The Funding Instrument for REDD+ in Indonesia:

Making the Case for Financial Innovation

UNORCID
United Nations Office for REDD+ Coordination in Indonesia

Citation
United Nations Office for REDD+ Coordination in Indonesia (UNORCID), 2015. The Funding Instrument for REDD+ in Indonesia: Making the Case for Financial Innovation.
http://www.unorcid.org/index.php/unorcid-publications/research-studies/387-funding-redd

Editor in Chief : Satya S. Tripathi
Editorial Team : Johan Kieft, Hideyuki Kubo, Felicity Le Quesne, Jyoti Mathur-Filipp
Peer Reviewers : Kevin Evans, Suzanty Sitorus, Gita Syahrani, Melany Tedja
Lead Author : Leonard Lerer

ISBN : 978-1-942960-03-4

Photo credits : UNORCID

The Funding Instrument for REDD+ in Indonesia:
Making the Case for Financial Innovation

FOREWORD

2015 marks ten years since REDD+ was first raised as an agenda item at the 11th Conference of the Parties to the United Nations Framework Convention on Climate Change, held in 2007 in Bali. Since then REDD+ has moved to the forefront of climate change negotiations and, in several tropical forest countries including Indonesia, to the core of green growth strategies.

Since 2010 when Indonesia's national REDD+ programme was catalysed by the initiation of a strategic partnership with the Government of Norway, the country has made considerable progress in not only defining a vision and strategy for implementing REDD+ but also in integrating those elements within national and sub-national development planning processes. Framed in terms of 'Beyond Carbon, More than Forests', REDD+ is interpreted as an opportunity for Indonesia to develop sustainably and in a way that ensures fair governance, equitable benefit sharing and environmental resilience.

Building the appropriate legal frameworks and institutional preconditions for successful REDD+ implementation requires a robust and comprehensive store of knowledge. It is hoped that this study- and its two related studies- will illuminate issues and inform decisions in such a way that not only contributes to building this store of knowledge, but also brings it closer to the sphere of planning and policy-making.

Bridging the spheres of research and policy is a key element of what UNORCID was created to achieve. The office was established in 2011 through a Memorandum of Understanding between the Republic of Indonesia and the United Nations system, following the government's request for an institution that could ensure coordinated and responsive support to its ambitious REDD+ programme. UNORCID represents an institutional innovation for the UN system, one designed specifically to provide rapid, dynamic support to Indonesia from a highly strategic vantage point from which the resources of the international community- financial, knowledge-based and political- can be coordinated efficiently.

In early 2014, with the support of the UN-REDD Programme, UNORCID initiated a coordinated framework study titled "Beyond Carbon? Exploring Mechanisms for Equitable REDD+ Implementation in Indonesia". The purpose of this initiative was to explore key issues whose resolution would be determinative of Indonesia's ability to implement its vision of REDD+. It was intended that findings be closely linked to policy recommendations, and grounded within prevailing and potential legal and institutional frameworks. The three separate studies that comprise the framework study are as follows:

1. Community Rights to Forests in Indonesia: A Field Assessment of Community Experiences in Rights Registration
2. REDD+ Social and Environmental Safeguards Development and Implementation in Indonesia
3. The Funding Instrument for REDD+ in Indonesia: Making the Case for Financial Innovation

REDD+ is increasingly spoken of, and implemented, within the broader context of countries' efforts to transition to a green economic development path. Nonetheless, the original idea of a financial incentive mechanism for sustainable forest management remains at its core. The extent to which REDD+-implementing countries are able to construct robust, transparent and credible institutions for managing REDD+ finance will significantly impact upon their ability to attract funds and to disburse these funds in a way that will most efficiently help them to achieve their REDD+ objectives.

One of the core aspects of the Letter of Intent signed between the Governments of Indonesia and Norway refers to the development of a 'world class funding instrument to channel support from the international community'. The REDD+ Task Force and the National REDD+ Agency made considerable progress in designing such an instrument, which came to be known as FREDDI- the Fund for REDD+ in Indonesia. This report provides an analysis of the design blueprints for FREDDI and its early evolution, considering its likely ability to deliver upon its objectives under and beyond the Letter of Intent. The ongoing integration of the duties and functions of the erstwhile National REDD+ Agency with the Ministry of Environment and Forestry means that the future design, development and institutional location of the funding instrument are yet to be determined. It is timely, therefore, to reflect on the lessons learned so far and also- this is the second aspect of this report- to make recommendations for the form that a REDD+ funding instrument might take going forward. Recognising that many approaches could be taken and proposals offered, on this topic, this report focuses on the objective of impact maximisation. It is suggested that the funding instrument should aspire to act as a strategic investment vehicle as opposed to merely a disbursement mechanism, in particular seeking to leverage innovative financing options in order to provide robust and broad-based funding support for REDD+ in Indonesia.

This publication of this study is timely given the ongoing restructuring of REDD+ within the Government of Indonesia, and it is hoped that its findings and recommendations will provide constructive guidance in support of this process. As Indonesia's progress with REDD+ continues, we intend to pursue further research studies that we hope will be as timely and relevant as this one.

Satya S. Tripathi
Director and Executive Head
United Nations Office for REDD+ Coordination in Indonesia

EXECUTIVE SUMMARY

Reducing Emissions from Deforestation and Forest Degradation (REDD+) is a global mechanism that provides economic incentives to developing countries to support reductions in greenhouse gas emissions from deforestation and forest degradation.

Indonesia is one of the world's largest emitters of greenhouse gases (GHG). The country committed in 2009 to reducing emissions by 26 percent compared to a business as usual trajectory by 2020, or up to 41 percent with adequate international financial and technical support. In 2010, Norway committed an overall sum of up to USD1 billion in official development assistance to REDD+ activities in Indonesia. The stated ambition of this commitment was to establish "a world class funding instrument to channel support from the international community".

A design for a Funding Instrument for REDD+ in Indonesia, known as FREDDI, was developed by the National REDD+ Agency. FREDDI was designed as a national trust fund with mechanisms to manage, mobilise and disburse funds through results-based and other type of disbursements. It was intended to conform with the highest global standards of governance and sustainability. FREDDI's mission,strategy and proposed operational structure have been extensively documented and are congruent with its objectives of attaining best practice in performance-based funding for REDD+.

This report has two objectives. Firstly, it reviews the conceptualisation and early stages of development of the funding instrument under BP REDD+ and, based on this analysis, considers its likely ability to achieve its objectives as specified by the LOI. Secondly, it provides an overview of the potential role of financial innovation, including debt and market mechanisms, to further enhance the vital role of the funding instrument for REDD+. It should be noted that in accordance with Perpres 16/2015, the duties and functions of BP REDD+ will be integrated within the Ministry of Environment and Forestry. Whilst the commitment to a funding instrument for REDD+ remains, the specific outcome for the funding instrument is as yet unclear. The recommendations produced by this report are designed to be generally applicable to whatever form is taken by the funding instrument.

Summary of Findings

The proposed operational and governance structure of the FREDDI has considerable strengths, and its current design of the funding instrument appears to be appropriate for its optimal functioning as a disbursement mechanism, especially from a governance and fiduciary perspective.

With a view to the future, and given the urgent need for further financial resources to support the achievement of REDD+ objectives, it would be valuable to consider funding mobilisation strategies that could be pursued by the funding instrument for REDD+, as was indeed already being done by the the FREDDI team within BP REDD+. This report affirms the theory that the funding instrument should consider a longer-term evolution away from being a mainly passive disbursement mechanism into a 'strategic investment fund' (financial portfolio, active investor) paradigm, to facilitate active approaches to funding mobilisation. This evolution would likely maximise impact, build national environmental financing capacity and ensure long-term sustainability.

The concept of innovative financing for development refers- in brief- to a variety of novel approaches and initiatives outside the traditional ambit of official development assistance to generate additional, sustainable, and effective funding for the achievement of development objectives. It is becoming increasingly prominent as the global development finance arena is evolving in such a way that traditional sources of grant financing have become constrained and emerging market countries are facing growing pressure to self-finance solutions to environmental and social infrastructure challenges.

This report makes the case that devoting resources to developing innovative financing capacity, in particular, may be a critical ingredient in ensuring that the funding instrument can play its full role in mobilising and leveraging global public and private sector investment to protect the forest and peat land heritage of Indonesia.

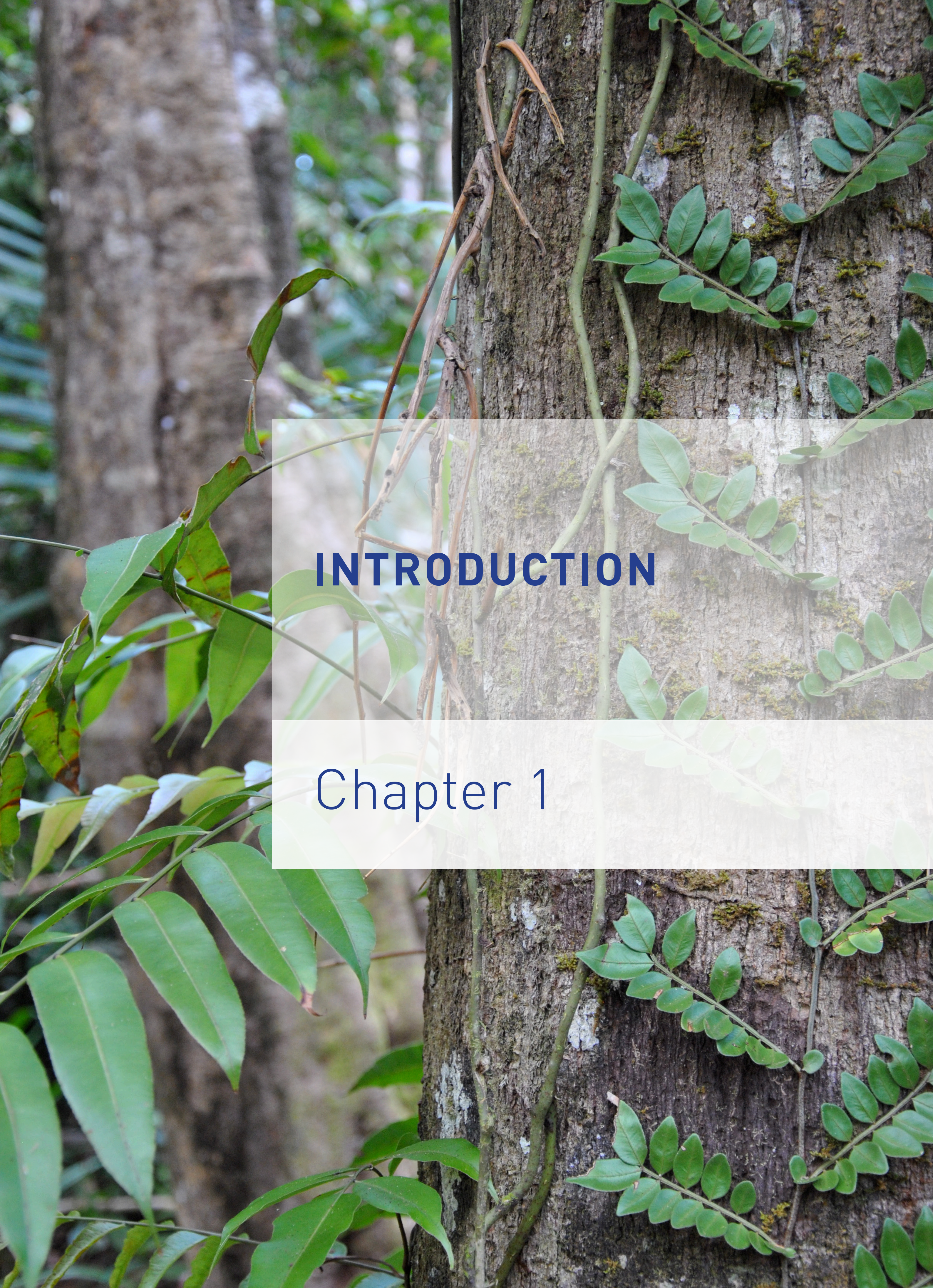
The latitude that the funding instrument will ultimately have to deploy financial innovation to meet its objectives will be intimately linked to its management design and structure. Given the recent institutional shifts, these aspects are as yet unclear.

