

NATIONAL FORESTRY FUND: CASE OF INDONESIA*

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Abstract

In order for the forestry fund has substantial meaning, the fundamental factors that inhibit the forestry business must be removed first. Although public investment of reforestation fund (DR) is quite large, the overall productivity of the land developed for industrial plantation forest has failed to achieve the targets set. Two internal factors that need to be addressed are property rights issue and timber price, which are very crucial for long-term investments. Only when forestry investments is attractive, then the funds will flow to the forestry sector. If forestry investment is not profitable, then the forestry fund will only be wasted and there will be no sustainable production forests.

Keywords: Dana reboisasi (DR), Natural forest, Royalty, Incentive, Profitable, Sustainable

1 Overview and background of the Fund

In accordance with the constitution, natural resources are used for the maximum benefit of the people in a sustainable manner. To ensure that such a use can be materialized, the productivity of the forest must be maintained; any degradation must be addressed, including by conducting reforestation. To ensure that reforestation can be implemented, the availability of funds dedicated to reforestation must be maintained. This is the background of Indonesia's forestry fund called DR. Although public investment of DR is quite large, the overall productivity of the land developed for HTI has failed to achieve the targets set. Two internal factors that need to be addressed are property rights issue and timber price.

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In Government Regulation 6 of 2007, DR is defined as a fund collected from IUPHHK holders in natural production forest to reforest and rehabilitate forests.¹ There is a confusion in understanding of DR and Reforestation Guarantee Fund (DJR, Dana Jaminan Reboisasi). From name point of view, both DR and DJR have similarity and it is understandable if one sees that the two terms have a close relation. It is true, the initial money of DR was from the money of DJR. DJR was money that belongs to holders of forest concession right that must be deposited in the government's account as a performance guarantee of reforestation of forest area under their concession. When we look at the substance contained therein, DR and DJR has a much different meaning. DR is not a guarantee of performance, while DJR is a guarantee of performance. Act 41 of 1999 through Article 35 clearly mandates that every holder of IUPPH is charged with a performance bond (DJK, dana jaminan kinerja). This mandate is not implemented by the MoF. So, in terms of substance, DJR was altered to DJK, not DR.

Through the Presidential Decree No 35 of 1980 regarding DJR, the holders of forest concession were required to deposit money to the government as guarantee for performing reforestation on their logged over areas. As time went by, DJR at the hand of the government built up because very few holders of forest concession who performed reforestation. Furthermore, the government through the Presidential Decree No 31 of 1989 regarding DR cancelled the Presidential Decree No 35 of 1980 and DJR was changed to DR with all consequences. The Presidential Decree No 31 of 1989 later, experiencing many changes, e.g. through the Presidential Decree No 29 of 1990, the Presidential Decree No 28 of 1991, the Presidential Decree No 40 of 1993, and finally the Presidential Decree No 24 of 1997.

The legal status of the DR from 1989 to 1999 was not clear, whether or not it was the state revenue. Logically, state revenues are grouped into two categories, namely in the form of tax revenue and non-tax state revenue or known non-tax revenues. During the period 1989 to 1999, DR was clearly not a tax nor non-tax revenues because inclusion of DR as a non-tax revenues lately occurred through Government Regulation No. 92 of 1999. Prior to 1999 the DR was off-budget, since 1999 the fund has been on-budget.

Large amounts of idle money certainly made many government bureaucrats tempt to use it. It follows the characteristic of bureaucracy that tends to maximize the budget (Niskanen, 1968). Also, DR, which was large and growing rapidly, was contested by professional foresters who supported sustainable forest management and political ally of Suharto, who sit in the Ministry of Forestry (MoF) (Ross, 2001).

¹Article 35 paragraph (1) of Law 41 of 1999 states " Each holder of forest utilization license as referred to in Article 27 and Article 29, subject to business license fees, fees, DRs, and performance bonds". In essence, DR is government revenue earmarked for reforestation.

