REDD+ Working Group" of the GIZ Sector Network on Rural Development and Management of Natural Resources (SNRD)Asia, "NAMAs and Market Mechanisms Working Group" of the Sector Network Transport, Environment, Energy, Water (TUEWAS) Asia.



### NAMAs and REDD+

Relationship and main issues for consideration - with a focus on Southeast Asia



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## Preface

Nationally appropriate mitigation actions (NAMA) are high on the agenda of the international policy discussion on climate change mitigation. Reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD+) is a similarly hotly debated initiative on greenhouse gas mitigation from the forest sector. The German Government supports developing countries in their efforts on climate change adaptation and mitigation, including in their readiness for implementing NAMAs and REDD+.

GIZ is providing technical assistance in a number of programs and projects in the Asian region supporting partner governments in developing REDD+ and/or NAMA approaches. While both concepts are highly relevant for developing countries, there is lack of clarity on how these relate to each other and what could be possible implications of integrating them into a coherent national strategy towards climate change mitigation. GIZ experts are therefore facing the challenge of providing practical advice which needs to be in line with the developments in the international climate policy discussion under the United Nations Framework Convention on Climate Change (UNFCCC) as well as adequate for the specific country they are working in.

This study has been organized through GIZ's regional knowledge exchange fora, the so-called "Sector Networks", and is based on case studies from countries in the region: Indonesia, Lao PDR, Philippines, Thailand and Viet Nam. It analyzes the current situation in these countries with regard to NAMAs and REDD+ and develops options on how the linkages of both can be dealt with in future. The final result is a product of the "REDD+ Working Group" of the GIZ Sector Network on Rural Development and Management of Natural Resources (SNRD) Asia and the "NAMAs and Market Mechanisms Working Group" of the Sector Network Transport, Environment, Energy, Water (TUEWAS) Asia. Together with the NAMA Source Book, that was developed in 2012 under TUEWAS it is supposed to serve as a resource for advisory services and building capacities towards NAMAs and REDD+ for GIZ experts working in this field.

We envisage that these materials will enhance the work with our partners for better understanding how to effectively address climate change mitigation activities in the region.

Steffen Lackmann Coordinator REDD+ Working Group GIZ SNRD Asia Philipp Munzinger Coordinator NAMA Working Group GIZ TUEWAS Asia





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#### List of Acronyms

ACR American Carbon Registry
AfDB African Development Bank

AFOLU Agriculture, Forestry and Land Use

AWG-LCA Ad Hoc Working Group on Long-term Cooperative Action

BAU Business-as-Usual

BMU German Ministry for the Environment, Nature Conservation and Nuclear Safety

BUR Biennial Update Report

CCB Climate, Community and Biodiversity Standard

CDM Clean Development Mechanism
CFL Compact Fluorescent Light bulbs
CGE Consultative Group of Experts
COP Conference of the Parties

DECC UK Department of Energy and Climate Change

DNA Designated National Authority
ETS Emissions Trading System

FCPF Forest Carbon Partnership Facility

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

GCF Governor's Climate and Forest Task Force

GEF Global Environment Facility

GHG Greenhouse Gas

ICA International Consultation and Analysis

ICI International Climate Initiative

ICRAF World Agroforestry Centre (International Centre for Research in Agroforestry)

IPCC Intergovernmental Panel on Climate Change

JNR Jurisdictional and Nested REDD+

LECB Low Emission Capacity Building Program (Philippines)

LOI Letter of Intent

LULUCF Land Use, Land Use Change and Forestry
MER Monitoring, Evaluation and Reporting
MRV Measurement, Reporting and Verification
NAMA Nationally Appropriate Mitigation Action
NCCAP National Climate Change Action Plan (Kenya)

NRPS National REDD+ Strategy

OECD Organization for Economic Cooperation and Development

PC Participants Committee

RAN/RAD-GRK National and Provincial Action Plan to Reduce GHG Emissions (Indonesia)

RED Reducing Emissions from Deforestation

REDD Reducing Emissions from Deforestation and Forest Degradation
REDD+ REDD including the role of conservation, sustainable management

of forests and enhancement of forest carbon stocks

REALU Reducing Emissions from All Land Uses
RL/REL Reference Level/Reference Emission Level

R-PIN Readiness Plan Idea Note
R-PP Readiness Preparation Proposal
SARI South African Renewables Initiative

SBSTA Subsidiary Body for Scientific and Technological Advice

SIS Safeguard Information System
SNRD Sector Network Rural Development

STRANAS National Strategy for REDD+ and a National Action Plan for REDD+ (Indonesia)

SRAP Provincial REDD+ Action Plans (Indonesia)

SWOT Strengths, Weaknesses, Opportunities and Threats

ToR Terms of Reference

TUEWAS Transport, Environment, Energy, and Water in Asia

UNDP United Nations Development Program

UNFCCC United Nations Framework Convention on Climate Change

VCS Verified Carbon Standard

## 1. Introduction

Reducing Emissions from Deforestation and Forest Degradation (REDD+) and Nationally Appropriate Mitigation Actions (NAMAs) occupy similar space as arguably the most important new initiatives to advance in developments towards a future climate agreement over the last five years. Each can be seen as an attempt to expand the reach of mitigation opportunities across developing countries with the potential support of industrialized countries.

Despite the apparent commonality of REDD+ and NAMAs in that both aim at facilitating developing countries' carbon emissions mitigation with developed country support, wide divergences continue between the approaches with regard to methodologies, expert communities, vocabularies and common understandings. To an extent this divergence is to be expected, given that REDD+ focuses exclusively on forest emissions and NAMAs allow for any emissions mitigation initiatives to be developed in a country-driven approach. However, as both work streams develop and overlaps between them become apparent, questions relating to potential integration or harmonization of REDD+ and NAMAs are becoming increasingly relevant for national climate and forestry planning and implementation processes. Since its inception, the question of whether REDD+ was itself a NAMA has been a question of significant debate and controversy.<sup>3</sup>

This study provides a timely opportunity to forward understanding on issues regarding integrating mitigation efforts under NAMAs and REDD+ in the actual circumstances of Asian countries. In conjunction with work under its Asia program climate mitigation capacity-building initiatives, GIZ is working to carry out a suite of background studies and advisory services to support policy advisers in assisting national governments with design and implementation of integrated REDD+ and NAMA programs. This paper aims to improve the understanding of the relations between REDD+ and NAMAs, how they might be combined and any implications of their merging, and recommend advice for Asia region GIZ Programs and experts.

This paper is part of a wider project of GIZ intending to build capacity across partner governments in the Asian region on REDD+ and NAMA approaches, in conjunction with GIZ programs and experts in the region. As part of this project, policy experts convened in Bangkok in May, 2013 to provide insight and feedback on the initial findings of this study (see text box below). Outcomes from the workshop have been integrated throughout this paper.

The present study begins with an overview of recent United Nations Framework Convention on Climate Change UN-FCCC decisions and literature on NAMAs and REDD+ in order to contrast the initiatives both at the international negotiations level and at the more concrete level of national and subnational implementation. The findings from the literature review are presented in an overview table comparing the main areas of overlap and divergence among REDD+ and NAMA approaches. Findings from desk research and summaries of in-depth country case studies conducted by in-country consultants are used to analyze their REDD+ and NAMA strategies and readiness planning, institutions, policies, actions, measurement, reporting and verification (MRV), and baseline development, as well as any relations between the two initiatives. Having highlighted main issues at a global level and as applied in each of the target countries, a deeper comparative examination of the country case studies is performed, extracting concise lessons on associations between REDD+ and NAMAs and implications for their various harmonization options. The global and country lessons further drive questions and recommendations used in advising partner country governments. Next a strength, weakness, opportunity and threat (SWOT) analysis examines the strategic benefits and drawbacks of an integrated REDD+/NAMA approach, and three scenarios are presented in examining how NAMAs and REDD+ could best be aligned to capitalize on strengths and minimize potential drawbacks. Finally, taking the status of REDD+ and NAMA development into account for each country, recommendations are put forward based on the potential scenarios for integration.

1. Introduction

#### GIZ sector network working group workshop:

On May 10, 2013 advisors from the GIZ working groups Sector Network Rural Development Asia (SNRD Asia)/REDD+ and Transport, Environment, Energy and Water in Asia (TUEWAS)/Market Mechanisms and NAMAs met to discuss the initial findings from Climate Focus' study on **NAMAs and REDD+: Relationship and Main Issues for Consideration**. The workshop brought together advisors from seven countries in SE Asia and the Pacific as well as staff from GIZ's headquarters. Attendees participated in interactive discussions and performed a SWOT analysis (see Section 7) to evaluate the synergies and divergences between REDD+ and NAMAs. Some salient perspectives that arose from the workshop included:

- Countries in the region are at very early stages of implementing REDD+ and NAMAs, and with the exception of Indonesia very little thought has gone into how the two will be integrated.
- Advisors typically work either on REDD+ or NAMAs, and there is little communication between the two groups.
   Enhanced communication between the two groups of work could help in de-compartmentalizing REDD+ and NAMAS.
- Integrating REDD+ and NAMAs presents significant opportunities, but also threats.
- In some countries, non-integration could be a preferred approach.



## 2. Overview of NAMAs and REDD+

#### 2.1 NAMAs

Development in UNFCCC Decisions

#### Historical overview

Conference of the Parties (COP) 13: The term NAMAs was coined in the Bali Action Plan in 2007 (COP 13) as part of a wider effort to enhance international and national action on mitigating climate change through long-term cooperative actions within in a defined framework. NAMAs were introduced as "nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner," While the term 'NAMAs' is relatively new, the concept itself is strikingly similar to the mitigation actions defined by the UNFCCC in 1992: "Parties have a right to, and should, promote sustainable development. Policies and measures to protect the climate system against human-induced change should be appropriate for the specific conditions of each Party and should be integrated with national development programs"3 (italics added).