A transition from disbursement mechanism to strategic investment fund is not easy, nor may it be seen by all actors as appropriate. Any consideration of a more "active" approach to disbursement and investment naturally raises the challenge of human resource constraints given the need for research, development and advocacy; the risk of being perceived as stepping on the turf of other REDD+ agencies; and increased accountability as the funding instrument would then be seen as "responsible" for the positive/negative impact or return on its disbursements. Any move into the financial sector brings with it many fiduciary, reputational and operational issues. Further, it is also important to be aware of the particular regulatory and legal constraints under which the funding instrument for REDD+ in Indonesia is likely to operate, regardless of its specific institutional location.

However, this report maintains that the advantages of the funding instrument taking a more active role as an 'investor' from the start of its operations, in a robust 'risk/return' model, seem to largely outweigh the possible downsides. An impact model could be developed to guide risk assessment- indeed, risk modelling and stress testing have become commonplace in the financial sector and the funding instrument may be able to adapt off-the-shelf products to create a risk assessment and management system for a future investment portfolio.

The financial commitment in the Norway-Indonesia Letter of Intent (LOI) is USD1 billion, while estimates of the amount needed for effective REDD+ implementation through 2020 have been placed at USD8 billion. As was recognised by BP REDD+, it is important that the funding instrument be designed to capture other opportunities beyond the LOI, and any future non-market based results-based payments once the global REDD+ mechanism is in place and operational. Should the funding instrument have the latitude to develop into a financial actor with an innovative financing portfolio, the potential roles that it could play in mobilising funding and thereby advancing REDD+ would be substantially broadened. For instance, the funding instrument could potentially lead the fund or capital raising to reach the amounts required for nationwide REDD+ implementation- it could be the lead agency in terms of advising government, supranational organiations, multilaterals, donors and the private sector on all aspects of REDD+ financing and take the lead in setting up various fund mechanisms and investment structures.

TABLE OF CONTENTS



INTRODUCTION

Chapter 1

Setting the context

Historical context: land tenure and natural resource management

The context for financial innovation in the land-use and forestry sector in Indonesia is extremely complex. With over 25 000 villages located within and in proximity to forest areas (constituting a population of about 50 million people[1]), the challenges of deforestation and forest and peat land management reach to the very core of the Indonesian economy. The context of activities such as palm oil plantations, forestry (mainly logging) and mining is informed by multiple social, economic and political factors. Relationships between communities, government and industry/investors are often highly complex.

Since obtaining its independence in 1945, Indonesia has been exposed to waves of land and forest use policy and agricultural development policies including the nationalisation of foreign owned plantations. In 1960, widespread land reforms were announced given that up to two thirds of the rural population was landless in many regions. Efforts to implement land reform through redistribution of small parcels to landless peasants were often limited in effectiveness due to anticipatory transfers and various blocking strategies implemented by richer landowners and landlords. All in all, less than 5 percent of usable agricultural land in Java and Bali was redistributed in the 1960s with resulting drops in productivity. Under the Suharto regime (from 1967), there was little change in peasant land tenure patterns, but the process of giving licenses to large scale, mainly foreign operators for timber harvesting and thereafter for industrial forestry began. Much of the focus was on subsiding the price of staple foods especially in the face of the need to import more food for a growing population. Indonesia has seen multiple attempts at land tenure reform including promotion of massive sponsored peasant migration, inefficient nationalisation and failed initiatives to improve the rights of tenants. According to Studwell (2013)[2], the survival of the landless and subsistence farmers can be largely attributed to their ability to maintain "market gardens" and in the case of forest dependent communities the maintenance of cash crop and agroforestry activities for rubber, coffee and cacao (which are increasingly being converted into palm oil plantations). Legislative and regulatory reform continues with, for example, Constitutional Court Ruling No.35/PUU-X/2012, which opens up the potential for attributing ownership rights over *adat* forests to *adat* communities.

While it is beyond the scope of this paper to explore the social, political and economic forces that shape the success and failure of environmental policy in Indonesia, the aforementioned summary gives some flavor of the complex backdrop for REDD+ implementation. Furthermore, it is vital to view any approach to financial innovation to maximise the impact of the funding instrument of REDD+ in the context of Indonesia's incontrovertible place as an emerging market investment target with consequent massive flows of mobile capital into mining, forest exploitation and palm oil plantations. The sheer financial power and growing political influence of large employers in the extractive industry/commodity (mainly palm oil) sectors at the local, regional and national levels inevitably influences the available modalities of REDD+ implementation.

Incentivising sustainable forest management through REDD+

In recognition of the opportunism of these industries and lobbies in terms of using existing laws and regulations for their advantage, and the complexities related to the attribution of forests to indigenous and local peoples, Indonesia has engaged in a number of commendable initiatives to protect its national forest and peat land assets.

1 FORCLIME 2013. TC module briefing notes. No 6: February 2013

2 Studwell J. 2013 How Asia Works – Success and failure in the world's most dynamic region.

At the Pittsburgh Summit in 2009, President Yudhoyono committed Indonesia to reducing its GHG emissions by 26 percent compared to a business as usual trajectory by 2020, or up to 41 percent with adequate international financial and technical support. Reduced Emissions from Deforestation and Forest Degradation, and enhancements of carbon stock (REDD+), is a key aspect of the Government of Indonesia's strategy to achieve these objectives.

In 2010, Norway committed an overall sum of up to USD1 billion in official development assistance (ODA) to REDD+ activities in Indonesia[3]. The stated ambition of this commitment was to establish "a world class funding instrument to channel support from the international community"[4] with the Norway – Indonesia REDD+ partnership representing a "significant challenge requiring major steps in policy development and implementation[5]."

Management of this grant was entrusted to a National REDD+ Task Force, established by Presidential Decree No.19 in September 2010 and further reconstituted by Presidential Decree No. 25 in September 2011. The duties of the National REDD+ Task Force were taken over by the National REDD+ Agency, established by Presidential Decree No. 62 of 2013. The National REDD+ Agency was also responsible for developing various reporting and verification mechanisms. Furthermore, Indonesia has been advancing the application of jurisdictional and nested REDD+[6].

In accordance with Presidential Regulation No. 16 of 2015, the duties and functions of the National REDD+ Agency are to be merged with the Ministry of Environment and Forestry.

The Ministry of Finance has an articulated "strategy to accommodate payments to create alternative economic opportunities where Government of Indonesia laws and regulations designed to achieve emissions reductions in land based emissions negatively affect existing economic opportunities" [7]. There is also increasing recognition of the impact of the private sector and initiatives to enhance its role in emission reduction and work to establish a context for regional incentive mechanisms and fiscal transfer mechanisms. The Ministry of Finance has recognised the need "to develop suitable transfer mechanisms which could be used for financing emission reduction programs and initiatives prepared by Ministries/Agencies and local governments"[8]. The fiscal instruments deployed by the Ministry of Finance include: financing relevant Ministries' and Agencies' budgets and financing activities falling under regional and local affairs administrations including specific allocation funds for emission reduction, performance based grants, local grants and policy development around fuel subsidy removal and incentives to change land use.

Indonesia is well positioned to benefit from the lessons learned from the various available channels of international funding for REDD+ including: project-based funds (e.g. Congo Basin Forest Fund); national approach based on regional incentives (e.g. Guyana REDD+ Investment Fund); national approach based on a mix of regulation and regional incentives (e.g. Amazon Fund) and nested approach (a national regulatory strategy with the ability for sub-national "proponents" to access international funding directly).

Among key national REDD+ stakeholders there is a recognised need to focus on economic viability, with

3 The funding is provided over a number of stages with REDD Task Force paving the way for the establishment of the National REDD+ Agency as part of meeting the first phase criteria (US$30 million in initial funding). Further installments will be disbursed in a transition phase followed by a second and third phase. Disbursement details for Phase 2 and Phase 3 are still in negotiation.

4 Working Group on Funding Instrument, REDD+ Taskforce. FREDDI (Fund for REDD+ in Indonesia): A Concept Note on the Funding Instrument for REDD+ in Indonesia. 2013 (Translation prepared by UNORCID)

5 Indonesia Ministry of Finance. Ministry of Finance Green Paper follow up: Regional Incentive Mechanism for emissions reduction from land based sector. Ministry of Finance and Australia Indonesia Partnership 2012.

6 See: http://www.v-c-s.org/JNRI. Defined as the voluntary remuneration for environmental services in subnational schemes that could contribute towards accounting of national reduction achievements.

7 Ministry of Finance. Ministry of Finance Green Paper follow up: Regional Incentive Mechanism for emissions reduction from land based sector. Ministry of Finance and Australia Indonesia Partnership, 2011.

8 Ministry of Finance, Fiscal Policy Agency, Center for Climate Change Financing and Multilateral Policy. Instruments and Mechanisms for Financing of Greenhouse Gas Emission Reduction Programs in the Land Based Sector, 2012.

an important component being the engagement of all the stakeholders and enterprises involved in REDD+ to ensure that all activities implemented have support[9]. The challenge of grant size and economic sustainability of REDD+ activities becomes more acute when one considers the scale and scope of the "competition" such as illegal logging (considered to be an approximately USD7 billion industry[10]) and palm oil production.

It is outside the scope of this paper to explore the systemic interventions that REDD+ has underway or is planning that could rebalance the "economic ecosystem" against logging and palm oil and in favour of local communities. It would be naïve to claim that it is possible simply to implant market-based mechanisms that could introduce sustainable environmental protection across Indonesia. Having said this, a review will be undertaken later in this paper regarding the potential of the carbon market to contribute to REDD+ through financial mechanisms linked to the funding instrument.

It is important to end this section with a cautionary note concerning the importance of devoting resources and time for reflection on the possible negative consequences of environment-focused economic interventions, however well intentioned. There will inevitably be attempts to subvert innovative financing initiatives for short-term profit and rent seeking. Also, any economic interventions involving land have to be designed to avoid "land grabbing"[11] given that even land acquired for forest and peat land protection can be "grabbed" from local communities. As issues of forest ownership and forest tenure are complex, extremely sensitive and outside the scope of this report, suffice it to observe that any financial strategy should be tailored to work with and strengthen mechanisms such as the Principles, Criteria and Indicators for REDD+ Safeguards in Indonesia (PRISAI) and be supportive of community land rights, aim to diminish conflicts and be supportive of equity, social justice and sustainability[12].

9 Chandra Kirana. REDD+ for a Green Economy for Sustainable Livelihoods – A policy strategy framework for Indonesia. ILO Glacier. December 2013.

10 Human Rights Watch. The Dark Side of Green Growth: Human Rights Impacts of Weak Governance in Indonesia's Forestry Sector. Published 16/07/2013

11 The International Land Coalition's Tirana Declaration defines 'land grabbing' as acquisitions or concessions that are in violation of human rights, particularly the equal rights of women; not based on free, prior and informed consent of the affected land users; not based on a thorough assessment, or are in disregard of social, economic and environmental impacts, including the way they are gendered; not based on transparent contracts that specify clear and binding commitments about activities, employment and benefits sharing and not based on effective democratic planning, independent oversight and meaningful participation. Source: www.landcoalition.org/about-us/aom2011/tirana-declaration

Study Framework

Focus and Scope

As described earlier, the obligation to develop a funding instrument for REDD+ was specified in the LOI. This became the responsibility of BP REDD+, according to Perpres 62/2013. BP REDD+ conceptualised and began to develop the Fund for REDD+ for Indonesia, known as 'FREDDI'. This report examines the development process of the Fund for REDD+ in Indonesia (FREDDI) with a view to identifying emerging lessons that could be applied to the future development of a REDD+ funding instrument in Indonesia, whether explicitly following the template established by FREDDI or not.

