful than the emission production state versus emissions reduction state. Annex I countries can reduce their own emissions or compensate for the negative impact of the provision of services or compensate for emissions reduction. Analysis: Forest plays a role in reducing GHG. Annex I Parties shall provide incentives for states that forest owners shown to reduce emissions. Annex I Parties are also necessary to help the forest management to reduce deforestation and forest degradation through capacity building and technology transfer, which in turn provides incentive for countries that are proven to reduce emissions.
1998-2014 Commitment II, Addendum Towards the Kyoto Protocol, Restricting emission limits of Annex I	Deepened global warming reaches 5 ° C per century. If no deep cuts action, bear bigger and/or faster disaster occurred. Fire of forest and decay of biomass are a high emitter, as well as deforestation and forest degradation. Costs of reduction due to emissions incurred 5 times compared to the costs for GHG reduction actions. Increasingly powerful role of forests: calculations based on the principle of additional of carbon, containing the release of emissions, emission absorption and storage of emissions (emission, sink, stock; ESS), the estimated afforestation, reforestation and deforestation. By reduce emissions, benefit for conservation. Emissions of Annex I Parties between 10.3% -19.4%, with a population of 19.7% of the total world population. While emissions of non-Annex countries, which has a population of 80.3%, accounted for 7.8% -17.3% emissions. Strictly necessary emission limitations for developed countries (Annex I). Tropical forest owners are given the opportunity to voluntarily reduce their emissions. Provide incentives for countries with tropical forests be able to reduce deforestation, with additional principles. Analysis: GHG reduction action more imperative. Insist Annex I countries to immediately reveal commitment to provide incentives to owners of tropical forests for reducing deforestation and forest degradation.

Source: Primary Data Analysis, 2014

By Table 3, the Climate Change Convention negotiations construct a narrative that is the problem of deforestation and forest degradation in countries with tropical forests can be suppressed by the incentive mechanism of GHG emission reductions by developed countries.

Almost all products of Indonesian policy response is concerning onto the Climate Change Convention mechanism, obviously the launch of the implementation of the Climate Change Convention does not imply for policy changes regarding to the root of the problem of forest management in Indonesia.

Narrative convention contested by Indonesia state is a convention mechanism, which contesting about the commitment of developed countries, solidarity with the affected countries, compliance, and methodology of calculation of emission reductions. The underlying cause of persistence of forest deforestation and forest degradation is failure of tenure governance, as a basic of land management. This issue is poorly contested. On the other side, the preparation of Indonesia in the Convention on climate change negotiations tends to incentive mechanism oriented, as well as administration. It is confirmed that the governance of tenure problems is considered as a matter of home country.

3.3. Interests of Actors

In the forum of the Convention are approximately 195 state actors. There are six groups, i.e. developed countries, developing countries, Least Developed Countries, Small Developing States, (SIDS), Non Governmental Organization (NGO) and multilateral international organizations. By the analysis of the national communication documents of states parties to the Convention are identified at least nine interests, among others (1) fossil fuel production (2) the industry (3) negatively impact that are vulnerable countries to global warming; (4) positively affected, (5) struggle for sovereignty and the fate of the impact of colonialism, release from dependence on developed countries (6) combating environmental and regional solidarity; promoting regional peace and stability through respect for justice and the rule of law, (7) FFP consumption, (8) improving economic conditions (9) zone of peace, freedom and neutrality and nuclear-free zone.

Strong interest is the reducing of deforestation and forest degradation, fairness tenure, biodiversity and conservation, law enforcement. Powerful actors are forestry ministry, the ministry of Energy, Ministry of agriculture, and local government. Powerless actors are NGOs, while community and private sector absence from policy making process. Somehow, NGOs allocate their time resource between participating on forum of climate change convention and fundraising, which attracts private donations [26].

3.4. Powering Politic

Discourse is particularly pertinent to the study of climate change because it provides a framework that is sensitive to the political construction and use of scientific knowledge [27]. The degree of success of policy change by joint knowledge depends on the actors involved, contents of dominant discourses, presence of rules and the availability of resources [28]. In Climate Change Conference, both of Green development discourse and conservationism discourse constitute in the economic framework, wherein the danger and the dispossession of

the atmosphere [29]. The economic perspective of the green development discourse is different from the perspective of conservationism discourse. The green development narrative is counter-narrative for conservationism narrative and vice versa.

Green development discourse promoted by industrialized countries, while conservationism discourse promoted by countries where in threatened by climate disasters. Countries building a knowledge to reach the own interest, that is an industry/economic benefit of certain countries, similarly a conservation interest of others. The strong 'materialization' of discursive shifts in forest management imply policy change as well as sustainability effects on the ground. Green development discourse itself is a coalition discourse build by developmentalism discourse and conservationism discourse [30]. Sustainable development discourse opened the door to coalitions, which succeeded in combining economic interests with ecological aims [31].

Although within the same framework of economic, industrial interests prioritize a profit and market, while the conservationists prioritize stabilization with preservation of environmental quality and protection. Mission of industry interests encompasses developing GHG disaster adaptation systems, the impact of the compensation system, incentive system (mechanism of environmental services) and the internalization of environmental costs. Option for industrialized countries is to prioritize the incentive system, the system of compensation and contesting mechanism for environmental services. Incentives system and compensation systems designed by industrialized countries, to offer incentives to the parties that provide reduction of greenhouse gas concentrations. The principle of compensation is constructed to provide compensation for disaster borne by certain parties. Thus, argument to strengthen adaptation to climate change is an orientation of the mission.