Since 2007 Parties have worked to further define NAMAs



and formulate host-country driven NAMA options. At COP 15 (2009) Parties agreed that NAMAs submitted by developing countries would be "recorded in a registry along with relevant technology, finance and capacity building support." Non-Annex I countries were also invited to submit NAMA proposals, which were presented as an appendix to the Copenhagen Accord.5

COP16: In Cancun in 2010, developing country Parties agreed to voluntarily implement NAMAs to reduce businessas-usual emissions by 2020.6 The Cancun Agreements also set out to further define types of NAMAs by distinguishing between "domestically supported mitigation actions" and "internationally supported mitigation actions." In another section of the Cancun Agreements (on market mechanisms), there is also the decision to "consider the establishment [...] of one or more market-based mechanisms to enhance the cost-effectiveness of, and to promote, mitigation actions." Thus, NAMAs are generally structured according to three different approaches, depending on the type of support the NAMA receives:

- Unilateral NAMAs: NAMAs financed with (public) funds originating exclusively from the host country.
- Supported NAMAs: NAMAs receiving international support. Support can include financial, technical or capacity building support.
- Market-based or Credited NAMAs: NAMAs that generate offset credits as a form of results-based financing.

Note that credited NAMAs are not officially defined by the negotiation texts but are often discussed as a third category of NAMAs in literature.8 In the negotiation texts, discussion on what could be termed a 'credited NAMA' takes place within the context of new market mechanisms, 9 which aim to enhance the cost effectiveness of mitigation actions through market-based approaches.

- Decision 1/CP.13. 2007. Report of the Conference of the Parties on its thirteenth session, held in Bali from 3 to 15 December 2007, para 1(b)(ii). Available from: http://unfccc.int/resource/docs/2007/cop13/eng/06a02.pdf.
  UNFCCC, Article 3.4, 1992. Available from: http://unfccc.int/essential\_background/convention/background/items/1349.php.
  Decision 2/CP.15. 2009. Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009, para 5. Available from: http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf.
  Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009, Appendix II Nationally appropriate mitigation services. Parties Available from: http://unfccc.int/geochagen.google/items/5355.php.
- actions of developing country Parties. Available from: http://unfccc.int/meetings/cop\_15/copenhagen\_accord/items/5265.php.

  Decision 1/CP.16. 2010. The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, para 48.
- Decision 1/CP.16. 2010. The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, para 48. Available from: http://unfocc.int/resource/docs/2010/cop16/eng/07a01.pdf.

  Decision 2/CP.17. 2011. Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011, para 83. Available from: http://unfocc.int/resource/docs/2011/cop17/eng/09a01.pdf.

  For studies on "credited" or "market-based" NAMAs see: UNEP Risoe, NAMAs and the Carbon Market, Nationally Appropriate Mitigation Actions of developing countries (2009); Ecofys, Scoping study for innovative climate finance facilities for testing scaled-up mitigation programs (2010); Ecofys, Nationally Appropriate Mitigation Actions, Insights from example development (2010); Yuri Okubo et al, NAMA crediting; how to assess offsets from and additionality of policy-based mitigation actions in developing countries (2011); Climate Focus, Briefing Note, Design options for NAMAs and their regulatory framework (2011); Climate Focus, Nationally Appropriate Mitigation Actions in Developing Countries, Emerging opportunities for private sector engagement (2011), Wang-Helmreich et al, Current Developments in Pilot Nationally Appropriate Mitigation Actions of Developing Countries (NAMAs), JIKO Policy Paper 01/2011; South Pole How to develop a NAMA by scaling-up on-going CDM activities on the road from PoAs to NAMAs (2011).

  See, e.g., Decision 1/CP.17 para 83, which "defines a new market-based mechanism. {...} to enhance the cost effectiveness of, and to promote, mitigation actions {...} in}
- See, e.g., Decision 1/CP.17 para 83, which "defines a new market-based mechanism. {...} to enhance the cost effectiveness of, and to promote, mitigation actions {... in} developing countries to meet part of thier mitigation targets or commitments":

Figure 1

NAMA categories as defined by the UNFCCC and emerging literature 10.

#### Unilateral NAMAs

- · Domestically financed
- Subject to domestic MRV guidelines, in accordance with general international guidelines

#### Supported NAMAs

- · Actions undertaken with financial, technical and/or capacity building support from developed countries
- Subject to national and international MRV

#### **Credited NAMAs**

- Domestically or internationally financed
- Carbon credits are generated
- Likely to be subject to national and international MRV

Both unilateral and supported NAMAs will be "measured, reported and verified domestically," with supported NAMA also "subject to international measurement, reporting and verification."11 Developing countries' mitigation actions, including NAMAs, shall be reported in biennial update reports (BURs), which should include a national inventory report, information on mitigation actions, needs and mitigation support received. At Cancun it was decided that these biennial update reports will be subject to "international consultation and analysis" (ICA), a form of verification 12 aiming to increase the transparency of mitigation actions and their effects through examination by technical experts under the Subsidiary Body for Implementation.<sup>13</sup>

Reporting of mitigation actions within host countries' BURs should include "a description [of the activity], analysis of the impacts and associated methodologies and assumptions, progress in implementation and information on domestic measurement, reporting and verification, and support received."14

Parties also further defined the NAMA registry as platform to match support with needs, and agreed to "set up a registry to record nationally appropriate mitigation actions seeking international support and to facilitate matching of finance, technology and capacity-building support for these actions."15 The registry would record information on NAMAs seeking international support, as well as developed country Parties' available and provided support for NAMAs. The registry will also record unilateral NAMAs for recognition in a separate section of the registry. 16

Further it was agreed that Nationally Appropriate Mitigation Actions, regardless of their nature, would be implemented "in the context of sustainable development". 17

COP17: In Durban in 2011, it was decided that the NAMA registry should be hosted as a web-based platform allowing countries and NAMA supporters to submit information under four distinct categories: 'NAMAs seeking support for preparation; 'NAMAs seeking support for implementation;' 'Other NAMAs for recognition;' and 'Information on support for NAMAs.'18 A prototype registry was released after COP17 including basic templates in which information should be provided under each aforementioned category. A fully functional version of the NAMA registry is expected to be presented two months before COP 19,19 to take place in November 2013.

Building off of the previous session's agreement to develop NAMAs under the paradigm of sustainable development, the Durban COP invited parties submitting supported NAMAs to the Registry to provide information on "co-benefits for local sustainable development, if information thereon exists." 20 Additionally, developing country Parties were invited to provide information on other individual NAMAs for official recognition. Ostensibly, such submissions could include information on co-benefits and sustainable development if information is available and the country chooses to include it in its submission.

<sup>10</sup> Decision 1/CP.16 at paras 61 and 62.
11 Decision 1/CP.16 at paras 61 and 62.
12 'Verification' as used here in the ICA context is not to be understood as the verification process foreseen for developed countries.
13 Decision 1/CP.16 at para 63.
14 Decision 1/CP.16 at para 64.
15 Decision 1/CP.16 at paras 5 and 8.
16 Decision 1/CP.16 at paras 6 and 8.
17 Decision 2/CP.16, para 48. Available from: http://unfccc.int/files/na/application/pdf/07a01-1.pdf
18 Decision 2/CP.17 at paras 45-49.
19 See Draft decision -/CP.18. Prototype of the registry (advance unedited version) at para 10.
20 Decision 2/CP.17 at para 46(h).

In order to support countries in implementing the Convention, a decision was also made to establish the Green Climate Fund, which would, among other things, "support developing countries in pursuing project-based and programmatic approaches in accordance with climate change strategies and plans, such as [...] NAMAs,"21 and "provide resources for readiness and preparatory activities and technical assistance, such as the preparation of [...] NAMAs."22

COP18: In Doha in 2012 the focus was on understanding the diversity of NAMA submissions already put forward by developing countries in order to identify the need for financial, technology and capacity building support with the goal of facilitating the increased preparation and implementation of NAMAs. This emphasis is designed to facilitate the 'learning by doing' approach adopted for NAMAs, which encourages developing countries to take ownership and define which actions they wish to propose under the work program. Beyond this, little progress was made towards further defining a NAMA framework.

#### **Current Status**

#### Current status of implementation

The decisions made by the Convention to date allow NA-MAs to be defined as activities that:

- Are driven by the host developing country Party;
- Are voluntary in nature: developing countries are not obligated to engage in NAMAs;
- Can receive developed country support in the form of technology, finance, and/or capacity building;
- Are measurable, reportable, and verifiable. NAMAs, as well as the support from developed countries, are subject to international or internationally defined MRV.

The fairly broad (and still open) definition of what constitutes a NAMA is intended to encourage developing countries to cultivate new and diverse mitigation initiatives that are country-driven and fit within their circumstances. Countries are permitted to submit ideas ranging from pilot projects to sector-wide national programs or policies, essentially in any area where carbon emissions reductions may be achieved. Following COP 15 in 2009, prior to development of the NAMA registry, the UNFCCC invited countries to submit NAMA ideas. Fifty countries made NAMA submissions,<sup>24</sup> 18% of which featured the forestry sector.<sup>25</sup> The country submissions varied greatly in their format and detail of content and include anything from expressions of intent to lists of investment projects or national mitigation commitments.<sup>26</sup> At the time of writing, Asia only accounts for 6% of all NAMA submissions, while 56% of submissions are from Latin America.<sup>27</sup>

The UNFCCC negotiations have defined different approaches to NAMA MRV depending on the type of NAMA planned. Unilateral NAMAs are subject to domestic MRV, in accordance with general international guidelines; while supported NAMAs are subject to national and international MRV through ICA. Credited NAMAs are not officially defined by the UNFCCC but will likely be subject to the most stringent MRV since the validity of any credits will need to be verified.

Thus far the parameters to be assessed during the process of ICA include:28

- The country's national greenhouse gas inventory;
- Information on mitigations actions, including a description of such actions and an analysis of their impacts;
- Associated methodologies and assumptions;
- Progress made in NAMA implementation;
- Information on domestic MRV; and
- Support received.

<sup>21</sup> Decision 1/CP.17 at para 36. 22 Decision 1/CP.17 at para 40.

Decision 1/CP.13 at para 40.
Decision 1/CP.13 at para 1(b)ii. (The Bali Action Plan calls for enhanced national and international climate change mitigation actions, including "nationally appropriate mitigation actions by developing country parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner.")