Indonesia has extensive experience in creating and managing structures to manage and disburse ODA. Rather than devoting this analysis to recommendations related to the structuring and initial operations of a funding instrument for REDD+, this report focuses instead on the issue of impact maximisation.
By the time BP REDD+ closed in January 2015, FREDDI was not yet fully operational- but it is still instructive to examine the stage to which it had developed. Specifically, it is timely to highlight the potential limitations of a payment for performance approach and to explore alternative or additional strategies for impact maximisation.

At the time of writing, the funding instrument was "under formation" and consequently there was some flux concerning key personnel and considerable negotiations were underway between the various stakeholders.

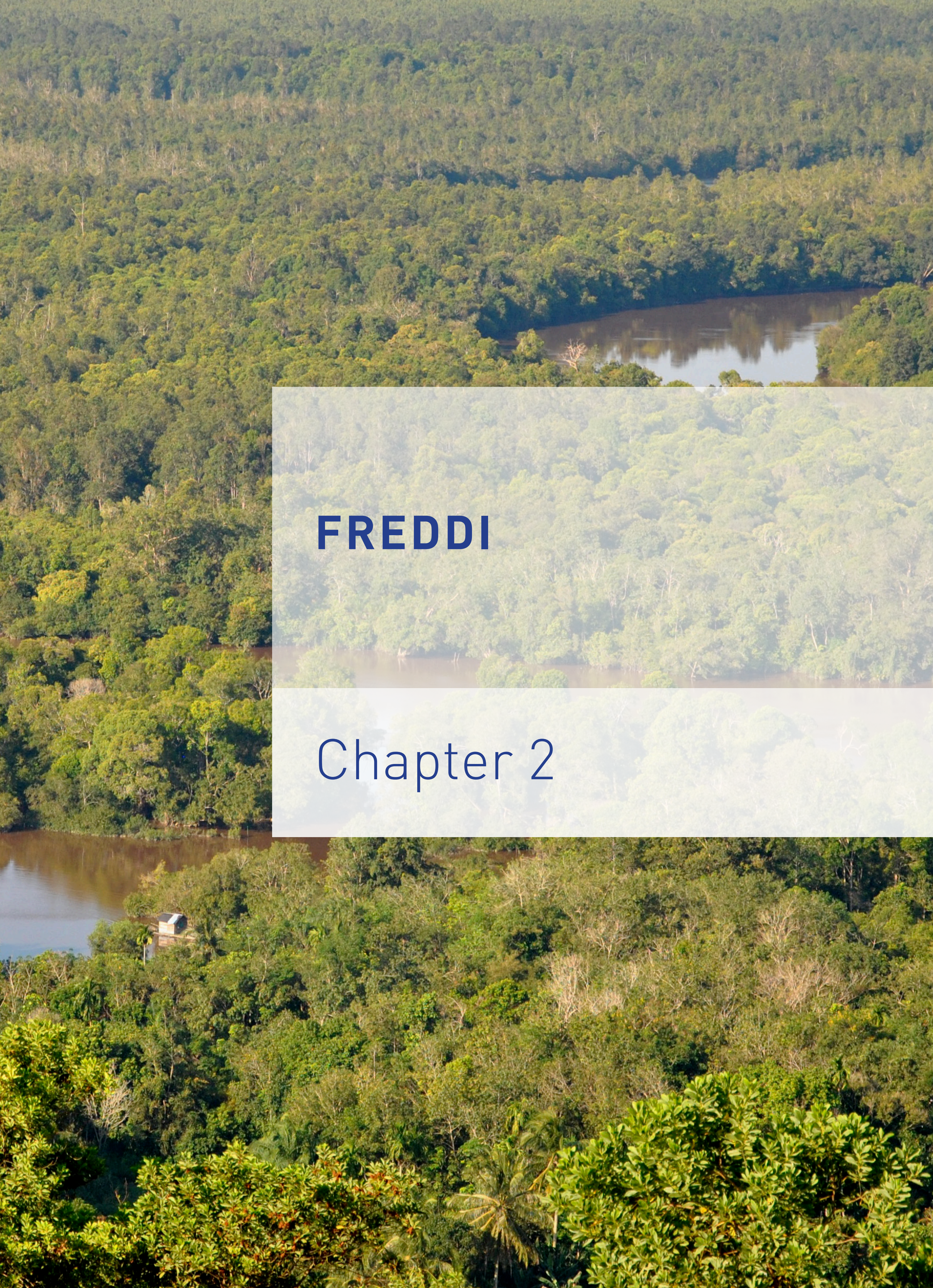
12 http://news.mongabay.com/2013/0517-indonesia-customary-forest.html. Accessed 20/02/2014

Methodology

The study has been prepared on the basis of a thorough literature review, including peer-reviewed publications, available written documentation regarding relevant institutions, laws and regulations and grey literature. These sources were supplemented by personal interviews with stakeholders and local partners.

In cases where conclusions were largely informed by grey literature or personal comment, every effort has been made to ensure that such data was confirmed via an independent source (which may itself also have been grey literature). This combination of source data was used to ensure that the report was able to make best use of emerging experiences and local detail, as well as be informed of stakeholder views that may not always be well reflected in traditional literature for political reasons, language barriers, or lack of resources or interest in publishing.

This report comprises one of three separate but interlinked initiatives to explore specific issues associated with REDD+ implementation, the other two being an assessment of land ownership registration processes in Indonesia; and a review of social and environmental safeguards that are relevant to REDD+ activities and applicable to the Indonesian context, including identification of gaps and lessons learned.



FREDDI

Chapter 2

Relevant Financial Definitions

There exists extensive documentation of the REDD+ international funding experience and also of various Indonesian environment-focused funding initiatives, produced by the the funding instrument team. These initiatives include the Indonesian Biodiversity Foundation Project (described as an endowment fund), the Indonesia Climate Change Trust Fund and the Indonesia Green Investment Fund. Indonesia has commendably attracted substantial funding from global public and private sources to assist in meeting its pressing environmental challenges.

In order to set the scene, it is important to review some financial concepts relevant to the structuring of FREDDI, and to the potential structuring of the REDD+ funding instrument in the future. The concepts that will be discussed are trust funds (as FREDDI is described), endowment fund models and government-linked funds.

It should be made clear from the start that there is little utility in a debating whether the design of FREDDI conforms to purist definitions of "trust funds". The purpose of this section is rather to analyse and understand the strengths and weaknesses of various approaches to the disbursement and management of funds.

A trust fund is a fund comprised of a variety of assets intended to provide benefits to an individual or organisation. A trust fund is established by a grantor to provide financial security to an individual or organisation, such as a charity or other non-profit organisation[13]. In the case of conservation, trust funds are generally government or institution sponsored pools of money that are earmarked for a specific purpose or objective and "ring fenced" from the main budget of the government or institution. Environmental trust funds are characterised by their management by a large multi-lateral institution, the involvement of major donors and a fairly wide scope of designated activities.

Examples include the Global Environment Facility Trust Fund that supports the implementation of multilateral environmental agreements, and serves as an operating entity of the financial mechanism of the UN Framework Convention on Climate Change. The Trust Fund for Environmentally and Socially Sustainable Development is a multi-donor trust fund that provides grant resources for World Bank activities which mainstream environmental, social and poverty reducing dimensions of sustainable development. A final relevant example is the Nigeria Trust Fund, which is a fund created in 1976 by agreement between the Bank Group and the Nigerian government. Its objective is to assist the development efforts of the Bank's low-income regional member countries whose economic and social conditions and prospects require concessional financing[14].

An endowment is intimately linked with the concept of a trust fund, given that the term is generally used to describe funds that are put aside for the long-term benefit of an individual or a cause. True endowments consist of funds permanently set aside to generate income for an organisation, charity or NGO. Quasi-endowed funds are funds committed to long-term use (endowment) generally by a board or some governing body resolution or decision. This form of trust fund has more flexibility as the body that decided to commit funds for long-term use may reverse or amend its decision. A term endowment is a gift in which the principal is restricted for a specific period of time. For example, a donor may create a gift for ten years to benefit a particular university program, or to fund a need for a limited period of time.

Countries generally have a range of funds and vehicles including national pension funds, currency stabilisation funds, reserve investment funds, savings funds, strategic development funds and sovereign wealth funds. These structures are regarded as government-linked or government-sponsored funds. There is much that can be learned from the growing body of experience related to the management strategy and governance, especially of sovereign wealth funds. Well-managed government-

13 Source: Investopedia. http://www.investopedia.com/terms/t/trust-fund.asp. Accessed 22/02/2014

14 Personal communication: Jyoti Mathur-Filipp

linked funds with clear mandates and professional staff can indeed drive effective investment in the public sector[15]. FREDDI, defined as a public fund, fell within this category.

Lessons to be learned from government-linked funds include the importance of seeking impactful investments, leveraging investments through partnerships and the value of impeccable governance and oversight. Government-linked funds often operate with a long-term vision aiming to grow national wealth for future generations. This ethos is shared with the REDD+ funding instrument, which similarly aims to protect the environment to ensure that future generations do indeed inherit a better Indonesia.

Governments and other public-sector bodies do set up institutions and mechanisms (including funds) to catalyse private-sector investment into sustainable activities, where the current risk-reward profile is not attractive or where there are particular political, technical or market risks. This tends to follow the model of the development finance institutions (for investment in the poorest developing countries) and for example, the UK Green Investment Bank (for investment in clean technologies). Additional areas for focus are agriculture, small businesses and forest protection[16].

The UK Green Investment Bank is the first bank of its kind in the world, with £3.8 billion of funding from the UK Government to invest in sustainable projects[17]. This ambitious initiative aims to finance interventions related to UK meeting its commitments under the Kyoto Protocol and other international agreements. The bank has a stated commitment to a double bottom line – "green" impact and financial return. Its main role is facilitating private sector investment by making green projects feasible investments. As designed by BP REDD+, the long-term strategy for FREDDI also involves attracting public-private partnerships and enlarging private participation in REDD+-related initiatives. Looking to the future, lessons learned from institutions such as this could be highly valuable. A recent Indonesia-specific example of government intervention to deploy a fund to meet a challenge (in this case reducing foreign debt) is the Ministry of Finance's use of the USD5+ billion fund from prospective pilgrims to purchase sharia-compliant government bonds, thereby reducing exposure to foreign investors who own about a third of Indonesia's foreign debt[18].

There is a growing recognition that achieving global emissions reductions requires scaled up funding. To this end, public-private partnerships based on innovative financing have been mooted[19]. Similarly, there is an ongoing search to increase the efficiency of aid and development funding by seeking "market inefficiencies of specific sectors that can benefit from development aid"[20]. The concept of innovative financing for development was introduced at the 2002 International Conference on Financing for Development held in Monterrey, Mexico. The rationale was to encourage novel approaches and initiatives, outside the traditional ambit of ODA, to generate additional, sustainable, and effective funding for the Millennium Development Goals (MDGs).

The Structure of FREDDI

FREDDI operated under a clear mandate with the National REDD+ Agency defining its strategy, as well as the scope and scale of funding activities. The legislative basis for the National REDD+ Agency to establish a funding instrument was Perpres 62/2013 that refers to a "funding instrument that is established by the Head of the REDD+ Agency to guarantee a management of funds that is transparent, accountable, effective in accordance with the guidelines and REDD+ funding safeguards pursuant

15 Alan Gelb. Silvana Tordo, Håvard Halland, Noora Arfaa, Gregory Smith. World Bank Policy Research Working Paper 6776. Sovereign Wealth Funds and Long-Term Development Finance Risks and Opportunities, 2014.