2 Resource mobilization

DR is collected from royalties charged on timber harvested from natural forests. DR rate depends on the wood species, size, and location (Table 1). Largest revenue comes from meranti and mixed timbers. Meanwhile, revenues from logs of ebony, natural teak, fancy wood, and sandalwood are very minor because the production of those timbers is also very low. Revenue per year of DR is presented in Table 2

Table 1: Tariff of Reforestation Fund (USD per cubic meter)

Species	Kalimantan-Maluku	Sumatera-Sulawesi	Papua-NT
Meranti	16.00	14.00	13.00
Mixed	13.00	12.00	10.50
Ebony	20.00	20.00	20.00
Natural teak	16.00	16.00	16.00
Fancy wood	18.00	18.00	18.00
Sandal wood	18.00	18.00	18.00

Source: Government Regulation No. 92/1999

Revenue from lease of land is also included to generate ideas that there are other revenue sources, such as land rent, that can be used for reforestation. Land lease is generally associated with mining operations. Former mining areas need to be rehabilitated in order to make it productive for agriculture. Whether or not the rate of land lease is already efficient still needs to be studied further.

Table 2: Receipt of reforestation fund ($\times 1000$ IDR)

Year	Reforestation Fund	Land Rent
2007	1 359 335 810.19	
2008	1 643 159 304.60	
2009	1 455 054 128.98	169 797 334.86
2010	1 721 221 417.26	162 231 506.40
2011	1 720 288 868.77	432 550 625.16
2012	1 516 134 718.31	403 865 794.15

Source: Directorate General of BUK

Annual revenue of DR tends to decline over time due to lower production of logs from natural forest. DR revenue on average is about 1.5 trillions IDR per year. The figures in Table 2 are not always consistent with the level of timber production in Figure 1 due to revenue of DR within a year does not always come from timber harvested during the year in question. Some DR received in a year may be as a payment against the

outstanding DR in previous years.

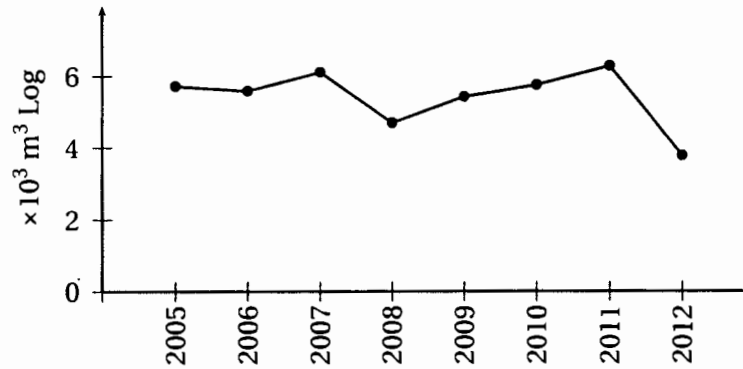


Figure 1: Log Production from Natural Forests

Other sources are still limited to the discourse, such as REDD+ funds and funds from carbon trading. Practice of payment for environmental services on a small scale has begun to occur, such as in Cidanau-Banten, between Cirebon and Kuningan local governments, and in Mataram NTB. Money paid by users of environmental services, at least, can help producers of environmental services to conserve forests in the upstream. Actually there is another important source, namely banking. For example, Bank Mandiri has shown its interest to help finance investments in forest plantations. But excessive regulation in the forestry industry makes the industry less attractive for investment (Kartodihardjo and Soedomo, 2011).

3 Fund utilization

The use of DR during the New Order era was almost without clear criteria, except closeness to the power. Activities that supported the rehabilitation of land could also be financed by DR, but the definition of the supporting activities was not very clear. Oversight of the use of DR also practically non-existent. The central government controlled fully the revenue and the use of DR. The situation changed after the New Order regime collapsed.

According to the government regulation No. 35 of 2002, DR shall be divided as follows: a. 40% (forty percent) for the producing region and b. 60% (sixty percent) for the Central Government. The DR of central government is allocated to the Technical Department (MoF) and the remaining is allocated to the Forest Development Account (RPH, Rekening Pembangunan Hutan).

Some of the DR has been placed on Public Service Board-Forest Development Funding Board (BLU-BPPH, Badan Layanan Umum-Badan Pembiayaan Pembangunan

Hutan), a financial management agency designed to help finance the development of plantations. BLU-BPPH must report the implementation of its activities, including financial management, to the MoF.

Under management of BLU-BPPH, DR is directed to assist the development of plantation, particularly private forest and HTR (forests planted by the people in the forest area). Loans to small-scale forest owners have started running and welcomed, as is the case in Wonosobo and Bora. Loans that have been given begins with application of a farmer group. After an investigation in the field, when the application is approved, the contract is for each farmer individually, not as a group. However, HTR development still face obstacles in the form of licensing procedures which are very complicated, especially for small-scale farmers who have a lot of resource limitations. Barriers to the HTR is also a barrier to forestry funds.

