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Readiness for REDD

Financial governance and lessons from Indonesia's Reforestation Fund (RF)

Christopher Barr, Ahmad Dermawan, Herry Purnomo and Heru Komarudin

Key points

- Tropical forest countries can generate substantial new revenue flows with REDD: reducing carbon emissions by curbing deforestation and forest degradation.
- Successful implementation of REDD requires good governance and sound financial management by participating governments and institutions.
- Indonesia's 20-year experience with its Reforestation Fund (RF) offers important lessons on financial governance, lessons shared by other countries participating in REDD.
- The use of the RF by the Soeharto regime to subsidise industrial plantation development, coupled with weak mechanisms for accountability, created perverse incentives, opportunities for corruption and fraud, and inequitable distribution of benefits.
- New institutions and practices since 1999, independent audit of the RF by the Supreme Audit Board and prosecution of RF-related corruption by the Corruption Eradication Commission, show promise as tools that can be applied to ensure the sound management of REDD funds.
- Financial monitoring, reporting and verification (F-MRV) of REDD financial flows to tropical forest-rich countries are as important as monitoring, reporting and verification of carbon emissions.
- The international community should be prepared to finance needed F-MRV capacity building as part of REDD readiness. Countries participating in REDD need to strengthen capacities in budgeting, accounting, fiscal management and other aspects of financial governance.

Introduction: Indonesia and REDD

In the global effort to mitigate climate change there is a growing consensus that wealthy countries should compensate poor countries for reducing carbon emissions. Schemes to pay poor countries for Reducing Emissions from Deforestation and Forest Degradation (REDD) are now being discussed under the United Nations Framework Convention on Climate Change (UNFCCC). For tropical forest-rich countries, REDD is an unprecedented opportunity to create new revenue flows by protecting standing forests and rehabilitating degraded forests.

With nearly 90 million hectares under forest cover, Indonesia has the world's third largest area of tropical forest, as well as extensive carbon-rich peatlands (Rieley *et al*. 2008). But Indonesia is also the world's largest emitter of CO_2 from deforestation and forest land use change. Through REDD, Indonesia has a unique opportunity to generate revenue, reduce the loss of forest cover and, in doing so, to make a significant contribution to mitigating global climate change. In May 2009, Indonesia became the first country to enact regulations for a national REDD program (Reuters, 8 May 2009).

In the G-20 meeting in Pittsburgh on 25 September 2009, President Susilo Bambang Yudhoyono made a commitment to reduce emissions from land use, land use change and forestry (LULUCF) by 26% in 2020 from the business-as-usual levels, and by 41% with international assistance. Analysis shows that reducing Indonesia's deforestation rate by 5% could generate REDD payments of US$765 million a year, while a 30% reduction could generate over US$4.5 billion a year (Purnomo *et al*. 2007). With such large sums potentially flowing through REDD payment schemes, Indonesia's ability to achieve REDD targets will require effective institutions for good financial governance.

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This infobrief summarises key findings from a study of financial governance and Indonesia's Reforestation Fund over the past 20 years (Barr *et al*. 2009). This experience offers critical lessons for REDD related to:

- managing finances and administering revenues;
- dealing with corruption and fraud and protecting state assets;
- monitoring, reporting and verifying financial transactions;
- aligning incentives;
- ensuring accountability; and
- distributing benefits equitably.

Indonesia's Reforestation Fund

Established in 1989, Indonesia's Reforestation Fund (*Dana Reboisasi,* DR) is a national forest fund financed by a volume-based levy paid by timber concessionaires. Over the past 20 years, the RF has had aggregate (nominal) receipts of approximately US$ 5.8 billion, making it the single largest source of government revenues from Indonesia's commercial forestry sector.

During both the Soeharto and post-Soeharto periods, the Indonesian government has used the Reforestation Fund to finance major public investments in reforestation and rehabilitation of degraded forest lands (see Table 1). In each case, however, these programs have fallen well short of their stated objectives, and implementation has been undermined by serious problems related to financial management and governance.

During the Soeharto era, the Ministry of Forestry used the RF to promote the development of industrial timber and pulpwood plantations, allocating over US$ 1.0 billion in cash grants and discounted loans to commercial plantation companies. The Ministry distributed a significant portion of the RF funds and forest conversion licenses to companies with close ties to state elites, allowing a few well-connected actors to capture sizeable forest rents. The Ministry also disbursed US$ 600 million to finance politically favoured projects that had little to do with the RF's mandate of promoting reforestation and forest rehabilitation.

Building on steps forward, avoiding steps backward

In the last 10 years, the Government of Indonesia has taken important steps to surmount the deeply rooted political and governance problems that beset the Reforestation Fund in the Soeharto era. Many tropical forest countries that implement REDD may face similar challenges. These countries, and the agencies currently developing REDD payment schemes, can learn from Indonesia's experiences, expanding and building on the positive aspects while avoiding the negative aspects.