The NAMAs communicated after the COP in Copenhagen have been compiled into an information document, which is available from: http://unfcoc.int/documents/advanced\_search/items/6911.php?priref=600006178. The original submission of these NAMAs is available from: http://unfcoc.int/documents/advanced\_search/items/6911.php?priref=600006178. The original submission of these NAMAs is available from: http://unfcoc.int/documentation/documents/advanced\_search/items/6911.php?priref=60000683
http://unfcoc.int/documentation/documents/advanced\_search/items/6911.php?priref=600006830. Burkina Faso, Gambia and Guinea also communicated NAMAs directly to the secretariat. Available from: http://unfcoc.int/focus/mitigation/items/7172.php.

Mitigation Momentum. 2012. Annual Status Report on Nationally Appropriate Mitigation Actions (NAMAs), page 8. Available from: http://www.mitigationmomentum.org/downloads/Annual\_Status\_Report\_27-11-2012.pdf.

See FCCC/AWGLCA/2011/INF.1. Available from: http://unfcoc.int/meetings/cop\_15/copenhagen\_accord/items/5265.php.

See http://namadatabase.org/index.php/Global\_overview#Distribution\_of\_NAMAs

See Decision 2/CP.17. Annex IV 'Modalities and guidelines for international consultation and analysis', para II 3(a).

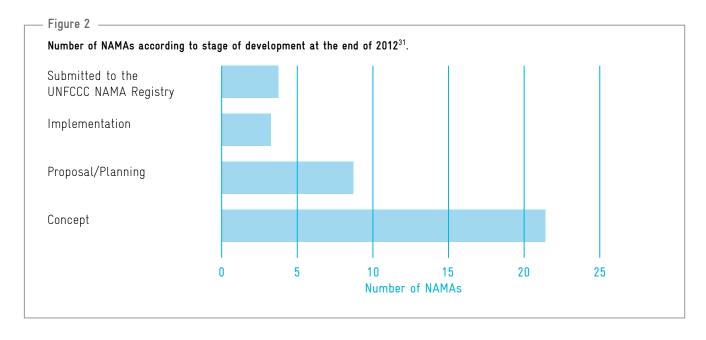
Further details have not yet been defined and the MRV framework remains quite broad. Questions regarding the type of information that should be provided on mitigation actions and how to verify the analysis of a policy's impacts remain unanswered. Nevertheless, host countries will be responsible for measuring and reporting NAMAs, while the international community will be responsible for verifying these assessments. These will be compiled in an ICA Report and shared with the host county for discussion and commenting before final publication.

Perhaps due to the wide scope of NAMAs, explicit safeguards have not been developed explicitly for NAMAs as they have for REDD+. However, as noted above, agreement has been reached that NAMAs should be implemented in the context of sustainable development and host country Parties are invited to submit information on how unilateral or supported NAMAs provide local sustainable development co-benefits beyond GHG emissions reductions. This aligns with early

UNFCCC guidance that suggests mitigation actions should promote sustainable development.<sup>29</sup>

#### Main programs

Of the NAMA submissions put forward, very few have been developed beyond the concept phase, as illustrated in Figure 2 below. This can be explained, in part, by the relatively new development of NAMAs as a mitigation tool and the lack of funding set aside for NAMA implementation. Any funds awarded to date have primarily focused on the preparation of feasibility studies and identifying possible NAMA options. The release of the final NAMA Registry and more concrete NAMA proposals may help to encourage pledging of support for NAMA implementation. Thus far, only the UK and Germany have pledged support for development of a NAMA Facility of EUR 70 million to support in NAMA implementation, announced in Doha in December 2012 and with the first round of proposals due in early September 2013.30

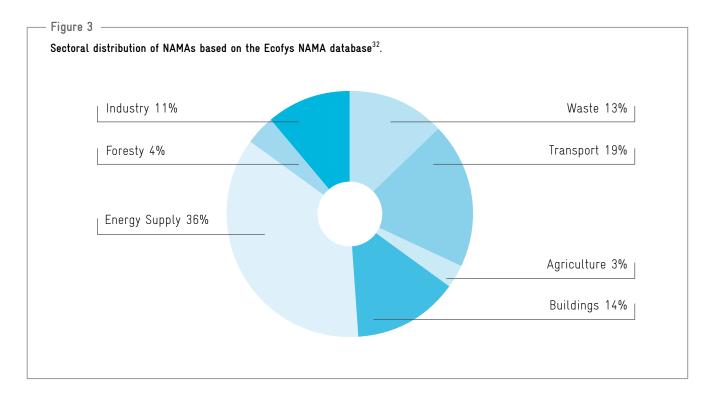


UNFCCC, Article 3.4, 1992. Available from: http://unfccc.int/essential\_background/convention/background/items/1349.php.
BMU. 2012. Germany and the United Kingdom launch NAMA Facility in Doha [Press Release]. Available from:
http://www.bmu.de/english/current\_press\_releases/pm/49568.php.
Mitigation Momentum. 2012. Annual Status Report on Nationally Appropriate Mitigation Actions (NAMAs), page 10. Available from:
http://www.mitigationmomentum.org/downloads/Annual\_Status\_Report\_27-11-2012.pdf.

NAMAs in the energy supply and transport sectors are most common, with forestry and agriculture NAMAs accounting for only 7% of NAMAs to date (Figure 3).

Almost all NAMA submissions made to date are at the concept or planning phases, with very few yet progressing into implementation. This is in part a product of the relatively new concept of NAMAs, but hinges more on the availability of finance for NAMA implementation. This is especially

evident in the draft UNFCCC NAMA registry, in which not a single entry has been made under 'Information on support for NAMAs' while 26 submissions from nine different countries have been made under NAMAs seeking support for either preparation or implementation.<sup>33</sup> An overview of NAMAs defined as 'at implementation' by the Ecofys NAMA database is provided in Table 1 below. At the time of writing, this represented a complete list of NAMAs at implementation.





Ecofys NAMA database, accessed 20/07/2013. Available from: http://namadatabase.org/index.php/Global\_overview.

Prototype NAMA Registry. Available from: http://unfccc.int/cooperation\_support/nama/items/6945.php.

In both the Ecofys and ECN information presented here, NAMAs at the 'Implementation' stage are defined as meeting the prerequisites for the Proposal/
Planning stage and securing some support to undertake its proposed implementation activities. The Ecofys definition further requires that the funding sources
must be specified and that Feasibility, Concept and Proposal/Planning stages must all be met.

Table 1: NAMAs at implementation in early 201335

NAMA Title	Objective	Sector	Type of NAMA	Start and end dates
NAMA for sustainable housing in Mexico	The NAMA aims at extending existing programs for sustainable housing, increasing the overall number of energy efficient homes built and improving their emissions performance.	Buildings	Supported (with unilateral elements). Funding provided from German Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)	2012 - 2020
Residential buildings energy efficiency in Morocco	The NAMA will incorporate several measures to incentivize the uptake of solar hot water systems, accelerate the adoption of compact fluorescent light bulbs (CFL), implement measures related to the thermal performance of buildings and incorporate energy efficiency labeling of appliances.	Buildings	Supported (with unilateral elements). Funding provided from the Global Environment Facility (GEF) and the African Development Bank (AfDB).	2012 - 2014
South African Renewables Initiative (SARI) (South Africa)	The South African Renewables Initiative aims to mobilize domestic and international funding, and sector expertise, to support South Africa to scaleup renewable energy.	Renewable energy	Supported (with unilateral elements). Funding provided by Denmark, Norway, UK, European Investment Bank and the World Bank	2012 -2030
Transportation demand manage- ment in Beijing (China)	The project aims to improve transport demand management in Beijing in order to manage the steadily increasing traffic density.	Transport	Supported (with unilateral elements). Funding provided by the International Climate Initiative (ICI).	2011 -2014

#### 2.2 REDD+

#### Development in UNFCCC Decisions

REDD+ began as a submission by Papua New Guinea and Costa Rica at COP-11 in 2005 to add avoided deforestation to the agenda of annual UNFCCC negotiations (to complement afforestation and reforestation incentives already offered under the Clean Development Mechanism of the Kyoto Protocol). In the years since, the scope expanded from reducing emissions from deforestation alone (RED) to include forest degradation (REDD), and three additional 'plus' elements as outlined in the Bali Action Plan of 2007: conservation, enhancement of forest carbon stocks, and sustainable management of forests, together known as REDD+. More recent UNFCCC decisions have reemphasized the importance of REDD+ and formulated initial guidance for the development of reference (emission) levels (RLs), safeguards, and MRV systems.

COP 16: In Cancun in 2010, Parties formally adopted a decision to incorporate REDD+ as a framework for incentives to reduce emissions under the UNFCCC. This began with a broad agreement that both industrialized and developing countries would support REDD+,36 and an official agreement on the scope of REDD+ as consisting of the five activities outlined originally in the Bali Action Plan. 37 While in Cancun, Parties also agreed that developing countries were to begin developing i) a national strategy or action plan; ii) a national forest reference emission level and/or forest reference level (with subnational reference levels acceptable as an interim measure); and iii) a robust and transparent national forest monitoring system for REDD+ activities.

 <sup>35</sup> Ecofys, NAMA Database, accessed 15/04/2013. Available from: http://namadatabase.org/index.php/Downloads.
 36 Decision 1/CP.16. Available from: http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=12. ("...in the context of the provision of adequate and predictable support to developing country Parties, Parties should collectively aim to slow, halt and reverse forest cover and carbon loss").
 37 Decision 1/CP.16 at para 70. Available from: http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=12. (The five activities called for by REDD+ are reducing and the parties of decaders of acceptance of the parties of the parti

deforestation and degradation, plus conservation, sustainable management of forests and enhancement of carbon stocks.)