4 Fund oversight

Before 1999 the use of DR was practically not audited. Since 1999, the use of DR must have been audited by Supreme Audit Board (BPK). A central feature of the DR during the Suharto period was that these funds were not flowing into the state treasury to be included in the annual budget of the government, but incorporated as a state off-budget funds managed directly by the MoF (Ascher, 1999).

On 5 February 2007, the Minister of Forestry and the Ministry of Finance jointly issued a regulation that supports the establishment of Forest Development Account (RPH) to support the use of DR in forest and land rehabilitation. RPH initial capital was granted in September 2007 amounting to 5.0 trillions IDR from the DR until then was administered by the Ministry of Finance.

Financial control over RPH is conducted by the Director General of the Treasury of the Ministry of Finance, which is obliged to release monthly reports related to the position of account to the MoF. The MoF can withdraw funds from the account to support the activities of forest and land rehabilitation. To do this, the MoF must submit a five-year work plan, along with a budget detailing the objectives of utilization of the fund. Once approved, the Ministry of Finance will send funds from RPH to 'working unit' of the MoF who is responsible for the expenditure of the fund for forestry development.

'Working Unit' of the MoF is in charge of managing DR as a 'revolving fund.' This unit is allowed to disburse a variety of loans to a number of legal entities - state or privately owned - as well as to groups and cooperatives of farmers. To qualify for this loan, those legal entities and cooperatives are required to have business licenses in forest utilization (IUPHT, izin usaha pemanfaatan hasil hutan) and expertise in the field of forestry. The legal entities should have not been involved in any bad activities

related to finance. If a legal entity fails to pay back the loan, then the debtor is subject to a penalty of 2 percent of the principal each year along with its interest. For groups and cooperatives of farmers, if they fail to pay back the loan then the debtor may be sanctioned collectively, which is not specified.

On 2 March 2007, the Minister of Finance announced the creation of BLU-BPPH, which would serve as a 'working unit' of the Ministry of Forestry that is responsible for forestry development expenditure. Establishment of BLU-BPPH aims to create a more flexible financing institutions in disbursing funds but more reliable in financial management. Since BLU-BPPH is in early stage, we do not have enough information to make a fair evaluation of its performance.

5 Key stakeholders

Some parties have influence and are influenced by forestry funds, particularly forestry fund in the form of DR, which is a state revenue. The fund management must be accountable to all the people, not only to those who contributed and who use it. As mentioned previously, the beneficiaries of DR in the past were mainly large-scale plantation companies, especially those who close to the center of power. Since the reform era, the target beneficiaries of the fund have changed slightly toward smaller-scale agents of plantation forest.

Lately, there is a discourse to finance the rehabilitation of natural forests, particularly in relation to the application of intensive silviculture. According to existing rules, any investment in natural forests, the results of the investment belongs to the government. As a result, there are no private parties who are willing to make long-term investments in natural forest land. As a way out, several parties suggested that agents who implement intensive silviculture are exempted from the obligation to pay DR.

6 Current status

What could be achieved by DR was not much. Although public investment of DR was quite large, the overall productivity of the land developed for HTI has failed to achieve the targets set. Several years ago, the government gave the loan, which was sourced from the DR, to some companies of industrial plantation forest, even with zero percent interest, but the forests in question did not materialize and many loans have not been returned. Worse, there is a suggestion to abolish the loan in default.

The number of companies that were willing to undertake rehabilitation was very little. They prefer to give up the money that has been handed over to the government than to rehabilitate the forests and get the money back. This suggests that the levy rate set by the government was too low. There are indications that the same thing

happens in the case of post-mining reclamation funds.

Indonesian experience shows that transparency and accountability are critical components of good financial governance. To a certain extent, DR abuses during the New Order were facilitated by non-standard accounting systems and weak supervision by the MoF over DR account. So, it is important also to involve institutions that have the power of law in dealing with financial oversight, such as BPK and KPK (Commission on Corruption Eradication). The absence of effective oversight and accountability mechanisms has led to a large number of DR lost to fraud, diversion to other uses and wasted in the poorly managed HTI.

7 Future outlook

Without the help of financial institutions, private forest in Java Island has grown up to 2.8 million hectares. There are several factors that contribute to the development of private forest in Java: clarity of rights, timber prices, transportation infrastructure, and population demographics. What happens in Java should provide very valuable lesson learned that could be replicated outside Java where idle lands are still plenty.