16 Forum for the Future. Sustainable economy in 2040: A roadmap for capital markets. 2011.

17 http:www.greeninvestmentbank.com. Accessed 20/02/2014

18 Indonesia taps $5.4bn Hajj fund for financial salvation - FT.com http://www.ft.com/intl/cms/s/0/fe4fbfe4-956a-11e3-8371-00144. Accessed 02/03/2014

19 GCP, IPAM, FFI, UNEP FI and UNORCID. 2014. Stimulating Interim Demand for REDD+ Emission Reductions: The Need for a Strategic Intervention from 2015 to 2020, Global Canopy Programme, Oxford, UK; the Amazon Environmental Research Institute, Brasília, Brazil; Fauna & Flora International, Cambridge, UK; and UNEP Finance Initiative, Geneva, Switzerland.

20 Eytan Bensoussan, Radha Ruparell, and Lynn Taliento.Innovative development financing, McKinsey & Company, 2013

to the prevailing laws and regulations."[21] A multi-faceted funding instrument, FREDDI has been extensively described in the excellent range of documentation produced by The Working Group on Funding Instrument, National REDD+ Taskforce with articulated guiding principles including: "effectiveness, efficiency, fairness, transparency and accountability; leadership in design, management and governance of the funding instrument by the Government of Indonesia; ensuring that Principles, Criteria, and Indicators for REDD+ Safeguards in Indonesia (PRISAI) are part of the funding instrument operation and REDD+ projects; and flexibility to finance national initiatives, provincial priorities, demand-driven proposals and small grants[22]."

The 2012 National REDD+ Strategy (Stranas) also specifies objectives for a funding instrument, as follows:

- Support the emissions reduction efforts from deforestation and forest degradation in Indonesia
- Support the implementation of the National REDD+ Strategy
- Support the institutional strengthening and further work of the REDD+ Agency through Funding Window 1
- Promote the payment-for-performance approach
- Provide funding that is complimentary to existing sources including national budget, regional budget and other donors
- Ensure that REDD+ funding is sustainably and effectively managed, disbursed and mobilised

It should be noted that the funding instrument operates in a complex regulatory and public law environment, and that diverse national, donor and other stakeholder interests have shaped its structure.

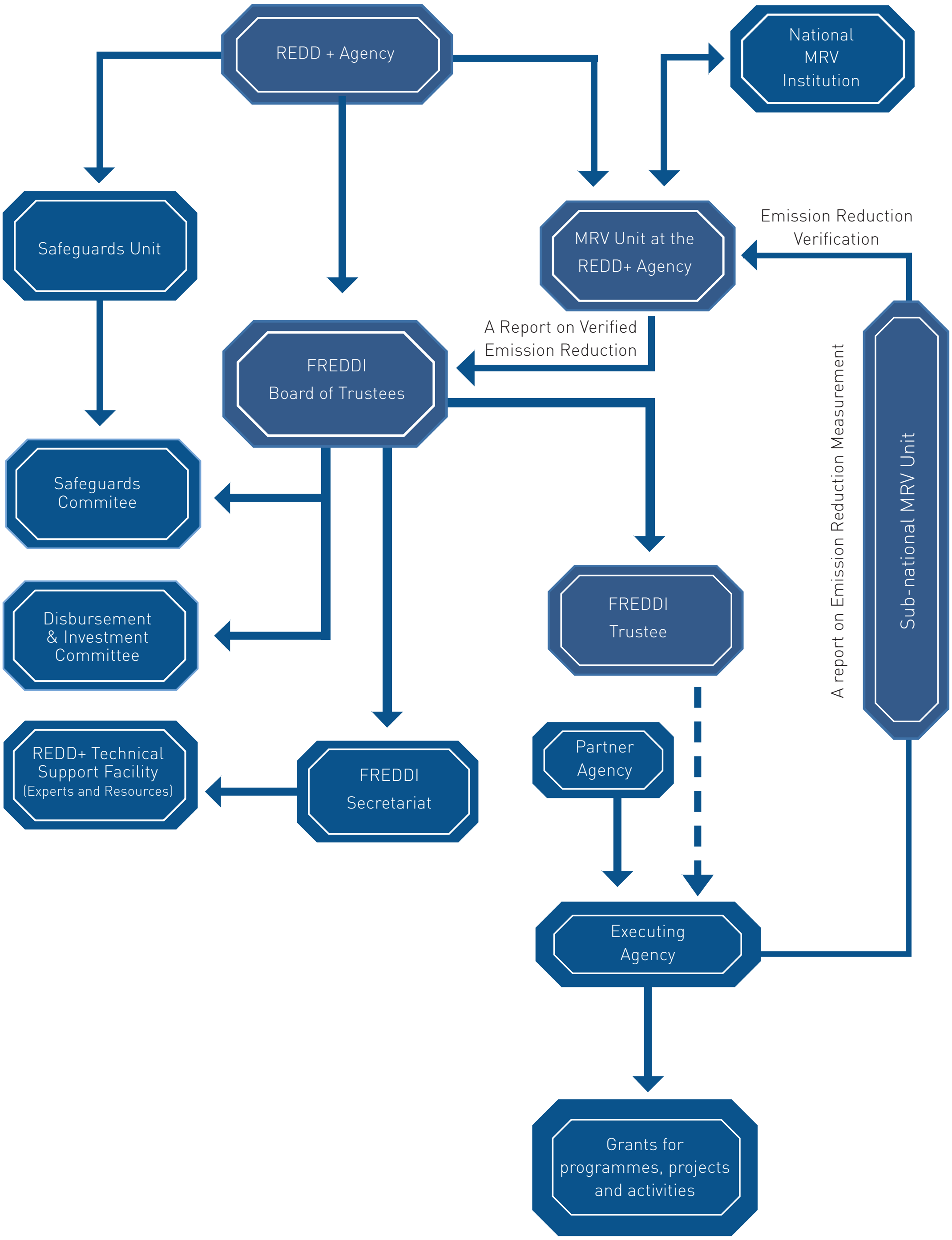
FREDDI is technically described as a trust fund based on the structure of "fund of funds" [23] pursuant to Presidential Regulation 80/2011 regarding Trust Fund. Its institutional architecture includes a Board of Trustees, Trustee, Safeguards Unit, Safeguards Committee, Fund Disbursement and Investment Committee, Secretariat, Partner Agencies, Executing Agencies, REDD+ Technical Support Facility with the REDD+ Agency designed to be the host institution for the funding instrument (figure 1). The way that FREDDI had been operationalised up to January 2015 can be described as a "fund disbursement strategy". Fund disbursement is to occur based on funding windows described as national funding window (covering national priorities and emergency interventions), sub-national funding windows focused on provincial REDD+ strategies, a competitive funding window and a small-scale funding window.

21 Presidential Regulation 62/2013 on the Agency for Reducing Greenhouse Gas Emissions from Deforestation, Forest Degradation and Peat lands (REDD+ Agency).

22 Working Group on Funding Instrument, REDD+ Taskforce. FREDDI (Fund for REDD+ in Indonesia): A Concept Note on the Funding Instrument for REDD+ in Indonesia. 2013 (Translation prepared by UNORCID)

23 Here described as a structure in which the main trust fund may make investment in the subsidiary funds

Figure 1: Schematic Proposed Structure of the Funding Instrument



FREDDI funding was envisaged to come from other countries' contributions and international and domestic private sources. As a 'fund of funds', subsidiary funds under the funding instrument provide an opportunity to establish financial cooperation and to support fund mobilisation; indeed, the mandate for REDD+ fund mobilisation 'has opened up an opportunity to create funding alternatives from the public and private sectors as a continuation of the first to third modalities'[24]. These alternatives are clearly outlined within the three stated funding modalities of FREDDI.

24 Working Group on Funding Instrument, REDD+ Taskforce. FREDDI (Fund for REDD+ in Indonesia): A Concept Note on the Funding Instrument forREDD+ in Indonesia. 2013 (Translation prepared by UNORCID)

Modality I is for grants to achieve a REDD+ objective. Grants are offered at three scales, with the small-scale grant modality intended to facilitate inclusion of communities, NGOs and SMEs. Pure grants are channeled, in a phased approach, primarily to REDD+ readiness activities, infrastructure development and capacity building. Pure grants were initiated in Phase I of the Indonesia's REDD+ Programme. Performance-based grants, also part of Modality I, are channeled based on agreed-upon verified performance covering emissions reduction activities and activities that support the emissions reduction target (see Table 1). They will be initiated in Phase II.

Modality II is for performance-based payments and payment aggregation. The National REDD+ Strategy gives examples of cases in which such payments may be appropriate, for instance, giving an incentive for a policy to be issued at the provincial or district level, or giving an incentive for capacity-building at the sub-national level, or buying a CER/VER from a project implementing unit.

Modality III is for investments to support REDD+ activities, including funding through investments, loans and carbon markets. Through this modality, the funding instrument would buy VER/CER from REDD+ projects to be resold to carbon markets. Options being explored within this modality are cap and trade within inter-province carbon trade, based on emissions quotas for each REDD+-implementing province; the use of financial instruments other than grants, such as concessional loans, pre-financing guarantees, municipal bonds and global bonds for REDD+ issued by the Government of Indonesia.

The modalities are being implemented in a phased approach, with a focus upon ensuring adequate enabling conditions. FREDDI was not yet operational by the time of integration of BP REDD+'s mandate with the Ministry of Environment and Forests in January 2015. The design process at that stage was focusing on grant management and disbursement modalities. Also up to that point, funding mobilisation for REDD+ had depended upon international public and private funding sources. However as described above, there was a clear intention and roadmap for the funding instrument to evolve to a stage where Modalities II and III are operationalised, as a result of which FREDDI would mobilise domestic private funding sources. Progress towards operationalising these modalities is carefully mapped out and dependent upon putting in place of necessary infrastructure including human resources, legal framework, an MRV system and other relevant institutions.

Various impact measurement mechanisms were developed for these funding modalities. Funding windows were established as part of a pipeline development program aligned with the National Action Plan for Reducing Greenhouse Gas Emissions (RAN-GRK), the National Action Plan for REDD+ in Indonesia (RAN-REDD), the Provincial Action Plans and Strategies (SRAP). These funding windows include (1) a strategic window for readiness, national priorities and emergency intervention; (2) subnational initiatives; (3) small grants; and (4) competitively- selected initiatives. The first three windows were scheduled to commence disbursement in 2014, while funds disbursement for competitively selected initiatives was planned for 2015. FREDDI was also committed to ongoing consultation and evaluation to evolve its institutional structure.

It should be noted that FREDDI operated under a very clear mandate with the REDD+ Agency issuing "strategic directions for FREDDI, defining the scope and limitation of activities that can be funded, and defining annual budget allocation for each funding window".

FREDDI had adopted a long-term project portfolio approach with a pipeline of "finance-able" targets aligned with the national REDD+ strategy (Figure 2). The advantage of such an approach is that it highlights the fact that FREDDI would not only need more funding to achieve its objectives, but also that there is indeed a longer-term vision and a clear strategy concerning the mobilisation of funding for REDD+ implementation in Indonesia.