Managing finances and administering revenues

During the Soeharto era, weak financial management and inefficient administration of revenues by government institutions at all levels undermined effective use of the Reforestation Fund. Major public investments in reforestation and rehabilitation of degraded forest lands fell well short of their objectives. In the absence of effective mechanisms for oversight and accountability, large sums intended to fund development of plantations were lost to fraud, diverted for other uses and wasted on poorly managed plantations.

The transfer of the Reforestation Fund to the Ministry of Finance as part of the IMF-led structural adjustment process in 1998–1999 introduced important checks and balances and integrated the RF with the state budget. However, recent audits by Indonesia's Supreme Audit Agency (BPK) have documented widespread irregularities and weak internal controls in RF funds administered by the Ministry of Forestry. The recently formed Forest Development Funding Agency Public Service Unit (BLU-BPPH) – which manages at least US$ 2.2 billion in RF funds – had failed through mid-2009 to disburse *any* of its funds budgeted for plantation development during 2008 and 2009. Similarly, district and provincial governments have collectively received US$ 500 million in RF funds since 2001, but many still do not have the skills to manage funds effectively and transparently. To cope with an influx of REDD funds, there need to be improvements in budgeting, accounting, internal financial controls and reporting. It will be important to put in place systems that clearly set out who gets what in terms of revenues, in accordance with the roles and responsibilities of the various agencies involved at national, provincial, district and local levels. Transparency and public accountability will also be key.

Dealing with corruption and fraud, and protecting state assets

Corruption and fraud undermined major Reforestation Fund investments in reforestation and forest rehabilitation during the Soeharto era. The result was a loss of hundreds of millions of dollars in state funds and depletion of Indonesian forests. These problems, deeply rooted in political systems and compounded by opaque governance, are proving difficult to eradicate.

In the *Reformasi* era, Indonesia has made major efforts to stamp out corruption, notably by creating the high-profile Corruption Eradication Commission and the Corruption Court. These institutions investigate, prosecute and try high-level corruption cases independent of the normal law enforcement and judicial processes. In recent years, they have successfully prosecuted numerous cases of forest-related corruption involving officials at all levels.

Table 1. History of Indonesia's Reforestation Fund

Year	Event	Remarks
Soeharto era (ca 1966 – 1998)		
1980	Reforestation Guarantee Deposit (DJR) introduced, initially structured as a performance bond for timber concession-holders with stated aim of promoting reforestation and forest rehabilitation.	DJR proved to be ineffective as an incentive for timber concession-holders to carry out reforestation. Most found it more profitable to relinquish the DJR performance bond than to rehabilitate degraded concession sites.
1989	Reforestation Fund (RF) introduced as a volume-based levy to support reforestation and rehabilitation of degraded forests.	Managed by the Ministry of Forestry (MoF) as an off-budget slush fund, RF became the single largest source of revenue with annual receipts exceeding $500 million.
1990–1999	RF subsidies support industrial timber plantation development.	MoF subsidises private and state-owned commercial plantation development with US$ 1.0 billion in cash grants and discounted loans. Much of these funds were lost to fraud and corruption, and plantations developed fell far short of targets.
1994–1998	$600 million* from RF allocated to finance non-forestry projects	Non-forestry projects financed by the RF included: • $190 million for the state aircraft company PT Industri Pesawat Terbang Nusantara (PT IPTN); • $250 million for One Million Hectare Peatland Development Project' in Central Kalimantan; • $47 million for the Takesra family welfare scheme; • $109 million for construction of Bob Hasan's PT Kiani Kertas pulp mill in East Kalimantan; • $15 million for the Indonesian delegation's participation to the 1997 SEA Games; • $10 million for Tommy Soeharto's helicopter service company, PT Gatai Hutama Air Service.
***Reformasi* era (1998 – present)**		
1998	During Asian financial crisis, IMF rescue package includes conditionalities for: • Transfer of RF to Ministry of Finance • Third-party financial audit of RF	Key elements of financial governance established, including checks and balances and consolidation of the Reforestation Fund receipts and expenditures in the state budget. Audit report by Ernst and Young completed in December 1999, but not yet released in public domain (as of October 2009).
1999	The disbursement of RF funds to finance the development of HTI plantations suspended by the Minister of Forestry and Estate Crops (MoFEC) to fulfil an IMF conditionality.	Significant driver of natural forest conversion suspended.
1999	Fiscal balancing law redistributed RF receipts 60% to national government and 40% to provincial and district governments, as part of Special Allocation Fund.	Fiscal balancing resulted in increased equity in the distribution of Reforestation Fund receipts across levels of government. However, government institutions at district and provincial levels were ill equipped to manage funds.
2003–2004	Government writes off Indonesian Bank Restructuring Agency multi-billion forestry debt.	Write-off highlights low levels of accountability among forestry debtors and encourages high-risk investments.
2003–2009	Corruption Eradication Commission (KPK) and Corruption Court created.	Successful prosecution of high-profile Reforestation Fund corruption cases. Anti-corruption not yet mainstreamed in law enforcement and judicial institutions. Debts still outstanding.
2004–2009	The role of Supreme Audit Board (BPK) as sole auditor for government finances, including RF, is strengthened.	Emergence of BPK marks significant progress in RF transparency and accountability. BPK conducts at least 29 audits either directly or indirectly related to RF, and all are published on its website.
2007	Audits by BPK finds both national and regional governments have routinely under spent RF allocations, often by 50 per cent or more.	National and regional governments continue to be ill equipped to manage funds.
2007	Ministry of Finance transfers national government share of RF revenue to new Forest Development Funding Agency Public Service Unit (BLU-BPPH). MoF announces that BLU-BPPH will disburse $2.2 billion from RF to finance the development of 9.0 million ha of industrial and community plantations by 2016.	Financial incentives to remove natural forest to establish plantations could jeopardise carbon emission reduction targets. Lack of transparency and mandate for 'flexibility' in fiscal management by BLU-BPPH could put progress in accountability at risk.
2009	As of June 2009, BLU-BPPH had not yet released $500 million budgeted for disbursement during 2008–2009.	Questions arise as to whether BLU-BPPH has the administrative capacity to manage effectively large sums of forestry revenues. Not yet clear whether BLU-BPPH will play a role in administering future REDD funds.