Parties in Cancun also agreed on a three-phased approach to REDD+, from REDD+ readiness to implementation of policies and measures, and final full-scale implementation, as outlined below.<sup>39</sup>

#### Figure 4

#### Three Phases of REDD+ Readiness.

#### Phase I: REDD+ Readiness

- Development of national REDD strategies or action plans
- · Capacity building

#### Phase II: Implementation of Policies & Measures

- Technology development and
- · Results-based demonstration activities

#### Phase III: Full-scale implementation

· Full MRV of results-based actions

Additionally at Cancun, the COP agreed on seven safeguard principles<sup>40</sup> and requested developing country parties to produce a system for providing information on how REDD+ social and environmental safeguards are being addressed and respected.41

COP17: In Durban in 2011, the COP decided in Decision 2/CP.17 that REDD+ financing sources could include public, private, bilateral and multilateral, and left the possibility for development of market-based approaches to support results-based actions. 42 However, the specific meaning of market-based approaches was not defined, leaving a long list of uncertainties, namely: the use of offsets and the fungibility of REDD+ credits (i.e. whether temporary or long-term); whether sub-national might be supported by markets; whether mechanisms outside the UNFCCC such as bilateral agreements would be recognized by the COP; and whether market-based mechanisms were to link with mechanisms under a new future climate agreement or under a second commitment period of the Kyoto Protocol.<sup>43</sup>

Durban also produced guidance on RLs for measuring performance. The COP outlined that RLs should be flexible (permitting choice in pools, gases and activities), step-wise (to allow improvements in data and methodologies over time), and transparent (via provision of information and a rationale). Parties also agreed to establish a technical assessment process at the next Subsidiary Body for Scientific and Technological Advice (SBSTA) session. However, Durban left unclear if and how RLs might be tied to financial "results-based" incentives in the future.44

Also at Durban, the COP adopted Decision 12/CP.17 stating that parties should provide a summary of information on how the Cancun safeguards are being addressed and respected. According to the Decision, this summary of information, commonly referred to as a safeguard information system (SIS) for REDD+, should be transparent and provide consistent information, implemented at the national level and build upon existing systems, and Parties should also report on safeguards in their National Communications. 40 However, the text did not explicitly provide guidance on what information should be collected within the SIS and with whom it should be shared.

COP18: In Doha in 2012, the COP failed to reach agreement on many important aspects needed to further the REDD+ agenda. One main area of disagreement at Doha on REDD+ was over whether REDD+ monitoring and verification would be conducted externally by independent experts from both developing and industrialized countries or predominantly by developing countries such as via the Consultative Group of Experts (CGE) and the ICA process. This was closely tied to disagreements on whether financing should be provided before or after agreement on monitoring and verification, with developing countries pushing the idea of finance first. The COP left until 2013 the question of which track should host the ongoing REDD+ negotiations after the Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA) expires in 2015. No final clarity was provided on how long until REDD+ projects may become creditable or traded under the Convention. A work program on results-based finance for REDD+ is to take place in

Decision 1/CP.16 at para 73.

Decision 1/CP.16 at para 73.

Decision 1/CP.16, Appendix I, 2(a)-(g). Available from: http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=12.

Decision 1/CP.16 at para 71. Available from: http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf

Decision 2/CP.17. Available from: http://unfccc.int/resource/docs/2011/cop17/eng/09a02.pdf#page=16.

Climate Focus. 2012. CP17/CMP7 Durban Debrief at page 3. Available from: http://www.climatefocus.com/documents/files/cp17cmp7\_durban\_debrief.pdf.

UNFCCC. 2012. Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011. Available from: http://unfccc.int/resource/docs/2011/cop17/eng/09a02.pdf.

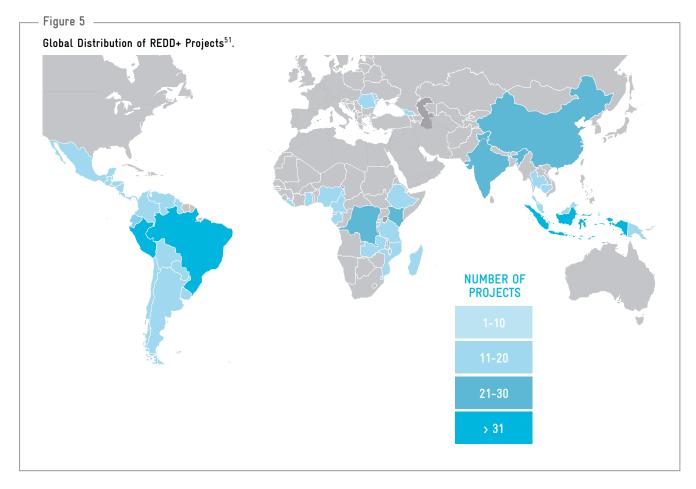
UNFCCC. 2012. Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011. Available from: http://unfccc.int/resource/docs/2011/cop17/eng/09a02.pdf#page=16.

2013.46 While in Doha, Parties decided that market-based mechanisms may be used towards national targets under the Kyoto Protocol or the Convention, via a broad reference to either New Market Mechanisms or REDD+ mechanisms.<sup>47</sup>

#### **Current Status**

#### Current status of implementation

Since its inception, REDD+ has increasingly gained global support, with the majority of its most concrete efforts so far in the form of projects at the subnational level but also via national and subnational policies and 'readiness' programs. Similar to NAMAs, the parameters of an official REDD+ mechanism under the UNFCCC have not yet been finalized, and pilot projects of a range of sizes and activities have allowed government, private sector and civil society actors to test incentive-based initiatives for realizing REDD+ goals in the meantime. Although REDD+ and NAMA funding is expected to come eventually from the GCF, in the interim REDD+ project finance to date has come primarily from private investors as well as some government and multilateral funds, and credits generated are typically sold on voluntary carbon markets. At the time of writing, 52 countries are involved in some form of REDD+ planning and/or implementation. While it is difficult to ascertain a reliable estimation of active projects, CIFOR has listed 338 REDD+ projects worldwide at various stages of implementation. 48 Most projects to date are found in Indonesia<sup>49</sup> and Brazil,<sup>50</sup> as shown in Figure 5 below. Numbers may be overstated as some projects at preliminary feasibility study stages have since abandoned efforts as either viability proved weak or funding could not be secured.



- UNFCCC. 2012. Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at paras 25-40. Available
- UNFCCC. 2012. Report of the Work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at paras 25-40. Available from: http://unfccc.int/resource/docs/2012/awg17/eng/103701.pdf.

  UNFCCC. 2012. Report of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on its eighth session, held in Doha from 26 November to 8 December 2012: Doha Amendment to the Kyoto Protocol, page 11 and 12. ("Any units generated from market-based mechanisms to be established under the Convention or its instruments may be used by Parties included in Annex I to assist them in achieving compliance with their quantified emission limitation and reduction commitments under Article 3.")

  See CIFOR: "Global Profile" tab. Available from: http://www.forestsclimatechange.org/redd-map/#legends. (Note that the CIFOR database lists all project ideas planned and operational public and grivate from all three phases, which may include projects deemed non-eligible according to international standards or potentially not
- and operational, public and private, from all three phases, which may include projects deemed non-eligible according to international standards or potentially not financially viable due to lack of committed investors. By comparison to a strict interpretation of forest carbon emissions reductions projects in the voluntary markets
- At time of writing, the CIFOR database REDD Desk (http://www.theredddesk.org/countries/indonesia, later Carbon Portal, which tracks voluntary broad interpretations of REDD+ projects and activities, list respectively 44, 67, and 37 projects in Indonesia. The Forest Carbon Portal, which tracks voluntary carbon market projects alone, lists four REDD+ projects as Operational and three as Pipeline in Indonesia. (http://www.forestcarbonportal.com/project/index.php).
- Currently, the CIFOR database and the REDD Desk respectively list 53 projects and 39 projects in Brazil, whereas the Forest Carbon Portal lists one REDD+ project as Operational and another as Pipeline in Brazil.

  See CIFOR: Distribution of REDD+ projects worldwide. Available from: http://www.forestsclimatechange.org/redd-map/#

#### Main programs

Beyond projects, multilaterally- and bilaterally-funded programs have been driving 'REDD+ Readiness' and testing the potential of results-based finance even where national REDD+ platforms are still under development. Multilateral, publicly-fund initiatives such as UN-REDD, the World Bank's Forest Carbon Partnership Facility (FCPF) and the Governor's Climate and Forest Task Force (GCF) have and continue to develop high-level guidance on REDD+ activities and test payments to REDD+ programs. Such programs work to gradually define goals based on members' shared experiences, often contributing the most significant addedvalue in the form of capacity-building. Bilateral initiatives such as between Norway and Indonesia, the Guyana REDD+ Investment Fund, and the Amazon Fund (as well as new initiatives such as the German REDD+ Early Mover's Program and Japanese Bilateral Offset Credit Mechanism) also pilot results-based REDD+ payments.

Bilateral and multilateral initiatives as well as the emerging international REDD+ regime all draw to varying extents on experience and expertise developed in the context of the voluntary forest carbon market. Voluntary, non-governmental standards include the Verified Carbon Standard (VCS), the American Carbon Registry (ACR), the California Action Reserve, The Gold Standard Land Use & Forests, Plan Vivo, the Panda Standard, the Climate, Community and Biodiversity (CCB) Standard, REDD+ Social and Environmental Standards, and SocialCarbon. All are voluntary regimes yet the jurisdictional and nested standards of the VCS and ACR allow for interaction with national and subnational compliance systems.

#### 2.3 Country Positions on NAMAs and REDD+

Despite the broad definition of what may be classified as a NAMA, there have been a few points of ongoing difference on NAMAs since their inception. Several of these may be seen to have special ramifications for REDD+, namely: 1) linkages between REDD+ and NAMAs, and in particular if REDD+ is to be officially considered a NAMA, 2) funding and offsets; and 3) how NAMAs are to be measured, reported and verified (questions 2 and 3 are closely linked, and both also central questions for REDD+).