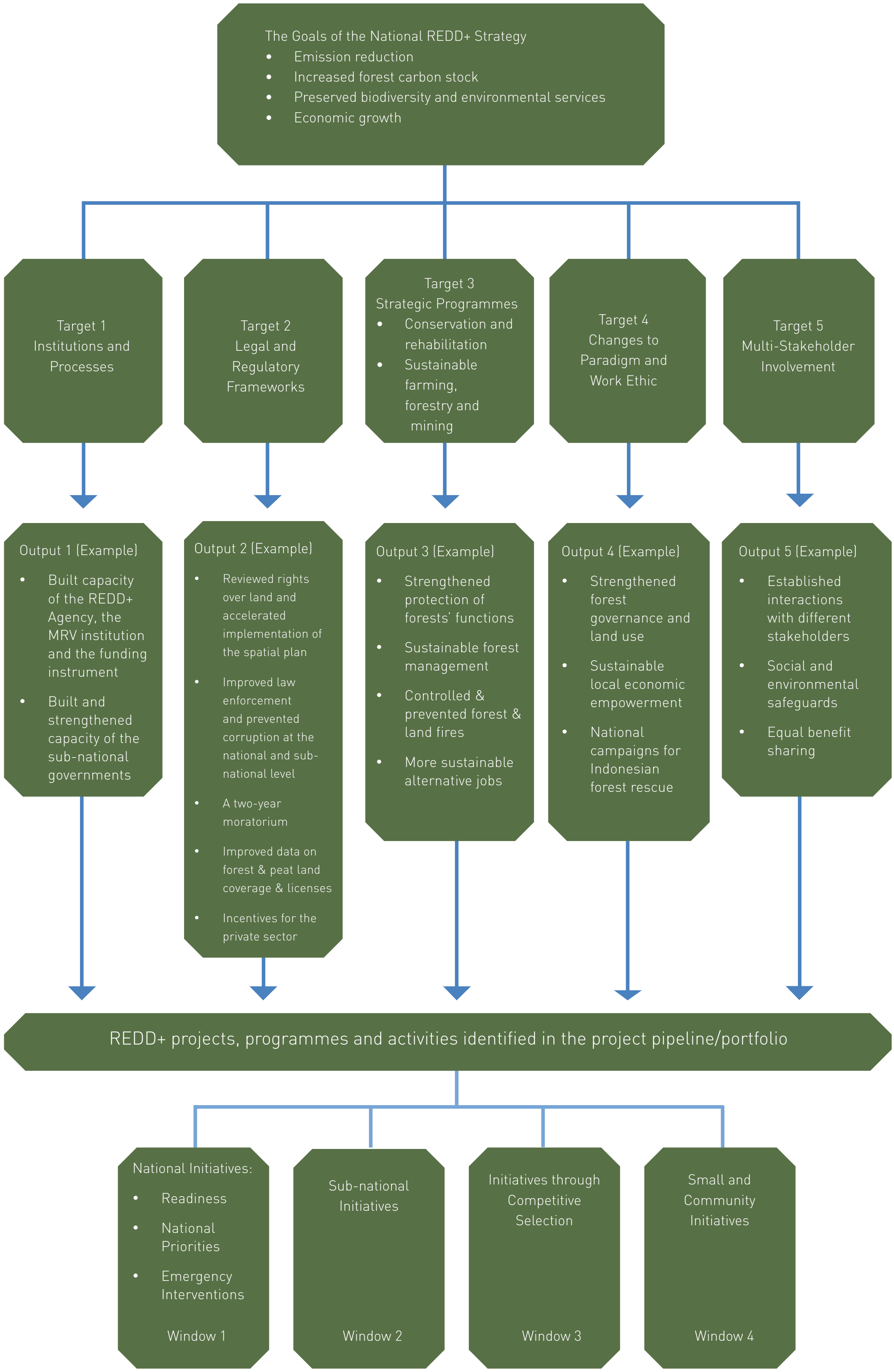
It is estimated that up to USD8 billion would be needed until 2020 for the implementation of the National REDD+ Strategy, all provincial strategies and action plans, and the REDD+ aspects of the National Action Plan for Greenhouse Gas Emission Reduction (RAN-GRK)[25].

25 Working Group on Funding Instrument, REDD+ Taskforce. FREDDI (Fund for REDD+ in Indonesia): A Concept Note on the Funding Instrument for REDD+ in Indonesia. 2013 (Translation prepared by UNORCID)

Table 1: Some potential programs, projects, and activities to be funded

Institutions and Processes: Institutional Infrastructure	Strategies and Action Plans, national and regional REL/RL (baseline), MRV system development and implementation, institutional capacity building, pilot province implementation, funding instruments.
Legal and Regulatory Frameworks	Mechanisms for Incentives; land use planning; legal review and revision related to tenurial issues, land classification and land swap; forest governance strengthening, including licensing and land conversion; law enforcement and anti-corruption.
Strategic Programmes: Sustainable Landscape Management	Land productivity; sustainable forest and land management; sustainable alternative livelihoods; the restoration of land degraded due to commodity production; value-chain improvement.
Strategic Programmes: Conservation and Rehabilitation	Rehabilitation and reforestation; fire prevention and control; conservation and protection zone surveillance; and biodiversity conservation and ecological empowerment.
Paradigm Change and Work Ethics	National campaigns to "save Indonesian forests"; the recognition of REDD+ achievements with equity.
Multi-stakeholders' Involvement	Multi-stakeholder interaction or consultation; social and environmental safeguards; mechanisms for benefit sharing and incentives in an equal manner.

Figure 2: The Funding Instrument Pipeline



FREDDI: Emerging lessons

It should be noted that at the time of the closure of BP REDD+, FREDDI was still at an early stage of development. Having said this, though, it may be useful to highlight some key features relating to process as a basis for further, ongoing investigation and discussion. This section explores the implications of the early evolution of FREDDI to inform the design of a funding instrument for REDD+ going forward. It should be noted that at the time of writing this report, there was still ongoing discussion on the requisite amendments required to permit the funding instrument to become fully operational.

A REDD+ funding instrument has an important potential role in supporting Indonesia's articulated "green fiscal policy" which highlights the role of REDD+ in achieving a successful green economy transition[26]. Similarly it is pivotal to a regional collaboration opportunity, especially as related to applying recognised standards for emission reduction[27].

The REDD+ funding instrument can draw on considerable learnings from global REDD+ implementations in terms of efficiency, efficacy and equity of REDD+ strategies[28]. This experience is useful across key areas including community-based agro-forestry, conservation, sustainability and capacity building.

A priori, government institutions (in particular, the Ministry of Finance) were extremely supportive of FREDDI, especially as related to assisting with its rapid establishment. Given its particular "trust fund" structure, FREDDI was bound to operate in a fairly rigid (real and perceived) regulatory context[29].

FREDDI and its evolutionary process of establishment naturally reflect many of the realities of project implementation in Indonesia. While certainly not unique to Indonesia, we must be cognisant of the complexity of government and international stakeholder consultation, sensitivities related to outside intervention, the propensity to be risk averse and focus on small yet time and resource consuming pilot and proof-of-concept projects, barriers to speedy implementation, the excessive costs of verification and monitoring, the complexity of budgeting processes and financing mechanisms and the barriers to the transfer of knowledge and expertise. These implementation challenges have a financial cost. For example, using international agencies exclusively for their fiduciary and procurement services (with consequent fees, overhead and other charges) erodes the amount available for project implementation and also prevents local management capacity building.

The evolution of a REDD+ funding instrument from a disbursement mechanism into a full-fledged fund, in FREDDI's case through implementing Modalities II and III, requires considerable focus on capacity building, implementation mechanisms and financial structuring. Reviewing the potential for a REDD+ funding instrument to evolve into a fully-fledged government-linked strategic investment fund (see later in this report for discussion concerning Sovereign Wealth Funds and Strategic Infrastructure Funds) is outside the scope of this report, but it should be observed that there are indeed regulatory and other issues (as in the case of the Indonesia Climate Change Trust Fund) to be overcome.

One of the main differences between a "fund" and a "disbursement mechanism" lies in the nature and level of activity related to the grant or investment activity. A recognition of this difference, and the intent to evolve beyond a 'disbursement mechanism', is clearly articulated in relation to FREDDI's three modalities.

Like grants (Modality I), 'performance-based payment' approaches (Modality II) are generally regarded as passive approaches, as opposed to actively seeking opportunities for impactful funding and investment.

---

26 Bambang PS Brodjonegoro. Accelerating Green Economy Transition Through Greening The RPJMN. Ministry of Finance of the Republic of Indonesia. June 2013.

27 Barbara Lang, Sebastian Koch and Bojan Auhagen. Supporting REDD+ safeguards: Towards a common approach of German Technical Cooperation in Southeast Asia and the Pacific. Discussion Paper of the REDD+ Working Group of the GIZ Sector Network Natural Resources and Rural Development (SNRD) Asia. 2013

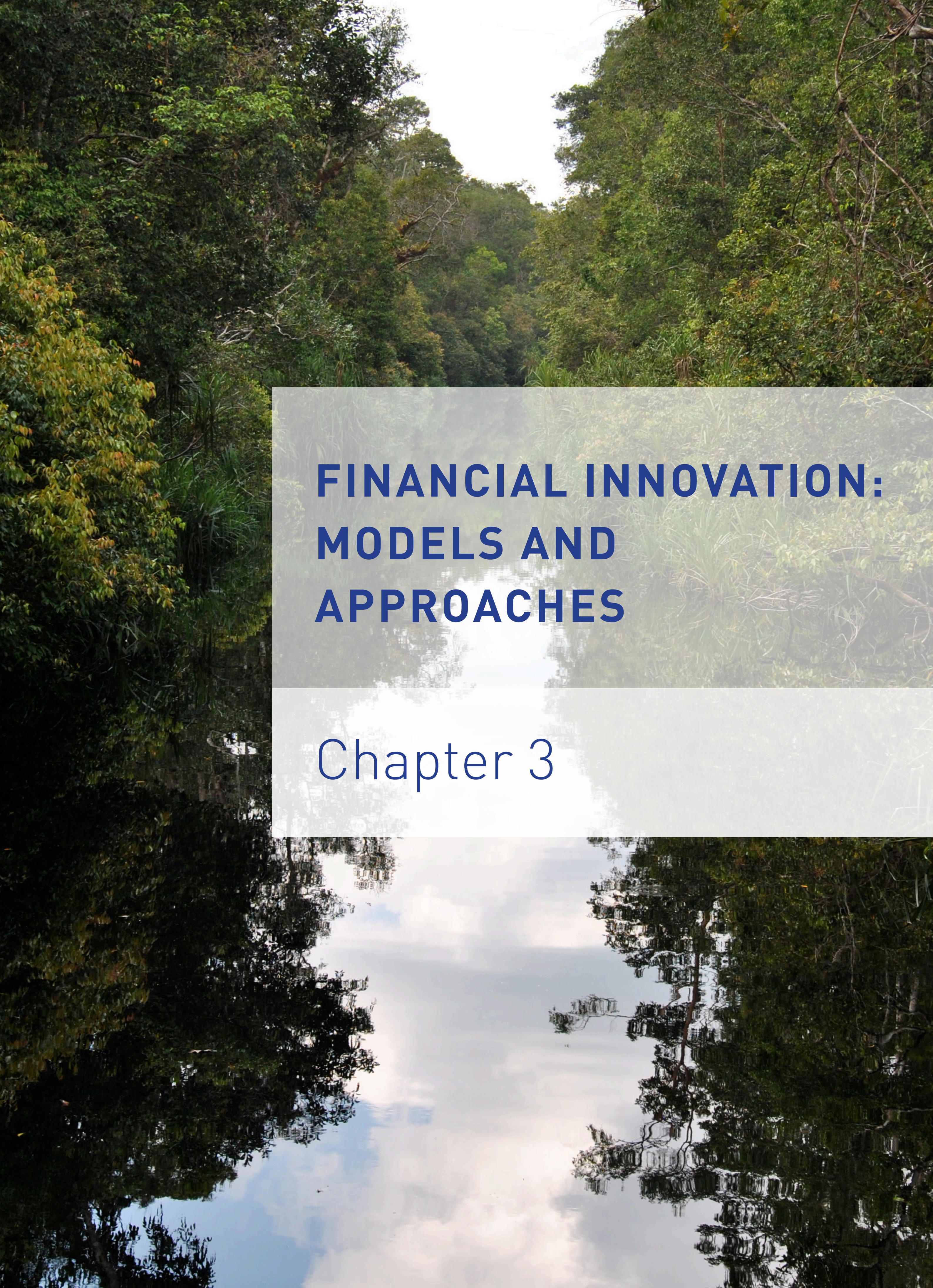
28 May, P.H., Millikan, B. and Gebara, M.F. The context of REDD+ in Brazil: Drivers, agents and institutions. Occasional paper 55. 2nd edition. CIFOR, Bogor, Indonesia, 2011.