* All currencies in US dollars

But the vast majority of corruption and fraud cases continue to go unpunished, as they are handled by the normal law enforcement and judicial institutions. What now needs to be done is to build capacity to prevent corruption and to take action on corruption or other criminal behaviour at all levels. Law enforcement, judicial processes and civil society need to be strengthened to preempt and deal with potential corruption and fraud in REDD schemes.

Monitoring, reporting and verifying financial transactions

Through the *Reformasi* era, and particularly during the Yudhoyono administrations (2004 –present), the Government of Indonesia has taken steps to improve transparency and accountability in the administration of the Reforestation Fund, and other state funds. The capacity of the Supreme Audit Board (BPK) has been strengthened. Between 2004 and 2008, BPK conducted 29 audits related to the Reforestation Fund and published them on its website.

Sound financial management, financial good governance and effective enforcement of financial law are needed to ensure that REDD funds will be well managed and that REDD revenues will flow sustainably. If funds allocated to REDD projects are lost to corruption, diverted for other uses, or simply badly managed, investors will shift to other countries or other markets where financial management and governance are better.

Countries will need to ensure that REDD projects meet high performance standards and cost-efficiency targets. This will require high levels of transparency and accountability from the outset. In particular, governments will need to put in place effective systems for financial monitoring, reporting, and verification (F-MRV) in addition to the MRV of carbon emissions averted, and regular independent audits.

Aligning incentives

While REDD aims to provide incentives to reduce deforestation and forest degradation, Indonesian government policies promoting new timber and pulpwood plantations – as well as significant new investments in pulp and paper capacity and expansion of the oil palm and biofuels sector – can accelerate the rate of forest loss. Analysing and aligning policy incentives is a critical step in preparing for REDD.

During the Soeharto period, RF subsidies for developing plantations encouraged overharvesting of logging concessions and clearing of 'degraded' natural forests. Timber companies had a strong incentive to mismanage the forests in their concession sites so that they would be eligible for subsidies to convert these areas to timber or pulpwood plantations. The current administration is using RF funds to promote the development of 9.0 million hectares of new plantations by 2016 to 'revitalise' the nation's commercial forestry sector.

Governments putting in place REDD schemes will need to align policies across forestry and other sectors, and synchronise these with broader economic policies. Strengthening coordination between agencies administering REDD and those responsible for land allocation, forest use, and industrial licensing will be essential, especially in cases of major investments that are likely to generate high levels of carbon emissions

Ensuring accountability

Indonesia found that subsidies for plantations, coupled with poor accountability, encouraged irresponsible behaviour. The lack of oversight by regulatory agencies meant that politically well-connected companies did not face consequences if they failed to use the subsidies for the purpose for which they were intended. The result of this lack of accountability was that US$1.0 billion in RF subsidies generated only limited areas of commercially productive plantations (Table 2).

The government's failure to hold subsidy recipients accountable has resulted in large write-offs of Reforestation Fund debt and a significant loss of state assets. This has contributed to high levels of moral hazard, as forestry companies were encouraged to make high-risk investments and to manage funds irresponsibly.