#### REDD+ as a NAMA

Generally countries in favor of keeping REDD+ emissions reductions domestically to be counted towards national efforts rather than offsets to be sold internationally would prefer REDD+ to be included as a NAMA. Contenders of

this view include large developing countries such as Indonesia, South Africa and Brazil, but also smaller countries such as Costa Rica, Dominican Republic, Guatemala, Honduras and Tuvalu. <sup>52</sup> Developed countries such as Norway, Australia, the United States and European Union have also stated support for REDD+ as a NAMA, generally viewing NAMAs as broad economy-wide low emission development strategies that include unilateral actions, with REDD+ functioning as a component of that strategy. <sup>53</sup>

Conversely, developing countries such as Papua New Guinea, Paraguay, Guyana, Colombia who do not support inclusion of REDD+ in NAMAs generally explain that they do not want to dilute focus on REDD+. <sup>54</sup> A UNFCCC submission from the Coalition for Rainforest Nation countries, which includes Papua New Guinea and Guyana, however convolutes the position of these countries as it states support for REDD+ as a 'pathway to engage in voluntary NAMAs.' <sup>55</sup>

#### Funding and Offsets

Funding and the use of offsets are important questions for both NAMAs and REDD+, and many discussions on the two initiatives resemble each other albeit typically in separate negotiations (and with much discussion on credited NAMAs taking place in the context of New Market Mechanisms or outside the UNFCCC). Under NAMA negotiations, an important question early in the negotiations was whether unilateral action would be considered a NAMA. Those opposing unilateral actions generally wanted to ensure their actions were contingent on developed country funding, and those supporting such unilateral NAMAs often hope to gain official recognition for their actions. As discussed further below, additional support for unilateral NAMAs comes from the fact that MRV of unilateral NAMAs is likely to be less onerous than that for funded or credited NAMAs.

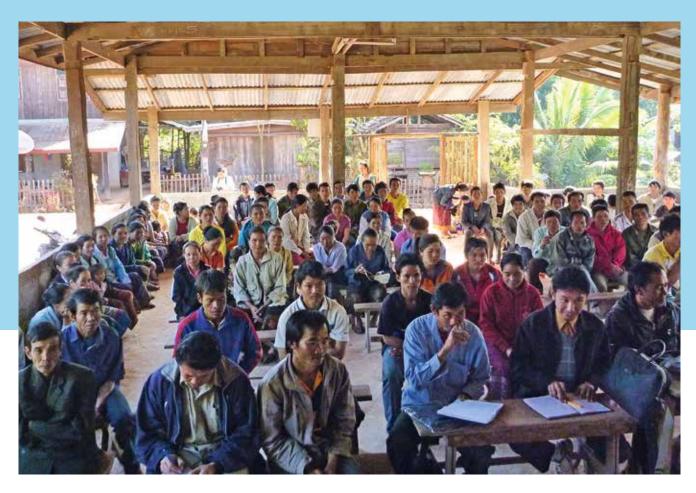
The use of offsets has also been a source of contention for both NAMA and REDD+ negotiations. Some parties such as South Korea have contended that only NAMAs financed by developed countries should be eligible for offsets. <sup>56</sup> In contrast, others like Costa Rica contend that the generation of offsets from domestically funded programs such as forest carbon stock enhancement should be included, independent of funding sources. Although a proponent of unilateral actions, Brazil opposes the use of offset mechanisms in REDD+ and NAMAs, although allows for other market-based mechanisms. This has implications for MRV, as unilateral NAMAs will likely be subject to a less rigorous verification process.

<sup>52</sup> Climate Focus. 2009. Developing Effective National REDD Programmes: REDD and NAMAs. pp. 16-20 and 40-47. Available from: http://www.climatefocus.com/documents/files/developing\_effective\_national\_redd\_programmes\_redd\_and\_namas

<sup>53</sup> Ibid. 54 Ibid.

<sup>34</sup> iol.
55 Client Earth. 2012. Country Submissions: Financing results-based REDD+ Related to Decision 1/CP.16, paras 68-70 and 72, p. 4.
Available from: http://www.clientearth.org/reports/redd-plus-finance-mapping-summary-of-submissions-annex-1.pdf

<sup>56</sup> Climate Focus, supra note 54, p. 20.



Debate has also taken place over to whether and to what extent REDD+ and NAMAs should follow the same processes for measuring, reporting and, in particular verification of emissions reductions. The main source of controversy here has focused around whether the ICA process of verification for supported NAMAs can replace the more rigorous process of MRV contemplated under REDD+ discussions. Parties generally see the importance in having general compatibility in verification for NA-MAs and REDD+, with some like Guyana contending that all MRV actions within REDD+ should be aligned with requirements and guidance of NAMAs. However, differences exist with regard to whether this should be done by independent, international experts or internally by host countries as under the ICA regime discussed for NAMAs. As mentioned above, this ties in with the question of unilateral or foreign funding (the latter suggesting higher verification requirements) versus offset crediting (suggesting the highest verification requirements).

In Cancun, Parties requested SBSTA to work on developing modalities for MRV REDD-plus to be consistent with MRV guidance for developing country NAMAs. 60 During the ensuing negotiations, several parties proposed inclusion of REDD+ information in the BUR, requiring verification through ICA, which would have the effect of linking REDD+ with NAMAs in terms of national reporting and verification. Developed countries such as Norway, however, objected to this notion, emphasizing the importance of third party verification.<sup>61</sup> This issue came to a head in Doha, where Norway and several other (mainly developed) countries pushed for independent international verification, and other (mainly developing) countries such as Brazil argued for internal domestic verification (especially for funded and unilateral rather than credited efforts, thereby increasing the similarities between REDD+ and NAMAs further).62 Under methodological guidance adopted by the COP in Doha, Parties simply agreed that MRV for REDD-plus should be consistent with guidance in decision 4/CP.15 and any MRV guidance for developing country NAMAs. 63

UNFCC 2012. Financing options for the full implementation of results based actions relating to the activities referred to in decision 1/CP.16, para 70, including related modalities and procedures. p. 45. Available from: http://unfccc.int/resource/docs/2012/tp/03.pdf

Client Earth, supra note 55, p. 16.
UNFCC 2012, supra note 57.
Decision 16/CP.1 Appendix II, para (c).
Institute for Global Environmental Strategies. Jul 2012. IGES Briefing Note on REDD+ negotiations: UN Climate Change Conference, Bonn, Germany, 14 to 25 May 2012. p. 4. Available from: http://redd-database.iges.or.jp/redd/download/project?id=75 Zwick, S. Dec 2012. "REDD+ Sidelined in Dispute Over Verification," Available from

http://www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page\_id=9466&section=news\_articles&eod=1 FCCC/SBSTA/2012/L.31, Annex, para 3. Available from : http://unfccc.int/resource/docs/2012/sbsta/eng/l31.pdf

# 3. Comparative analysis of NAMAs and REDD+

The following Table 2 outlines the main design concepts and approaches to certain elements under both NAMAs and REDD+. The analysis is presented side-by-side for easy comparison. A more in-depth comparative analysis is provided in Sections 3.1, 3.2 and 3.3.

#### 3.1 Design Issues

Table 2: Analysis of the design concepts and approaches of NAMAs and REDD+

Design Elements	NAMAs	REDD+
Scope	Any activity from any mitigation sector, including a project, program, policy or even an emissions reduction target.	Five activities from the forestry sector are accepted: reducing deforestation, reducing degradation, conservation, sustainable management of forests, and enhancement of carbon stocks. Activities may be projects, programs or policies. <sup>64</sup>
Scale	Anything from a project to subnational to national sectoral or full country.	National-level accounting and crediting with subnational level processes allowed in the interim while countries scale up capacities.
Reference Levels (RL)/Baselines (BL)	Unilateral/Supported: Indirectly referenced via information in BURs (in assessing effects of actions) <sup>65</sup> Credited: 'Ambitious' RLs (credit Baselines/threshold cap)	RLs required, with flexibility in national (or if appropriate, subnational) construction methodologies subject to independent review and verification.
MRV	Unilateral: Domestic MRV Supported: Domestic MRV and international verification through ICA Credited: Although yet undecided, negotiations suggest MRV likely at least at level of Supported, plus leakage, additionality and double-counting.  MRV of strategies or policies (72% of NAMAs submitted to date) difficult due to timescale and attributing effects of a policy or strategy.	Full national MRV including remote sensing and ground-based measurements required in the third phase of REDD+, with three components: estimates of forest land GHG emissions and removals; data for policy assessment covering multiple sectors; and links to monitoring of other forest information.  MRV for large-scale REDD+ difficult due to timescale and attributing effects of a policy or strategy. Projects more attributable to emissions reduction and easier to MRV, although with lesser impacts.

Decision 1/CP.16 at para 70. Available from: http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf.
 See Decision 2/CP.17, Annex III, para 2(c). (In addition to providing information on mitigation actions and their coverage (i.e., sectors and gases), BURs should provide "associated methodologies and assumptions" used to assess the effect of planned/implemented mitigation actions, which strongly suggests the use of baselines.)
 Decision 1/CP.18 at para 51(f). (Discussed within the context of new market mechanisms, credited NAMAs require "the establishment, approval and periodic adjustment of ambitious reference levels (crediting thresholds and/or trading caps).")

Design Elements	NAMAs	REDD+
Safeguards	No safeguards named yet, but potentially Green Climate Fund-developed safeguards would provide similar basis as for REDD+. Information on sustainable development co-benefits is invited for NAMAs seeking support to be listed in the NAMAs Registry, 67 and co-benefits have been promoted consistently in COP decisions. 66	<ul> <li>Seven safeguards named:</li> <li>Furthering goals of national forest programs, international forest agreements;</li> <li>National forest governance;</li> <li>Respect for local and indigenous communities;</li> <li>Stakeholder participation;</li> <li>Environmental protection and improvement;</li> <li>Prevention of leakage;</li> <li>Ensuring permanence.<sup>69</sup></li> <li>Also, Parties are to periodically report on actions to implement safeguards.<sup>70</sup></li> </ul>
Leakage	Leakage has not yet been considered within the NAMA discussions.	National strategies should incorporate drivers of deforestation to avoid displacement of emissions from one region to another. Leakage should also be captured in national MRV systems and accounted for in carbon accounting and registries. International leakage is not accounted for under REDD+.
Permanence/ reversals	Permanence/reversals have not yet been considered within the NAMA discussions.	Countries should avoid emission reversals through carefully designed national programs including consideration of deforestation drivers, buffer pools, and RL calculations. International crediting rules are still to be developed.
Additionality	Additionality concerns are not, at present, addressed as part of the NAMA discussions. Developing countries are considered able to decide for themselves which activities they can develop internally (unilateral NAMAs) and which they will require support for (supported/credited NAMAs). Additionality becomes more of an important issue when credited NAMAs are considered.	No guidance has been provided on additionality, although given that accounting and crediting is to progress to national level, it can be assumed that additionality will be captured in national-level RLs.