29 Presidential Regulation (Perpres) No.80/2001 on Trust Fund; Government Regulation (PP) No.10/2011 on Procedures of Procuring Foreign Borrowing and Receiving Grants; Act (UU) No.1/2004 on State Treasury

Results-based or performance-based funding, as already implemented in the health sector, is a robust and ostensibly "safe" mechanism, ensuring that funding decisions are based on a transparent assessment of results against time-bound targets[30]. However, this funding approach has the downside of requiring considerable monitoring and evaluation resource allocation and tends to favor incumbents over communities and individuals that have no conventional track record, yet have a valid and promising project. There are a number of disadvantages in being a passive investor or grant disburser in that the organisation may not be in the "information loop", is seen as simply as source of money and has little role in shaping and facilitating and leveraging opportunities to attract further investment.

As described earlier, however, there is scope within the Modalities of FREDDI - particularly Modality III - to move from a 'passive' to an 'active' investor role. This next section of this report reviews the options for financial innovation in support of the objectives of a REDD+ funding instrument, and in particular in support of this transition towards active fund mobilisation. It is hoped that the importance of a robust risk/return model will become apparent, as the advantages of a REDD+ funding instrument taking a more active role as an "investor" from the start of its operations seem to largely outweigh the possible downsides.

30 Performance based funding at the Global Fund. Geneva, Global Fund to Fight AIDS, Tuberculosis and Malaria, 2008.



FINANCIAL INNOVATION: MODELS AND APPROACHES

Chapter 3

This section reviews the main innovative financing instruments currently deployed across the world with a particular focus on the environment. The aim is not to propose one or other approach for Indonesia's REDD+ funding instrument, but rather to highlight the panoply of options that exist and to consider the benefits of considering how to deploy financial innovation in the service of the funding instrument's objectives.

Impact Investing

"Impact investing" is described by the Global Impact Investing Network (GIIN) as "investments made into companies, organisations, and funds with the intention to generate a measurable, beneficial social and environmental impact alongside a financial return." Impact investments can be made in both emerging/ frontier and developed markets, and target a range of returns from below-market to above-market rates, depending upon the circumstances. Impact investing is paradigmatic of possible win-win partnerships between the public and private sectors. J.P. Morgan and The Rockefeller Foundation (2010) claim that investments focused on the basic needs of the "bottom of pyramid" (including housing, water and sanitation, education, maternal health and agriculture) constitute a new asset class (impact investing) that has substantial potential in terms of both scale (up to USD1 trillion in investment opportunities over the next decade) and returns.

Impact investors are primarily distinguished by their intention to address social and environmental challenges through their deployment of capital. For example, criteria to evaluate the positive social and/or environmental outcomes of investments are an integrated component of the investment process. While return expectations may tend to optimistic, there is a growing body of evidence that impact investors can indeed play a real role in meeting social and environmental challenges[31].

31 Nick O'Donohoe et al, "Impact Investments: An Emerging Asset Class," J.P. Morgan (2010): 6, accessed May 1, 2013, URL: http://www.rockefellerfoundation.org/uploads/files/2b053b2b-8feb-46ea-adbd-f89068d59785-impact.pdf.

Private investors, government-linked funds, multilateral institutions and large investment funds have demonstrated interest in sustainable forestry sector opportunities[32]. Forestry and agriculture investments in emerging/frontier market countries are attractive given that they offer portfolio diversification and potentially substantial returns[33]. Impact investing is becoming increasingly sophisticated as robust models to understand the interaction between risks, return and impact are being developed[34]. The proliferation of research on impact investing is indicative of the confidence that it will grow into a USD1 trillion asset class before the end of the decade. The growth of impact investing will be determined by how much resources are devoted to build the "market". These resources are largely in the domain of public policy[35].

The FREDDI design team anticipated that impact investment would be encouraged through the funding instrument (through lead and co-investment, fund seeding, building local capacity to accept investments etc). It is, however, necessary to consider the possibility that options in this regard would have been constrained by the FREDDI's regulatory cadre and trust fund operating model. It is possible that the government could play a role in ensuring that fiscal policy and local and national laws and regulations encourage impact investing. It should also be noted that impact investors are "normal" investors in terms of requiring data to make sound decisions. For example, fine-grained information is required on supply chains, timber production, policy and management[36].

32 The Rimba Raya initiative could be regarded as an impact investment.

33 Patrick E. McNellis. Foreign investment in developing country agriculture – the emerging role of private sector finance. FAO Commodity and Trade Research Working Paper no 28. 2009

34 Saltuk Y. A portfolio approach to impact investment: A Practical Guide to Building, Analyzing and Managing a Portfolio of Impact Investments. JP Morgan Global Social Finance Research. 2010

35 Martin,Maximilian. Making Impact Investible Impact Economy Working Papers,Vol.4,1 Geneva. 2013

36 For example, studies such as: Earth Innovation Institute. Preliminary findings: a provincial wide spatial, economic and social analysis of timber industry in West Papua. 19 December 2013.

A more recent development has been the creation of social impact investment funds that provide debt capital for late stage projects in sectors such as healthcare. Investors get their capital back and some debt investment return if the projects are successful. The investment managers may forego their profits and this money is then used to fund research and development. The FREDDI design team anticipated that FREDDI would evolve in such a way as to encourage social impact investments - which would be either channelled through the funding instrument itself, or with the funding instrument as a guarantor.

No discussion of impact investing would be complete without a review of how to evaluate impact. While impact is the outcome attributable to a particular intervention or investment, clearly expectations related to outcomes vary. Over the past decade, there have been substantial advances related to the rigorous measurement of impact[37].

Extractive industries such as mining tend to be distanced from the impact investment paradigm. Emerging market countries that are resource dependent are naturally targets for investors seeking the best possible terms and conditions, sometimes at the expense of the natural environment. It is worth considering whether in the longer-term, a REDD+ funding instrument could play some role in promoting impact investment in extractive industries in Indonesia.

Debt issuance

The paradigmatic mechanism related to debt and debt issuance is IFFIm (International Finance Facility for Immunization), a UK-registered special purpose vehicle (SPV) that issues bonds on the global financial markets to finance the immunisation activities of the Global Alliance of Vaccine Initiatives (GAVI). The bonds are "frontloaded" based on long-term, staggered commitments from donor countries. The World Bank plays a treasury role and a number of commercial banks (especially Japanese banks) undertake retail debt issuance. Current donors include France, UK, Italy, Norway, Australia, Spain, the Netherlands, Sweden and South Africa and IFFIm has generated over USD3 billion for vaccination.

A growing area of debt issuance for development is social impact bonds – a results-based funding mechanism where private investors (including large foundations) essentially lend money to the public sector. The return on this investment may be linked to a specific outcome. Development impact bonds have been designed for poorer countries using the same mechanisms as social impact bonds, but being offered on more concessionary terms. Poorer countries are also being offered loan conversion programs where repayment is made by a third party (usually a private foundation) to the creditor on behalf of the debtor if the project is successfully implemented.

Debt swaps are generally bilateral partnerships with the creditor country cancelling a debt in exchange for the debtor country reinvesting part of the cancelled debt in health and development projects. France has pioneered the conversion of bilateral debt into grants for development projects in about 15 African countries, Bolivia and Honduras with the sum reaching over USD500 million. Debt swaps were pioneered by the Global Fund to fight Aids, Tuberculosis and Malaria with over USD200 million being swapped between participants such as Australia and Germany/Indonesia. The first Debt for Nature swaps are underway involving the USA and Peru, France and Madagascar, and Cameroon and the WWF. Currently less than USD100 million has been deployed in Debt for Nature swaps.

The most relevant debt issuance instruments for a REDD+ funding instrument are "green bonds" that support climate and sustainability-related investments. Green bonds are increasingly becoming an important part of fixed income portfolios. The World Bank first developed green bonds in 2008 and the current global issuance stands at about USD14 billion per annum. This amount is set to double within the next two years and it is likely that green bonds will constitute up to 15 percent of all global bond issuance within the next decade[38].

37 Abhijit Banerjee, Esther Duflo. Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty. Public Affairs Books. 2012

38 Green bonds take root in maturing market. http://www.ft.com/intl/cms/

Green bonds have broad attractiveness to large financial institutions, be they foundations, insurance and reinsurance companies and asset managers seeking mainly good quality investments in growth sectors.

A set of voluntary guidelines for "green" bonds that finance environmentally friendly projects has been produced by a consortium of leading banks including Bank of America, Citigroup, Crédit Agricole and JPMorgan Chase. The guidelines are intended to ensure the integrity of the rapidly developing green bond market[39]. The new guidelines assist issuers in launching credible green bonds, ensure that investors have the necessary information to evaluate the environmental impact of their investments and assist underwriters by moving towards standardised disclosure requirements. Although multilateral institutions such as the World Bank have already developed procedures for the labeling of green bonds, these procedures only cover a small part of the potential issuer base.

Market mechanisms

Global markets, be they financial, commodity or consumer, play a key role in driving the destruction of forests and peat lands in Indonesia. As indicated by the latest discussions on FREDDI within BP REDD+, prior to Perpres 16/2015, it was intended that the funding instrument may find a role within the domain of the carbon market, in the longer term, as a means of achieving its objectives. While it is outside the scope of this report to review the role of REDD+ in shaping the local and regional carbon markets, it should be recognised that financial mechanisms are at the core of future carbon market interventions.

The carbon market is based on the exchange of credits between parties (at this stage mainly countries) and is designed to reduce global emissions of carbon dioxide. The carbon trade allows countries that have higher carbon emissions to purchase the right to release more carbon dioxide into the atmosphere from countries that have lower carbon emissions[40]. The current trading systems for emissions in Europe do already contribute funding towards environmental protection and climate change activities in developing countries

Suffice it to observe that any functional local or regional carbon market requires the key components that are under development by REDD+ in Indonesia including verifiable baseline data, pilot transactions in a voluntary market and the creation of a sustainable, robust trading system. There is certain urgency in creating some form of local and regional market for carbon credits as this will inevitably drive investment in forest and peat land for speculative purposes (similar to real estate speculation) and provide urgently needed protection to threatened peat land and forests[41]. The World Bank is promoting the establishment of national carbon markets in middle income countries through the partnership for market readiness. Indonesia is one of the participants[42].

Advance Market Commitments have been used in the health sector to ensure that vaccines are developed through incentivising manufacturers with a guaranteed market at fixed prices. This form of public-private partnership (between a donor and a company) has the potential to be extended into the environment sector where innovations and technologies (especially related to clean energy) can be promoted on the basis of an assured market. Similarly, it may be possible to undertake some form of advanced market commitment initiative to drive the early establishment of a regional carbon market.

Whilst several of these options were being explored by the FREDDI design team, a strategy for their operationalisation that would enable their utilisation remains to be fully outlined.

s/0/1fb827d6-5789-11e3-86d1-0014. Accessed 13/01/2014

39 Guidelines for Green Bonds published - http://www.ft.com/intl/cms/s/0/18aeb9fc-7933-11e3-b381-0014, Accessed 13/01/2014

40 Investopedia. Accessed 8 January 2014. URL: http://www.investopedia.com/terms/c/carbontrade.asp

41 Personal communication: Dharsano Hartono, President Director, Rimba Makmur Utama

42 https://www.thepmr.org/

Other innovative financing mechanisms

A range of innovative financing approaches exist, mainly in the health sector. Whilst some of these interventions are not relevant to forest and peat land protection, nevertheless they demonstrate the panoply of new ideas in the innovative financing arena and are useful in stimulating thinking about how financial innovation can be deployed in the service of a REDD+ funding instrument in Indonesia.

Various forms of solidarity-based taxation and levies currently exist. For example, the airline ticket levy that has been deployed in France, Korea and a number of African countries has raised over USD1.5 billion for UNITAID, a global health initiative that provides sustainable funding to tackle inefficiencies in markets for medicines, diagnostics and prevention in HIV, malaria and tuberculosis. The European Union is also advancing on a financial transaction tax that will allocate a small part of its revenues to development. Some European countries devote a small part of national lottery revenues to international development. Consumers are increasingly being solicited to fund development through the social media and "crowdfunding". The paradigmatic consumer-facing innovative financing mechanism is PRODUCT (RED) with companies such as Apple, American Express, Nike, Starbucks and Gap devoting a portion of revenues from (RED) branded products to the fight against AIDS, tuberculosis and malaria in Africa. There are number of initiatives to incentivise the private sector and individuals through rewarding innovation for development (AgResults for food security) and promote new ideas for development.