It is opposed by countries threatened disaster prone. The drought and threat of sea level rise of African countries, small island coastal state more urgent more than others countries, these are related to the survival of the nation [32]. Compensation system and incentive systems are considered still provide space industry practices regardless of the environment. Conservationists insist to immediately stop adding of greenhouse gas concentrations, i.e. reducing GHG emissions, such as by the action of deep cuts. Conservationists promote an additional principles and to strengthen mitigation actions. This is disputed by the industrialized countries, because it would threaten the survival of the industry. By reducing GHG will deteriorate their industrial activities, thereby ultimately weaken the economic situation. On the other side, the acceleration of the Asian economies become increasingly however strengthened its own concerns for the countries the United States and Europe, which is threaten the United States and European markets. The taken approach is oriented south-north negotiating compensation [33, 34, 35] also donor-recipient negotiation [26].

Negotiations then move to the initiation to internalizing environmental costs. Waste treatment policy will add up a total operating costs and profit industries as such affecting the selling price of industrial products. That is closely associated with the purchasing power of consumers and ultimately to the market demand. Environmental costs are also not cheap [36] likewise also environmental tax policy. It is still not getting a deal in the negotiations of the Convention. Negotiations with respect to them is often become a dead lock, because it does not obtain the agreement of the parties that threatened its interests.

Powerful actors are developed countries/industries. Powerless actors are poor countries and/or vulnerable to climate disasters, i.e. islanders. Islanders face is not so much the hazard of climate per se, but the reason why SIDS communities often do not have the resources or options to resolve climate change and other development challenges themselves. Indicate the actor has bargaining power which is associated with the Convention's financial contribution borne by the developed countries/industries. Developed countries/industries withdraw financial flows when the results of the negotiations of the Convention are not relevant to their interests, even they do not provide incentives or financial assistance from developed countries (Annex I, annex II) to the non Annex I, obviously, leave from the commitment to the Conventions. The bargaining position encourages countries to the next negotiation.

The main contestation of climate change meeting related to economic issues, also issues of controlling GHG disaster. The problem of forest governance is considered as the internal affairs of home countries, therefore poor governance of forest tenure is Indonesia's domestic affairs.

To achieve its interests, actors affiliate into a network, require to effective implementation of climate change convention [37, 38]. Economic/industrial networks are OECD, EU, and OPEC, while G77 + China solidarity to fight the former imperialism. AOSIS and CFRN struggle a climate disaster. Network is used to strengthen the bargaining position of the intervention in the climate change convention negotiations, either verbal intervention or written intervention [32] with a joint proposal or common position. This is due to the parties that each country has one vote in the intervention; therefore the greater networks create for the stronger position [38], such as sustain network [40] The network enable accelerate the implementation of the Convention on Climate Change in Indonesia [41].

Every country contributes to GHG emissions, however, developed countries/industries are mandatory reduce emission, while developing countries voluntarily. Emissions of Annex I Parties between 10.3% -19.4%, with a population of 19.7% of the total population of the world; while emissions of non-Annex countries, which has a population of 80.3%, accounted for 7.8% -17.3% of emissions, so that emissions of developed countries should be restricted. That is political network done by developing countries (G77 + China), insist to developed countries to mandatory reduce emissions.

Narrative of forest management Indonesia that is deforestation and forest degradation failed reduce by the presence of community alienation. Policymaker actor reluctant to reforms the current policy. It is indicate that the actor associate with policy makers take a part of free riding and rent-seeking, safety player person, skepticism, and the presence of the historical of the policy.

Such the situation indicates that strongly narrative contested, have no guarantee to be adopted. It is depend on magnitude of actor interests, in which form a bargaining position [42, 43] by construct a discourse and a network both. These findings draw the negotiation are still dominated by powerful business-as-usual interests, reflected in some countries reluctance to undertake the larger policy reforms that would enable the required change and effectiveness in tackling the often underlying causes of deforestation and forest degradation.

In engaging the interests of actors, decision-making mechanism becomes important [23] The political decision-making is not controlled by one (group) actor, but rather the process of consensus [44] thus providing power space for the benefit of the actors whose have high magnitude of interest [32, 45, 46, 47, 48]. Obviously politics is constructed by actors become critical aspect [49].

4. Conclusion

Climate Change Convention able to encourage the production of policies associated with incentive mechanisms, such as a proposing procedure for forest management, inventory and monitoring of GHG of Indonesia, and its institutions. Climate Change Convention enforces international cooperation related to research programs, technology transfer, human resource development and institutional capacity building associated with incentive mechanism. Such a situation, benefit for the government, NGOs, research institutions and the owner of the concession, while the people ignored even become sufferers of a system of incentives that will be built. Climate Change Convention does not promote for policy changes toward fairness tenure because it has a different focus to the issue of forest management in Indonesia. On the other hand, in the home country, tenure issues have not been a priority in Indonesia's forest management yet.

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