Is it true that the forest is experiencing a shortage of funds for investment? Is not a lack of applicants who want to invest? Is forest an attractive place for investment? I am afraid that the problem of the slow development of forests, especially outside Java, is not caused by a shortage of funds for investment, but by the lack of clarity about the rights, low timber prices, and limited transportation infrastructure. Once upon a time, President Harry S. Truman said

“ Give me a one-handed economist! All my economists say, On the one hand on the other.”

The same thing happened with the individuals working in forestry-related fields in Indonesia. On the one hand they want to keep forestry funds available for investment, but on the other hand they also make forestry less attractive for investment. In the upstream, many barriers with respect to licensing that must be faced by entrepreneurs. In the downstream, selling timber from a long investment is exposed to very low timber prices due to government policies that distort the market of logs. Indonesia's forestry business can be summarized as “ choked in the upstream and clogged in the downstream.” But it is expected to remain healthy.

Identifying the real problem is very important because with it we can design the use of forestry funds more effectively and efficiently. On land that is not forested there are certainly human activities, which often involve tenurial conflicts. What is the better way to spend money from the forestry fund in a case like this? To resolve conflicts over tenure or to purchase seed? If there is no interference by humans, then the bare land will be covered quickly by vegetation through natural succession. We do not

need to waste money for planting trees as a consequence. On the one hand we let the property rights remain unclear, but on the other hand we expect sustainability of forests is maintained. The intersection between the two is an empty set.

Property rights offers incentives for long-term investments, because it protects individual against expropriation by other agents, including the state. In a particular situation, making land rights more secure and transferable would promote incentive for investment and efficient use of resources. There are three reasons supporting this conventional view. First, secure rights are believed to provide a guarantee to farmers the benefits from their investments will certainly flow to them and will not be appropriated by other agents. As a result, long-term investment is encouraged (Besley, 1995; Deininger and Jin, 2006). Second, capitalization of asset with more secure property rights is more probable. According to Feder and Onchan (1987), security of ownership improves chances of obtaining loans to finance agricultural investments. Secure property rights reduces costs for the lender and provides the basis for using land as a collateral asset. Third, secure tenure rights would allow farmers to devote their productive resources to agriculture, rather than to the defense of their holdings against expropriation by other agents.

According to the national forest plans, production forest that is allocated for large-scale is 43.6 million hectares while for small scale is 5.5 million hectares. Does this mean that maintaining forests is tantamount to maintaining the injustice? Is justice not an important element of sustainability? So, forestry fund to be collected should be used to fix the injustice or to plant trees? There is no need to maintain forest sustainability if it does not deliver welfare to the people.

The most sustainable and reliable source of forestry fund should be the forest itself. To achieve this, the forestry business must be profitable. Currently, the forestry business in Indonesia is generally less profitable. Without any improvement in the business environment of the forest industry, it is difficult to expect people to invest their money in the forestry sector. Even the money that is available today will run out eventually.

Sustainability of DR is very difficult to maintain due to the decline in the ability of natural forests to produce timber, besides the growth rate of natural forest is generally too slow. Other sources of funding must be found. In addition, the possibility of investing a part of DR in financial markets, which results in a higher rate of return with an acceptable risk, should be considered.

Export ban on logs make log price difference between the domestic market and international market so far. For meranti timber, the difference can reach 220 USD per cubic meter. With prices at the international level, the entire allowable cut of natural forests (about 9 million cubic meters) will likely be utilized. Difference between al-

lowable cut and actual production has the potential to generate additional profit of 8 trillions IDR. If the government takes half of the additional benefits, via export tax for example, and allocate the revenue to forestry fund then every year there is an additional 4 trillions IDR to DR. But there is a big risk, the destruction of natural forests. The reason is that property rights in natural forests are not clear.

Payments for environmental services can be considered as a source of forestry fund. It is still in early stage of development. We need to explore it further. A partnership between local water companies (PDAM, Perusahaan Daerah Air Minum) and farmers in protected forests in Mataram Lombok can be a good example (Soedomo and Nugroho, 2009). PDAM Menang Mataram has allocated 850 million IDR in 2011 to fund conservation and to provide assistance to communities and villages around the spring.²

Let us take a look the economy of Indonesia, particularly its fiscal policy. So far, the importance of forest is still limited in a seminar room. Meanwhile, burning fossil fuel is much more important so that the government needs to support it by providing subsidy. Although it can not be compared directly, the figures in Table 3 say a lot about real attitude of the society represented by the government. State budget allocated to subsidy for fuel that add CO₂ in the air is much larger than the one allocated to activities or sectors that potentially support CO₂ reduction from the air. In 2006, the fuel subsidy was 64.2 trillions IDR, while the budget for environmental protection was only 2.7 trillions IDR. Environmental protection budget rose to 10.1 trillions rupiah in 2011, but at the same time fuel subsidy jumped to 129.7 trillions rupiah. In addition, two government institutions that are frequently associated with environmental protection, namely MoF and Ministry of the Environment (MoE), received annual budget, in total, of 1.8 trillions IDR in 2006 and 7.0 trillions IDR in 2011. Reallocation of state budget by reducing fuel subsidy to increase budget related to environment and forestry could be an important source of forestry fund.