CREATING A FUNDING INSTRUMENT FOR REDD+ IN INDONESIA: STRATEGIC FINANCING CONSIDERATIONS

Chapter 4

As described in Chapter 2, the design of FREDDI under the National REDD+ Agency appeared to be appropriate for its optimal functioning as a disbursement mechanism, especially from a governance and fiduciary perspective. It remains to be seen whether a REDD+ funding instrument could effectively execute its mandate of funding mobilisation.

Irrespective of the structure of the REDD+ funding instrument, it should be recognised as a matter of great urgency that given the pivotal role of financing for the success of REDD+, the funding instrument should be fully resourced in terms of expertise and implementation capabilities. Even if it functions simply as a "disbursement mechanism", it will need to engage with a wide range of local and international stakeholders, engage with the private sector and the financial markets and be present in a changing rights, regulatory and market environment. The role of the funding instrument will grow in line with the replenishment and increase of REDD+ funding in Indonesia.

A key question is how the REDD+ funding instrument can play its full role in the context of changing public sector financing paradigms that include severe budget constraints stemming from the global financial crisis and a quest for efficiency that is inevitably moving the focus from budget allocation to public sector investments. Also, it is important to note the challenges associated with expanding sources of funding to include foreign public funds other than those from Norway- including, mobilising domestic and foreign private investments.

BP REDD+ was envisioning and deliberating strategies for enabling the funding instrument to "transition" towards a more active and activist[43] role in REDD+. Recognising the considerable reflection and strategic thinking that has gone into the development of REDD+ in Indonesia, this section aims to provide some high-level reflection on how financial "structuring" can indeed further strengthen the stated objectives and implementation priorities of REDD+[44]. Indeed, the role that the REDD+ funding instrument must play as a financial sector facilitator has already been recognised- and is manifest in innovative thinking such as the need to recognise "ecological services certificates" as an asset class[45]."

Given the stated objective of mobilising international funding, this report puts forward a case for the REDD+ funding instrument to evolve towards a 'trust fund' with full "strategic investment" capacity (financial portfolio, active investor). This would maximise the potential impact that it could have in ensuring that REDD+ meets and surpasses its objectives. At the heart of this impact lies the innovative financing mechanisms outlined in this report and Table 2 briefly shows some potential areas where these mechanisms could support and enhance the REDD+ pipeline portfolio, in particular by "leveraging" the true impact of REDD+.

The nascent but rapidly growing green bond sector was described earlier in this report. Debt issuance for the environment can play an important role in Indonesia attaining its REDD+ objectives and various initiatives are under consideration or underway. BP REDD+ explored possible roles for the funding instrument in the Indonesian environmental debt issuance arena, for instance, through the issuance of Municipal Bonds or Global Bonds for REDD+. It would remain to be seen, however, how this role is influenced by the legal, fiduciary and operational structure of the REDD+ funding instrument.

If the funding instrument does indeed transition towards an investment fund "approach" then it will transition from being a conduit for the disbursement of debt funding for the environment into an active player mobilising funding for REDD+. A further argument for a stronger entrepreneurial orientation (seeking out opportunities, actively supporting projects at a community level and disbursing up-front) is that it would send a clear message that the funding instrument is indeed the channel of choice for the international support required

43 The term "activist" is used in a financial sector context to mean using the power that FREDDI has (as a funding institution) to shape the debate on the on how to ensure the long-term sustainability of REDD+ in Indonesia.

44 REDD+ in Indonesia: The road to implementation. UKP4, Indonesia, 2013

45 Financing REDD+: in Indonesia through FREDDI. Agus P. Sari Chair, Working Group on Funding Instruments Presidential Task Force on REDD+ FCPF, Lombok, June 29, 2013

Table 2: Innovative financing approaches that can support REDD+ funding pipeline portfolio development

Pipeline portfolio	Innovative financing mechanisms
Institutions and processes - Capacity building of the funding instrument host institution. National and regional government capacity building	Sovereign Wealth or Strategic Investment or Government-linked fund paradigm that includes focus on national financial capacity-building, long-term investment strategies
Legal and regulatory frameworks - Rights, law enforcement, licensing, private sector collaboration	Regulatory and fiscal framework encouraging impact investment funds; novel public private partnership models – such as advanced market commitments
Strategic programs - Conservation and rehabilitation, sustainable forestry, agriculture and mining, sustainable management of landscapes	Impact investment funds; market interventions related to carbon trading; PPPs involving communities and regions, green bonds and social impact bonds
Changes to work programs and culture - Strengthening forest and land use governance, empowerment of local communities using sustainability principles, national forests campaign	Impact investment funds, strategic investment fund, sovereign wealth fund, collaboration with ESG fund sector
Inclusion/involvement of stakeholders - Facilitate interaction with and among stakeholders, develop social and environmental safeguards, ensure equitable benefit sharing	National campaigns to "save Indonesian forests"; the recognition of REDD+ achievements with equity.

for Indonesia to meet its REDD+ goals.
Such a transition is not easy, nor may it be seen as appropriate by all actors. FREDDI- and any future REDD+ funding instrument- will operate within particular regulatory and legal constraints. Available FREDDI documentation outlines a range of potential financial mechanisms (such as fund-of-funds), but it must be cautioned that any financial sector operation requires considerable human capital (financial sector expertise). Indeed, any consideration of a more "active" approach to disbursement and investment naturally raises the challenge of human resource constraints given the need for research, development and advocacy, the risk of being perceived as stepping on the turf of other institutions involved with REDD+ and increased accountability as the REDD+ funding instrument would then be seen as "responsible" for the positive/negative impact or return on its disbursements. Any move into the financial sector brings with it many fiduciary, reputational and operational issues. But, it seems that the challenges are outweighed by the potential role of the funding instrument in counterbalancing the substantial financial power of the extractive industries sector.

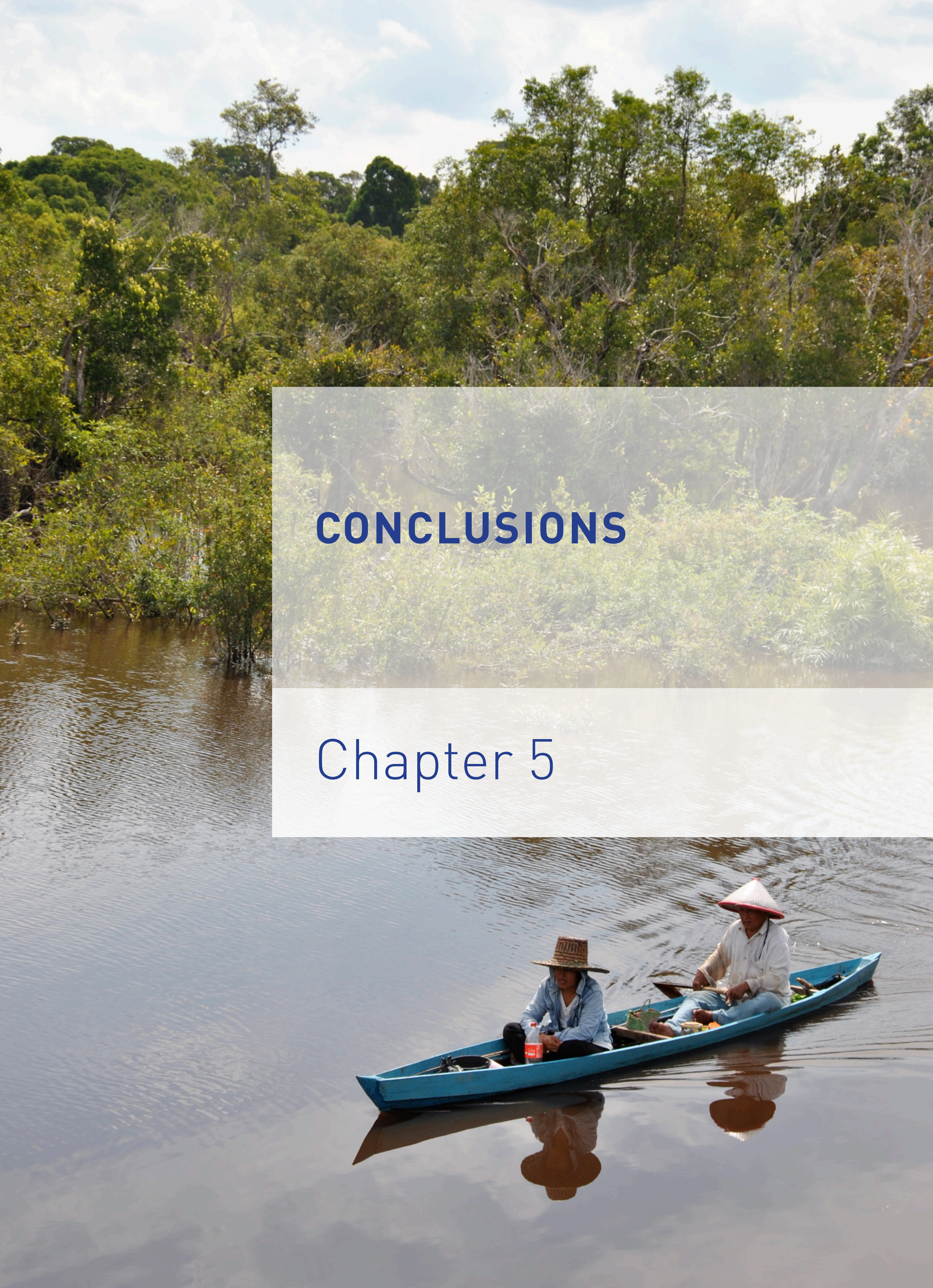
While it is outside the scope of this report to delve into the precise nature of the future evolution of the REDD+ funding instrument in Indonesia, it is worthwhile to highlight the potential roles that it could indeed play in advancing REDD+, should it have the latitude to develop into a financial actor with an innovative financing portfolio. The current LOI commitment is USD1 billion, while the estimated need for REDD+ until 2020 is USD8 billion. The REDD+ funding instrument must be designed to capture other opportunities beyond the LOI, and any future non-market based results-based payments once the global REDD+ mechanism is in place and operational. It could indeed lead the fund or capital raising to reach the amounts required for nationwide REDD+ implementation- it could be the lead agency in terms of advising government, supranational organisations, multilaterals, donors and the private sector on all aspects of REDD+ financing and take the lead in setting up various fund mechanisms and investment structures.

Further, and given the importance of ensuring that funding appropriately diffuses to the regional and local (community) level (which is the fundamental tenet of jurisdictional or nested REDD+), it should be noted that achieving this objective would be facilitated by a more "active investment" approach.

These possibilities bring sharply into focus the difference between a disbursement as opposed to a financing mechanism. There is the inevitable danger that unless one goes out to look for and develop meritorious projects, funding inevitably lands up with those who are best informed and equipped to "game" the system.

At the heart of this debate is the concept of risk. Investors accept risk in order to generate the maximum, acceptable return. It may be useful for those responsible for developing the REDD+ funding instrument to commission the development of an impact model to guide risk assessment, rather than to rely exclusively on process (committees, rules and guidelines). Risk modelling (and stress testing) has become commonplace in the financial sector, especially after the recent financial crisis, and the funding instrument may be able to adapt off-the-shelf products to create a risk assessment and management system for a future investment portfolio.