<sup>67</sup> Decision 2/CP.17 at para 46(h). Available from: http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf ("[Invites developing country Parties to submit] ... Other relevant information, including the co-benefits for local sustainable development, if information thereon exists;")
68 See, e.g., Decision 2/CP.16, para 48. Available from: http://unfccc.int/files/na/application/pdf/07a01-1.pdf
69 Decision 1/CP.16, Appendix I at page 26. Available from: http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf.
70 Decision 12/CP.17 at page 16. Available from: http://unfccc.int/resource/docs/2011/cop17/eng/09a02.pdf.

Design Elements	NAMAs	REDD+
Registry/carbon accounting and crediting	NAMA registry - being developed by UNFCCC for release before COP 19 in Warsaw - to allow countries to submit NAMAs for recognition or seeking support, and donors to submit funds for NAMA development or implementation.  National registries also can record on-going mitigation activities to avoid double counting - especially important when policy-based NAMAs are being developed or where credited NAMAs exist alongside unilateral or supported NAMAs and existing emissions reduction projects (such as the Clean Development Mechanism (CDM)). Attribution a challenge as difficult to accurately predict cause and effect of a policy. No guidance yet for how to avoid double counting of emissions reductions for policy-based NAMAs.	REDD+ registries proposed at international level and preliminary registry plans are under development in several REDD+ countries. A national registry would link reference levels, MRV and any subnational REDD+ initiatives in an integrated database in order to allow transparent tracking of emission reductions (or emissions increases) at the level of each initiative. Such registries would ultimately need to tie in with international registries in order to connect with funding from UNFCCC or initiatives.  Double counting a concern when emissions reductions may be attributable to different activity levels (e.g. national, subnational and/or project), such as under 'nested' REDD+ systems. Similarly, double counting could occur where emission reductions are caused by both broad policies or programs and discrete projects.
Market issues	NAMAs potentially may generate carbon credits where they can be directly attributed to emissions reductions achieved. Policy and strategy-based NAMAs thus not likely suitable for support from market-based mechanisms, although components of these NAMAs could potentially benefit from crediting. For example, a strategy-based NAMA may aim to reduce national deforestation via measures including capacity building, strengthening legal structures, enforcement and a national efficient cookstoves initiative. Only the use of efficient cook stoves has a directly measurable effect on rates of forest degradation and could be supported with crediting.	The UNFCCC agreed in Durban that REDD+ results-based finance may include public and private, bilateral and multilateral, including alternative sources" [and] "appropriate market-based approaches could be developed by the COP "71

Design Elements	NAMAs	REDD+
Funding sources	NAMA finance architecture can take different forms depending on the type of NAMA to be financed. Unilateral NAMAs are domestically supported, while supported NAMAs can receive funding from a range of sources including bilateral, multilateral and private sector finance, all of which can also be channeled through the Green Climate Fund.  The Cancun Agreements confirmed developed country pledges made under the Copenhagen Accord (i.e., fast-start finance of USD 30bn, (or roughly 17% of total Official Development Aid invested in 2009 (Organization for Economic Cooperation and Development (OECD) 2010)) for 2010-2012. Long-term funds are committed annually to reach USD 100bn (EUR 0.72bn) per year as of 2020. These funds target mitigation and adaptation activities in developing countries. Jointly with REDD+, technology transfer and adaptation activities, NAMAs provide an accounting and crediting framework for developing and developed country governments to absorb fast-start finance.  A NAMA Facility of USD 70mn has been established by Germany and the UK.	Financing approaches for REDD+ have centered largely on the use of public or private finance, and in particular market approaches allowing for crediting.  Decision 2/CP.17 that REDD+ results-based financing sources could include public, private, bilateral and multilateral, and left the possibility for development of market-based approaches to support results-based actions. Exact parameters for REDD+ crediting and use of markets, or if they are even to be included in a final global REDD+ regime, remain to be defined by UNFCCC. The large financing gap between current annual public funding (roughly USD 4.5bn) and long-term needs (estimated at USD 17 – 33bn annually) suggests need for market approaches. Some demand can come from sovereign governments & multilateral funds, but large scale offset demand will require domestic obligations on private sector (caps).
Legal nature	NAMAs are purely voluntary with no binding obligations placed on developing countries following submission. Host countries may, however, be bound to certain commitments upon receipt of funding. Where bilateral funding is awarded, these will likely be negotiated directly between the financier and host country government.	REDD+ a voluntary undertaking without obligations for developing countries to address emission from deforestation and forest degradation. Parties generally agree that international finance will require meeting agreed parameters such as verification of emissions reductions, although exact parameters not agreed to by COP (e.g., if external, independent MRV only or domestic ICA allowed).

Design Elements	NAMAs	REDD+
Policies and Measures	NAMAs should fit within a country's sustainable development strategy, but otherwise unrestricted in form they can take.  Such diversity exists in types of policies and measures put forward within NAMA submissions that identifying trends as to the type of measures is difficult. However, most of NAMA submissions (43%) are made in the form of strategies, defined as measures working towards a common long term goal. Another 29% of submissions are policies, either programs or measures embodied in legislation (e.g., feed-in-tariff) and 14% are projects.  NAMAs are being proposed in all economic sectors, most prominently in energy supply (36%) and transport (19%). NAMAs in forestry and agricultural sectors account for only 7% of proposals collectively.	REDD+ policies and measures in the form of national and subnational strategies and action plans to reduce forest carbon emissions or increase removals are being developed (Phase I) and implemented (Phase II). Early Readiness planning related to REDD strategy development includes national dialogue, institutional strengthening, and demonstration activities and programs, largely supported by immediate voluntary contributions from UN-REDD, the World Bank's FCPF, and bilateral agreements.  37 REDD+ countries are developing national strategies with funding from FCPF Readiness Mechanism (first submitting a Readiness Plan Idea Note (R-PIN), then a Readiness Preparation Proposal (R-PP) with planning, budget and schedule to achieve REDD Readiness for REDD activities).  To implement new REDD+ policies, host countries and states are working to either draft new REDD+ regulations or to re-draft existing legal frameworks. In addition, countries are harmonizing REDD+ goals with other sectorial policies (e.g., forestry, agriculture, and mining).
Status of Implementation	To date, almost all NAMAs are still at concept phase with only four having secured funding and moved to implementation.	Countries are at various levels of implementation (e.g., readiness, piloting, institutional creation, legislative drafting), with most countries still in Phase I and a handful of advanced REDD+ countries in Phase II (e.g. Costa Rica, Brazil, Indonesia, Guyana, Ecuador, Colombia, Viet Nam). To date no countries are fully implementing results-based REDD+. Numerous results-based payment pilot programs are planned or underway via bilateral partnerships (e.g., Norway's agreements with Indonesia, Guyana and the Amazon Fund in Brazil, and Germany's REDD Early Movers Program). At a multilateral level, the Carbon Fund coordinated by the FCPF to provide USD 200M in REDD+ payments.

#### Scope of activities

The scope of a program defines the types of activities that fall under REDD+ and NAMAs respectively.<sup>73</sup> The scope of REDD+ activities is restricted to five activities (reducing deforestation, reducing degradation, conservation, sustainable management of forests, and enhancement of carbon stocks), whereas NAMAs may come from any sector and any type of activity.

Thus, the scope of NAMAs is clearly much wider in regard to Land Use, Land Use Change and Forestry (LULUCF) activities, though the activities allowed for under REDD+ cover nearly all aspects of the forestry sector, so most forestry-related NAMAs would likely also fall within the definition of REDD+. Based on experience from Chile's forestry NAMA, it has become clear that in some countries there will be overlap in scope between forestry NAMAs and REDD+. However, in order to facilitate a landscape approach to mitigation in the land use sector, NAMAs could also be used to address and account for a wider scope of land use carbon pools not covered by REDD+ such as non-forested peat lands, trees outside forests, agriculture, small holder and low canopy cover agro-forestry, 74 home gardens, or sea grasses.

#### Scale

The scale at which a program operates defines whether it is project-based, sub-national or national. This is relevant for determining the program's interaction with other initiatives and establishing boundaries, especially when taking into account issues such as double-counting and crediting.

REDD+ accounting and crediting will eventually take place entirely on a national scale; this means that all forestry activities will somehow have to be accounted for within these national frameworks, be they REDD+ or forestry NAMAs operating within the zone of REDD+ activities. A question remains though as to whether and how NAMAs addressing LULUCF activities outside of those officially accepted under REDD+ (e.g., agriculture or low canopy cover agro-forestry) should be accounted for in a comprehensive national accounting system.

NAMAs are far broader than REDD+ in scope and have flexibility in terms of scale, presenting numerous options to integrate development of REDD+ and NAMAs where they are to be implemented within the same host country. Most likely, given its already more stringent rules on scale, NAMAs occurring within REDD+ forest sector activity types would need to follow REDD+ guidelines (e.g. move to nationallevel accounting and crediting). This would avoid complications regarding applicability of rules and such activities might be funded under both schemes. Conversely, REDD+ could take place within a larger NAMA framework of overall country mitigation efforts, allowing subnational and projectlevel accounting and crediting for LULUCF sector activities not covered under the five activity types of REDD+.

#### Reference Levels / Baselines

Setting a reference level or baseline defines the benchmark against which performance of an emission reduction project, program or policy will be assessed. For programs that will generate carbon credits, baselines are defined in terms of emissions, whereas other programs can use more relevant and measurable metrics for the type of activity.