Table 3: Pro (+) and contra (-) forces of CO₂ emission (trillions IDR)

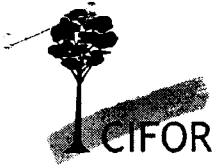
Description		Year						
		2006	2007	2008	2009	2010	2011	2012
Fuel subsidy	+	64.2	83.8	139.1	45.0	82.4	129.7	123.6
Env. protection	-	2.7	5.0	5.3	10.7	6.6	10.1	10.6
MoF	-	1.5	1.8	3.2	2.1	3.3	5.9	6.1
MoE	-	0.3	0.4	0.4	0.4	0.4	1.0	0.9

Source: Ministry of Finance

²<http://pdammenangmataram.com/detberita.php?index=25>, Oct 14, 2013.

References

- Ascher, W. 1999. *Why governments waste natural resources: policy failures in developing countries*. John Hopkins University Press, Baltimore and London.
- Besley, T. 1995. Property rights and investment incentives: Theory and evidence from Ghana. *The Journal of Political Economy*, 103(5):pp. 903–937.
- Deininger, K. and Jin, S. 2006. Tenure security and land-related investment: Evidence from Ethiopia. *European Economic Review*, 50:pp. 1245–1277.
- Feder, G. and Onchan, T. 1987. Land ownership security and farm investment in Thailand. *American Journal of Agricultural Economics*, 69(2):pp. 311–320.
- Kartodihardjo, H. and Soedomo, S. 2011. Prospek hutan tanaman industri di Indonesia. Technical report, Bank Mandiri, Jakarta.
- Niskanen, W. A. 1968. The peculiar economics of bureaucracy. *The American Economic Review*, 58(2):pp. 293–305.
- Ross, M. L. 2001. *Timber booms and institutional breakdown in South East Asia*. Cambridge University Press, UK.
- Soedomo, S. and Nugroho, B. 2009. Fresh water study. Technical report, Fahutan IPB Bogor dan WWF Indonesia, Jakarta.



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Bogor, 1 October 2013

Prof. Sudarsono Soedomo
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Bogor, Indonesia

Invitation “Expert Meeting on Strengthening Finance for Sustainable Forest Management through National Forest Funds in the Asia-Pacific region”

Dear Professor Sudarsono,

The Center for International Forestry Research (**CIFOR**), together with the Food and Agricultural Organization of the United Nations (**FAO**) and Deutsche Gesellschaft für Internationale Zusammenarbeit (**GIZ**) GmbH, is organizing an “Expert Meeting on Strengthening Finance for Sustainable Forest Management through National Forest Funds in the Asia-Pacific region” on 24-25 October 2013. The meeting will be held in Bogor. CIFOR is pleased to invite you as a resource person to this meeting.

The meeting brings together experts on various funding mechanisms that support SFM currently or previously operational in their respective countries. The objectives of the meeting are to:

- Share knowledge and experiences related to establishing and managing NFFs or similar funding mechanisms and discuss lessons learned;
- Assess the effectiveness of NFFs in promoting SFM;
- Identify potential strategies (policy, legal, and institutional) needed to effectively establish and manage identified NFF models; and
- Assemble information on best practices for the development of a Practical Guide on NFFs.

All resource persons are required to provide a PowerPoint presentation and a background paper. Kindly see enclosed info brief for more information on the expert meeting.

In the event that you are unable to attend, we would be grateful if you could nominate a suitable candidate as a replacement. Kindly confirm your attendance to Rogier Klaver (r.klaver@cgiar.org).

Yours sincerely,

Dr. D. Andrew Wardell
Research Director
Forests and Governance Portfolio

Encl.

- Info brief “Expert Meeting on Strengthening Finance for Sustainable Forest Management through National Forest Funds”
- Concept note National Forest Funds
- Guidelines for Resource Persons on paper submissions