A REDD+ funding instrument inevitably needs innovative financing expertise, especially as the global development finance arena is evolving. Traditional sources of grant financing have become constrained and other trends include pressure on emerging market countries to self-finance meeting environmental and social infrastructure challenges and perhaps most importantly, a recognition that the private sector and especially the financial sector



CONCLUSIONS

Chapter 5

has a pivotal role to play in financing development. This report has highlighted the considerable strengths of the proposed operational and governance structure of FREDDI and, assuming the REDD+ funding instrument continues to evolve, attempts to strengthen the case for orienting this evolution towards becoming a strategic investment vehicle (as opposed to purely a disbursement vehicle) in support of REDD+. The virtues of a more active funding approach as opposed to a grant-based or performance-based approach have been highlighted. A performance-based approach can indeed be implemented in an innovative way but it is generally not regarded as an innovative financing tool, as it does not fully meet the sustainable, additional and long-term funding criteria. There is certainly scope within the funding instrument's mandate and current strategic discussions to engage in more active funding mobilisation beyond grant-based and performance-based approaches. This report intends to encourage exploration of this scope, and to provide models for what forms of funding mobilisation could be pursued.

Given that we are at the initial phase of the evolution of the REDD+ funding instrument, and the institutional implications of the closure of BP REDD+ for that instrument are as yet unclear, it is premature to imagine what precise form such a strategic investment vehicle could take. BP REDD+ undertook a thorough process of analysis to provide concepts and avenues for this evolution. This report intends to complement and further this process by outlining some options as related to government-sponsored or linked funds and banks. What distinguishes these options from others that have not been reviewed is their independence, the diversity of their investment portfolios and their focus on building national capacity (developmental and human).

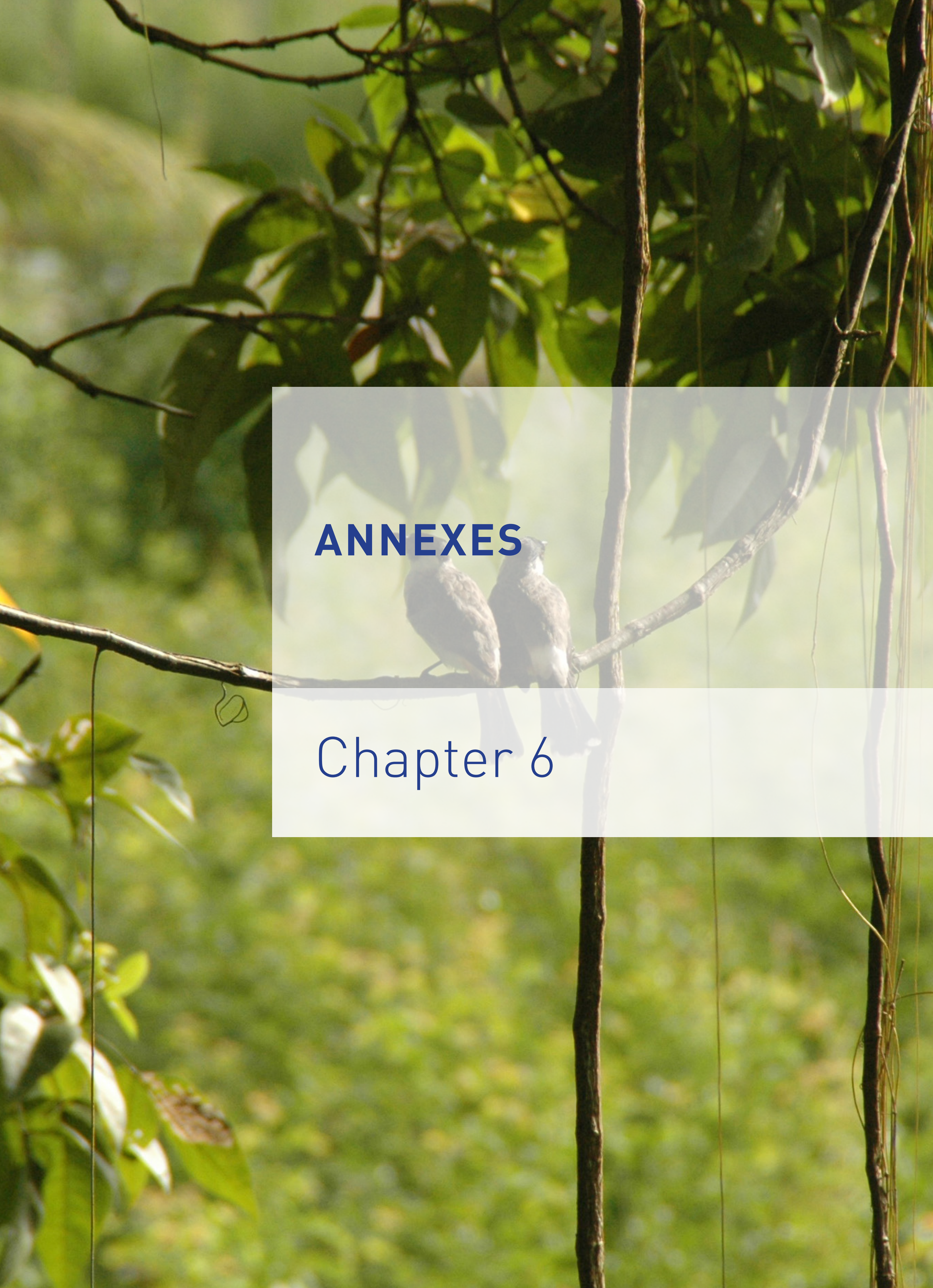
The evolution of the REDD+ funding instrument into a strategic investment vehicle will inevitably expose the complexity, cumbersome nature, expense and other issues that characterise the current structure of REDD+ in Indonesia. REDD+ discourse and ideology is a well-oiled machine (and well financed to date), and there will inevitably be a battle between the incumbent viewpoints and a perception that all that an investment vehicle approach can bring to the table is the malaise of uncontrollable, cynical and unethical global financial markets.

This paper does not deal with the process of transitioning a funding instrument into an innovative financing vehicle. Further research is required as to which existing financing mechanisms can be enhanced and which would need to be transformed. Also, as mentioned earlier, integration and compliance with the existing legal and regulatory web (including various trust fund and debt issuance regulations) will certainly not be easy.

It is likely premature to attempt to draw lessons from Indonesia's experience that could apply to REDD+ implementation elsewhere, except to perhaps recommend that the commendable process documentation related to the funding instrument be widely disseminated.

Impact does not come without taking risk and in complex situations it is often difficult to discern that what appears to be the least risky path may finally land up to be the most dangerous[46]. While an instrument with a trust fund structure- such as FREDDI- should not actively seek risk, a REDD+ funding instrument has the opportunity to strengthen its capacity to maximise impact and should actively explore how to best use financial innovation in support of REDD+. Perhaps it is timely to commence reflection on the first steps towards such a transition.

46 There is no better example than the global financial crisis that started in the previous decade and was propagated by supposedly almost risk-free financial instruments becoming worthless in a systemic global meltdown.



ANNEXES

Chapter 6

Books and articles

Bambang PS Brodjonegoro. 2013. Accelerating Green Economy Transition Through Greening The RPJMN. Ministry of Finance, Republic of Indonesia.

Banerjee A, Duflo E. 2012. Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty. Public Affairs Books

Bensoussan E, Ruparell R, Taliento L. 2013. Innovative development financing, McKinsey & Company.

FORCLIME. 2013. TC module briefing notes No 6: February 2013

Forum for the Future. 2011. Sustainable economy in 2040: A roadmap for capital markets.

GCP, IPAM, FFI and UNEP FI. 2014. Stimulating Interim Demand for REDD+ Emission Reductions: The Need for a Strategic Intervention from 2015 to 2020, Global Canopy Programme, Oxford, UK; the Amazon Environmental Research Institute, Brasília, Brazil; Fauna & Flora International, Cambridge, UK; and UNEP Finance Initiative, Geneva, Switzerland.

Human Rights Watch. 2013. The Dark Side of Green Growth: Human Rights Impacts of Weak Governance in Indonesia's Forestry Sector.
Kirana C. 2013. REDD+ for a Green Economy for Sustainable Livelihoods – A policy strategy framework for Indonesia. ILO Glacier.

Lang B, Koch S and Auhagen B. 2013. Supporting REDD+ safeguards: Towards a common approach of German Technical Cooperation in Southeast Asia and the Pacific. Discussion Paper of the REDD+ Working Group of the GIZ Sector Network Natural Resources and Rural Development (SNRD) Asia.

May, P.H., Millikan, B. and Gebara, M.F. 2011. The context of REDD+ in Brazil: Drivers, agents and institutions. Occasional paper 55. 2nd edition. CIFOR, Bogor, Indonesia.

Maximilian M. 2013. Making Impact Investible Impact Economy Working Papers, Vol 4,1 Geneva.

McNellis P E. 2009. Foreign investment in developing country agriculture – the emerging role of private sector finance. FAO Commodity and Trade Research Working Paper no 28.

Ministry of Finance, Republic of Indonesia. 2012. Ministry of Finance Green Paper follow up: Regional Incentive Mechanism for emissions reduction from land based sector. Ministry of Finance and Australia Indonesia Partnership 2012.

Ministry of Finance, Republic of Indonesia. 2011. Ministry of Finance Green Paper follow up: Regional Incentive Mechanism for emissions reduction from land based sector. Ministry of Finance and Australia Indonesia Partnership, 2011.

Ministry of Finance, Republic of Indonesia- Fiscal Policy Agency, Center for Climate Change Financing and Multilateral Policy. 2012. Instruments and Mechanisms for Financing of Greenhouse Gas Emission Reduction Programs in the Land Based Sector.

O'Donohoe N et al. 2013. Impact Investments: An Emerging Asset Class. J.P. Morgan (2010): 6, accessed May 1, 2013, URL: http://www.rockefellerfoundation.org/uploads/files/2b053b2b-8feb-46ea-adbd-f89068d59785-impact.pdf.

Saltuk Y. 2010. A portfolio approach to impact investment: A Practical Guide to Building, Analyzing and Managing a Portfolio of Impact Investments. JP Morgan Global Social Finance Research.

Studwell J. 2013. How Asia Works – Success and failure in the world's most dynamic region. Profile Books, London.

Tordo A, Halland H, Arfaa N, Smith G. 2014. Sovereign Wealth Funds and Long-Term Development Finance Risks and Opportunities. World Bank Policy Research Working Paper 6776.

Working Group on Funding Instrument, REDD+ Taskforce. 2013. the funding instrument (Fund for REDD+ in Indonesia): A Concept Note on the Funding Instrument for REDD+ in Indonesia. (Translation prepared by UNORCID)

Other materials[47]

Green bonds take root in maturing market. http://www.ft.com/intl/cms/s/0/1fb827d6-5789-11e3-86d1-0014. Accessed 13/01/2014
Guidelines for Green Bonds published - http://www.ft.com/intl/cms/s/0/18aeb9fc-7933-11e3-b381-0014, Accessed 13/01/2014

Indonesia taps $5.4bn Hajj fund for financial salvation - FT.com http://www.ft.com/intl/cms/s/0/fe4fbfe4-956a-11e3-8371-00144. Accessed 02/03/2014

Katingan Peat land Restoration and Conservation Project. Global Symposium: REDD+ in a Green Economy 19-21 June 2013, JW Marriott Hotel, Jakarta, Indonesia. Dharsono Hartono, PT. Rimba Makmur Utama

Katingan Peat land Restoration and Conservation Project. Global Symposium: REDD+ in a Green Economy 19-21 June 2013, JW Marriott Hotel, Jakarta, Indonesia. Dharsono Hartono, PT. Rimba Makmur Utama

Performance based funding at the Global Fund. Geneva, Global Fund to Fight AIDS, Tuberculosis and Malaria, 2008.

Presidential Regulation (Perpres) No.80/2001 on Trust Fund; Government Regulation (PP) No.10/2011 on Procedures of Procuring Foreign Borrowing and Receiving Grants; Act (UU) No.1/2004 on State Treasury

Tirana Declaration www.landcoalition.org/about-us/aom2011/tirana-declaration

47 Event reports, news items, legal documents

UNORCID

United Nations Office for REDD+ Coordination in Indonesia