Though guidance from the UNFCCC is not entirely clear, setting RLs under REDD+ likely will be defined more concretely than NAMAs. NAMAs in the forestry sector could adopt the eventual UNFCCC guidance and use Intergovernmental Panel on Climate Change (IPCC)/CDM guidelines for other land use-based activities to increase harmonization. Harmonizing NAMAs within REDD+ frameworks for RLs, like other elements discussed here, likely would bring similar complications as are contemplated under nesting of subnational projects and programs within national-level frameworks. Equally, registries capable of accounting for nested REDD+ activities with overlapping RLs should be wellequipped to also keep track of NAMA activities. If harmonization does not occur it could lead to disparities in accounting and problems in establishing the national accounting framework for REDD+.

Under both NAMAs and REDD+ it appears that their baselines/reference levels will be subject to independent review and verification. Streamlining approaches to reporting and allocating responsibilities at government level (e.g., having one entity responsible for reporting mitigation activities and for verification) will help to ensure cohesive and efficient communication and could help to reduce transaction costs.

#### Measurement, Reporting and Verification

Measurement, reporting and verification define the standard framework for transparently reporting performance. Typically, measurement and reporting are conducted by the same entity, whereas verification is carried out by an independent and qualified third party.

<sup>73</sup> Closely related to a program's scope is its eligibility, but as both programs are limited to developing country initiatives this is not compared here.
74 However, it should be noted that at a programmatic level, agriculture and agro-forestry can be addressed by REDD+, if agriculture is a driver of deforestation. REDD+ can promote intensification of agriculture as well as expansion into degraded instead of forested lands. Still, REDD+ performance is measured based on forest carbon stocks, leaving an accounting gap for the carbon flux implications of REDD+ measures on non-forested land.



Both NAMAs and REDD+ are subject to some form of MRV. It is the responsibility of the host country to conduct measurement and reporting of their activities in both, which may require support to strengthen the capacity of governments to carry out these activities. For situations in which both a NAMA in the forestry/land-use sector and REDD+ initiatives occur, combining measurement and reporting efforts will help to reduce costs and time.

For both supported NAMAs and REDD+, verification is likely to occur on the international level. As with RLs/baselines described directly above, streamlining approaches to reporting and allocating responsibilities at government level will help to ensure cohesive and efficient communication and could help to reduce transaction costs.

#### Safeguards

As noted in the tabular overview, Decision 1/CP.16 outlines a set of seven safeguards which should be respected by countries participating in REDD+, and Decision 12/ CP.17 requires countries to develop safeguard information systems. By comparison, there is no set of safeguard standards for NAMAs, and given the inherent fact that actions are intended to be 'nationally appropriate,' safeguard standards may not be elaborated at the international level. This would

be similar to the CDM, where the development and enforcement of safeguards is largely the prerogative of the host country's Designated National Authority (DNA). The result has been a wide divergence in safeguard development and implementation among countries. 75 However, the Green Climate Fund has been directed to develop a set of international environmental and social safeguards, which countries would need to adhere to in order to obtain NAMA funding.<sup>76</sup>

The current lack of safeguard instruments for NAMAs presents a potential loophole where forestry and land-use based activities which would not be considered eligible according to REDD+ safeguards could obtain funding through a NAMA financing stream. For example, the conversion of a natural forest to a plantation is an activity that would contravene the Cancun safeguards but may be eligible for financing as a NAMA. This could, in part, be addressed through a national REDD+ Safeguards Information System which would inherently monitor all forested lands within a country and require it to report on how safeguards have been applied across forested areas. Still, decisions have vet to be made on how this information will be shared and thus it is unclear if such information would be reported to the UNFCCC. In the interim it will be the prerogative of donors to develop screening mechanisms for land-use based supported NAMAs to ensure their social and environmental integrity.<sup>77</sup>

Mackenzie, Catherine. Forest Carbon Markets Communities. 2012. REDD+ SOCIAL SAFEGUARDS AND STANDARDS REVIEW at page 53. Available from: http://www.fomcglobal.org/documents/Safeguards\_Paper.pdf.
Decision 3/CP.17. Annex II D 18 (e) at para 60. ("The Board of the Fund will: ... (e) Develop environmental and social safeguards and fiduciary principles and standards that are internationally accepted").

For example, the German development cooperation BMZ has its own approach to human rights. See "BMZ Strategy paper - Human Rights in German Development Policy", available from: http://www.bmz.de/en/publications/type\_of\_publication/strategies/Strategiepapier305\_04\_2011.pdf

#### Leakage

Leakage refers to sources of greenhouse gas emissions that occur outside the program boundary which can be measured and are directly attributable to the program activity. Emissions caused as a result of leakage are usually required to be deducted from the emissions reductions generated within the program boundary.

Although NAMAs allow anything from project to national level approaches, isolated project-based approaches could allow for greater leakage relative to REDD+ unless tracked within national sector -level accounting and crediting. However, in countries where both REDD+ and NAMAs co-exist, forest sector emissions reductions and removals would need to be tracked nationally for the five REDD+ activities. Any overlapping NAMAs in those five activities would presumably need to be tracked in the national registry, although identified as financed and credited according to NAMA rather than REDD+ guidelines

#### Permanence

Ensuring the longevity of a carbon pool and the stability of its stocks is known as permanence, which relates to the management and disturbance environment in which it occurs. The risk of non-permanence describes the possibility of reversing climate benefits through the loss of forest carbon biomass. Forest projects under the Kyoto Protocol addressed permanence in the Clean Development Mechanism by making credits temporary and requiring periodic verification, and in Joint Implementation by national accounting and targets. Meanwhile, various voluntary standards have dealt with permanence in projects by requiring buffer areas and/or insurance mechanisms.

For similar reasons as for leakage, permanence seems likely to be of greater concern at the outset for NAMAs than REDD+, given the possibility of isolated project-based approaches under the former than the latter, which would be able to better control for leakage by national accounting. Should a country underperform in a given crediting period relative to its national level, it generally would be better able to offset by taking from its buffer account or drawing against the next period than would a single project due to its larger portfolio of forest activities. Should forest sector NAMAs (project or sectoral) be included within the larger accounting of a country together with REDD+ however, their permanence could be better ensured.

#### Additionality

Additionality refers to the need to determine that any emissions reductions achieved through an activity would not have occurred without the program. In other words, proving that a program is additional ensures that any outcomes occur over and above that which would have occurred anyway.

Additionality is not explicitly discussed in either NAMAs or REDD+. Whether a program is or is not additional will only become relevant when crediting of activities is considered. Additionality for sectoral NAMAs and REDD+ (given its national level accounting and crediting) is likely to be addressed via conservative RLs, as under the VCS-JNR and the ACR Nested REDD+ Standard, or potentially through comparison with other sectoral standards as under the Climate Action Reserve.<sup>78</sup> It is likely that the established tools/guidelines for assessing additionality under the CDM will be used if needed for projects.

Registry/carbon accounting and crediting

A registry is a tool that helps to transparently account for greenhouse gas emissions and removals. Where linked to carbon trading programs, a registry can also provide an infrastructure for the tracking and trading of carbon credits and allowances.

Registries are most relevant for credited NAMAs and REDD+ activities. At the time of writing, NAMAs are further ahead at the international level given the UNFCCC development of an international NAMA registry (although so far these are voluntary registries matching NAMA submissions with support rather than accounting for carbon), and REDD+ leads the way nationally with several countries developing national registries to track REDD+ activities and carbon accounting.<sup>79</sup> Given the potential for overlap of forest sector activities in REDD+ and NAMAs, it seems vital that national registries and international-level registries for carbon accounting (presumably still to be defined under the UNFCCC) be synchronized in order to prevent double counting of activities across both work areas. Here a tension is especially apparent between the distinct character of the two work programs and the need to combine their efforts in order to avoid duplication and confusion in MRV and registration of emissions reductions.

See, e.g., Forest Sector Protocol Version 2.1 (September 6, 2007). California Climate Action Registry. Available from: http://www.climateactionreserve.org/how/protocols/forest/dev/version-2-1/
Two examples of countries developing REDD+ registries include Ecuador and the Democratic Republic of Congo. For background on Ecuador, see The REDD Desk:
National registry for REDD+ activities-Ecuador. Available from: http://www.theredddesk.org/countries/ecuador/info/activity/national\_registry\_for\_redd\_activities\_ecuador.
For information on the DRC REDD+ Registry, see: http://www.climateinvestmentfunds.org/oif/sites/climateinvestmentfunds.org/files/DRC-FIP%20Pilot%20Countris%20
Meeting%20(Brasilia%20April%202012)%20Two%20Success%20Initiatives%20%20NFMS%20%26%20Registry.pdf.

The highest priority of a system of registries to avoid double counting at national and international levels would be to prevent duplicate credits circulating for the same carbon emissions mitigation activity in credited NAMAs as in credited REDD+ activities. Registries will also need to prevent double counting of financed NAMAs and unilateral NAMAs, since countries should not receive credits for work already externally supported or (to a lesser extent) that they themselves have already domestically funded. Where REDD+ and forestry NAMAs intersect it will be essential for a spatially explicit national registry to be created to avoid double counting. By comparison, the current primary function of the UNFCCC NAMA registry is to link donors with mitigation activities and track climate finance, rather than to account for carbon reductions. Therefore the responsibility of creating a registry to avoid double counting from integrating NAMAs and REDD+ will most likely lie at the national level.

#### 3.2 Financing

#### Market Issues

Carbon credits are a form of results-based payment, in which finance is awarded based on the quantity of greenhouse gas emissions that are reduced or avoided. However, since a carbon credit is not a tangible commodity, considerable effort is needed to ensure that an emissions reduction has been achieved, to quantify reductions, and prove that these would not have occurred in the absence of the activity.

The potential for an activity to generate carbon credits will depend on the extent to which the activity can be directly attributed to the emission reductions achieved. This is especially challenging for policies where establishing the cause and effect of the policy may not be comprehensive enough to allow for carbon credits to be generated.