Under REDD, the possibility that governments could be required to provide some sort of guarantee that project owners will meet their obligations raises important questions about the extent to which public institutions could ultimately assume private risk. In projects involving permanent credits, carbon insurance schemes are needed to mitigate the risks that permanence could be reversed (for instance, through removal of forest cover). But, if irresponsible owners know that projects are insured, they could have a perverse incentive to clear project forests and abscond with payments.

Governments will need to consider how to prevent project owners from failing to deliver and what measures to take if they do. This could mean putting in place systems to review the track records of prospective REDD participants and severe penalties for project owners who do not fulfil their obligations under payment schemes. In Indonesia, the possibility that companies that failed to meet their obligations under the Reforestation Fund may now receive REDD funds should raise red flags.

Table 2 Area subsidised by the Indonesian Reforestation Fund for plantation development and area actually planted, 1990–1999

Type of company	Land area (ha)	Net plantable area (ha)	Realised planted area (ha)	Realised area as % of net plantable area
Joint ventures				
93 companies subtotal	2 957 874	2 070 512	1 296 084	63
State enterprises				
PT Inhutani I	163 670	114 569	57 602	50
PT Inhutani II	100 420	70 294	66 713	95
PT Inhutani III	377 980	264 586	88 513	33
PT Inhutani IV *	-	-	-	-
PT Inhutani V	56 547	39 583	38 797	98
Inhutani subtotal	698 617	489 032	251 625	51
Total	**3 656 491**	**2 559 544**	**1 547 709**	**60**

* Data not available

Distributing benefits equitably

Particularly during the Soeharto era, the distribution of benefits from the Reforestation Fund was highly inequitable. Powerful actors captured economic rents while forest-dependent communities were often displaced from their customary domains. Conflicts between local people and forestry companies have often undermined RF-financed plantation projects.

REDD provides financial incentives for large emitters of forest-based carbon to reduce emissions. This means that a substantial portion of funds could go to large forestry enterprises, such as the pulp and paper and oil palm industries. Many of these companies are closely tied to state elites and are, therefore, in a good position to access economic rents from REDD, particularly when payments are distributed by government agencies.

In developing countries, inequitable distribution of REDD payments could increase disparities in the forestry sector, and could displace and impoverish forest-dependent peoples. The risks are particularly high when state agencies assert control over forests that have been managed by rural communities for generations. Unless governments take proactive measures to facilitate equitable benefit sharing with rural communities from the outset, allocation of forested land for REDD projects could spark conflicts. Although REDD may reduce deforestation and forest degradation, this could be at the cost of the well-being and livelihood security of forest-dependent communities.

Financial governance and REDD readiness

Indonesia's experience in dealing with governance and financial management issues related to the Reforestation Fund has a lot to offer both to current global discussions on establishing REDD mechanisms, and to countries thinking of putting in place national carbon-credit schemes.
In the post-Soeharto *Reformasi* era, the Government of Indonesia has taken important steps to rectify deep-rooted problems and improve management and governance of the Reforestation Fund:

- placing the Reforestation Fund under the authority of the Ministry of Finance and consolidating the fund in the state budget;
- strengthening Supreme Audit Board with far-reaching authority to audit the Reforestation Fund and other public financial assets;
- creating a Corruption Eradication Commission which has successfully prosecuted several dozen corruption cases involving senior officials;
- prosecuting high-profile cases of Reforestation Fund fraud; and
- sharing Reforestation Fund revenues, with 40% going to provincial and district governments and 60% to the national government.

Indonesia's experience shows that effective state agencies can play an important role in providing checks and balances. Effective state institutions could support and coordinate provincial, district and local agencies and encourage mutual accountability in managing REDD funds. But, sustaining the political will to put in place and enforce rules and regulations, and tackling the daunting task of transforming agencies at all levels, setting up transparent systems, and assigning roles, rights, and responsibilities, are significant challenges.

In readiness for REDD, countries are already building capacity in land-use planning and carbon accounting. Indonesia's experience shows that it is just as important to start building capacity in budgeting, accounting, fiscal management, and other aspects of administering REDD funds. Building capacity for financial governance across all levels of government will take commitment, resources, and time. But fostering transparency and good governance is a win–win strategy, not only for managing a nation's forest resources and generating new revenue flows from REDD, but for all state endeavors.

Action points

To prepare for REDD, governments need to:

- Build capacity to manage finances and administer revenues.
- Strengthen institutions to deal with corruption and fraud.
- Develop effective financial monitoring, reporting, and verification systems.
- Revise policies to align incentives.
- Impose robust due diligence and accountability on recipients of public finance.
- Promote equitable distribution of benefits and minimise negative impacts on forest communities.

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For further information, contact:
Christopher Barr (CBarr@woods-wayside.org)
or Ahmad Dermawan (a.dermawan@cigar.org).

For general inquiries, contact: cifor@cgiar.org