In addition, issues regarding demand for carbon credits and who will buy these remain controversial subjects. This is reflected in both the lack of the term 'credited NAMAs' in the UNFCCC decision texts and passive terminology used in the context of REDD+, where "appropriate market-based approaches could be developed by the COP..."80 (italics added). For both NAMAs and REDD+ the potential to generate carbon credits will depend on the types of activities carried out under these frameworks (i.e., where it is likely that only certain policies/activities within the wider framework will have a directly measureable impact on greenhouse gas emissions). In these circumstances, carbon credit finance could be applied in addition to other finance sources. Where both NAMAs and REDD+ are implemented, clear boundaries and rules will need to be established at project, jurisdictional and international levels to ensure that rights to carbon credits are transparently allocated and that no doublecounting occurs.

The question of fungibility between NAMA and REDD+ credits is a controversial one requiring both technical considerations and historical reflection on similar fungibility discussions from previous REDD+ policy debates. From a purely economic perspective, it may be argued in favor of fungibility that the resulting increase in liquidity (allowing for easy exchange of REDD+ and NAMA credits) would bolster the efficiency of carbon market. By more readily matching sellers and buyers, this would incentivize further investment in the supply of forest carbon emissions reductions. From a climate perspective, then, fungibility between REDD+ and NAMA credits may be seen as generally positive.

However, as has been outlined in this paper, REDD+ requires a much higher threshold of procedural hurdles and safeguards (and thus investment) than NAMAs before an emission reduction or removal may be verified. REDD+ credits had originally been regarded as cheap to produce based on simple opportunity cost projections, and thus capable of simple 1:1 fungibility with other types of carbon credits.81 More recently, this view has been discredited after deeper consideration upon the long-term costs of forest governance, as well as pervasive additionality and leakage concerns. 82 Equally, given the deep differences between REDD+ and NAMAs it would not seem advisable from a community, investor or developer perspective to make any potential corresponding credits from either type of activities completely fungible (e.g. both types of activities simply selling a generic 'forest emissions reduction credit').

<sup>80</sup> Decision 2/CP.17 at page 15. Available from: http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf.

Decision 2/CP.17 at page 15. Available from: http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf.
See, e.g., Stern Review on the Economics of Climate Change. 2006. Cambridge University Press. Available from: http://webarchive.nationalarchives.gov.uk/+/http://www.hm-treasury.gov.uk/sternreview\_index.htm. ("Curbing deforestation is a highly cost-effective way of reducing greenhouse gas emissions and has the potential to offer significant reductions fairly quickly."). See also, Angelsen, A., ed. 2009. Moving Ahead with REDD: Issues, Options and Implications at page 50. ("Demand for REDD arises because REDD credits are comparatively cheap.").
See, e.g., Blackman, A. 2010. Will REDD Really be Cheap? Available from: http://www.rff.org/Publications/WPC/Pages/Will-REDD-Really-Be-Cheap.aspx. ("Opportunity-cost models like this ignore voluminous evidence of the serious constraints on effective forest conservation in developing countries, including weak regulatory institutions, confused property rights, corruption, and an abundance of small-scale and informal drivers of tree cover loss.") See also, Angelsen, A. 2011. What does REDD really cost? Available from: http://blog.cifor.org/3793/what-does-redd-really-cost/#.UYE7xLW632s.



Full fungibility between credits for REDD+ and NAMAs (i.e. without any labeling or basis for price discrimination) also could lead to the perverse incentive of cheaper, more easily-produced NAMA credits washing out demand for REDD+ credits on global markets. This heightened demand for NAMAs could result in a massive supply-side shift to NAMAs from REDD+ and years of work on developing forest carbon rules for REDD+ would be effectively sidestepped - a setback not only for REDD+ but also potentially for its corollary social and environmental goals.

By example in the voluntary carbon market, credits are differentiated between forest projects lacking social or environmental co-benefits (e.g., those projects verified only by a pure carbon standard) and those selling at a premium that also include such co-benefits. If credited, REDD+ and NAMAs likely would need to have a similar differentiated relationship in a global market, given the additional rules and co-benefit safeguards already built into REDD+ that are overlooked in NAMAs.

#### Funding sources

As noted earlier in this document, the future sources of financing for both REDD+ and NAMA activities face a lack of clarity. To date, no dedicated funding stream exists for either initiative under the UNFCCC process, and existing funding has come primarily through bilateral and multilateral channels. REDD+ projects have received additional funding from the private sector through voluntary carbon markets, and a USD 70 million NAMA Facility has been established jointly by the BMU and the UK Department of Energy and Climate Change (DECC) to support NAMA implementation activities.83

Established at COP 1684, the Green Climate Fund has received a commitment from developed countries to provide USD 100 billion per year for mitigation and adaptation activities in non-Annex I countries. 85 As of yet it is unclear how the funding will be disbursed, but it is envisaged that it will be a significant source of funding for NAMAs and REDD+.

 <sup>83</sup> See BMU and DECC. 2012. Background Information: NAMA Facility. Available from: http://www.bmu.de/fileadmin/bmu-import/files/pdfs/altgemein/application/pdf/factsheets\_nama\_en\_bf.pdf.
 84 Decision 1/CP.16. Available from: http://unfocc.int/resource/docs/2010/cop16/eng/07a01.pdf.
 85 See UNFCCC. The Cancun Agreements: Financial, technology and capacity-building support. Available from: http://cancun.unfocc.int/financial-technology-and-capacity-building-support/new-long-term-funding-arrangements.

The GCF governing board has been tasked with identifying "additional thematic windows and/or substructures to address specific activities, as appropriate,"86 which will provide greater clarity on the availability of funding for sectoral specific mitigation and adaptation activities. The creation of a specific REDD+ funding window under the GCF has been widely discussed, though no decisions have been made.

Facing an unclear future for REDD+ and NAMA financing, some countries are pursuing both streams simultaneously to fund forestry-related activities. Kenya and Chile, for example, have both proposed to implement forestry activities simultaneously through REDD+ and NAMA financing instruments. Such an approach gives countries additional flexibility and the opportunity to pursue both financing streams, while hedging against the potential that REDD+ financing does not materialize substantially. Still, countries should take a thoughtful approach to developing financing proposals to avoid potential pitfalls associated with unwieldy and incoherent financing plans for forestry mitigation actions. In its R-PP for example, Chile elaborated on the complementarity of FCPF funding with planned Forestry NAMA actions funded by Switzerland. 87 This provided a coherent vision and logical framework for the complementarity between REDD+ readiness and NAMA forestry activity implementation. By comparison, differing documents in Kenya suggested at once that certain activities (such as forest restoration and REDD+ readiness) would be funded through REDD+ financing streams, while in other documents indicating the same activity would be proposed to the UNFCCC as a NAMA.88 Such an approach risks confusing donors of how REDD+ and NAMA activities will be integrated and coordinated.

#### 3.3 Legal/Policy Issues

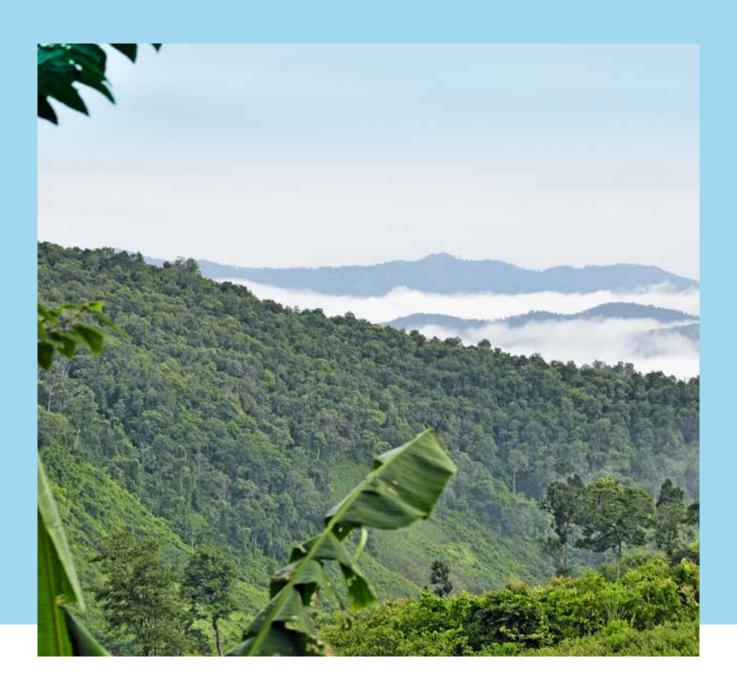
#### Legal Nature

The legal nature of either NAMAs or REDD+ refers to whether countries implementing these frameworks are legally bound to do so. Both NAMAs and REDD+ are voluntary in nature without any initial obligations. Obligations may, however, be bilaterally agreed upon between the host country and the international funding entity. This could include the requirement to monitor and verify emissions reductions, among other things, which likely would be more stringent for REDD+ than NAMA activities, but no exact parameters have been defined by the COP.

#### Policies and Measures

Both NAMAs and REDD+ should fit within a host country's national low-emissions development framework rather than supersede it. The types of policies and measures allowed under NAMAs are much broader than REDD+ activities, but are not as well defined. The far more flexible nature and scope of NAMAs allows for embedding REDD+ activities within a broader NAMA framework, whereas those activities eligible to receive funding under REDD+ (even including broader activities such as capacity building) are far fewer than those seeking support as NAMAs.

Becision 3/CP.17. Available from: http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf.
 See FCPC. 2013. Readiness Preparation Proposal (R-PP), Country: Chile, Version 4 Working Draft.
 Available from: http://www.forestcarbonpartnership.org/sites/fcp/files/2013/~6542135.pdf.
 See Kenya's National Climate Change Action Plan: Mitigation, Chapter 1: Mitigation Summary, Chapter 4: Forestry, Chapter 13: REDD Concept Note - Measuring Reporting, and Chapter 14: REDD Concept Note Restoration. Available from: http://www.kccap.info/index.php?option=com\_phocadownload&view=category&id=36.



# 4. Ideas on Harmonizing NAMAs and REDD+

#### 4.1 A Landscape-Based Approach

One of the criticisms of REDD+ is that it only accounts for carbon fluxes occurring inside officially defined forests, meanwhile ignoring significant land-based carbon sinks and sources outside those areas.89 For example, it is estimated that up to one third of forest emissions are not accounted for under REDD+ in Indonesia.90 Further, reducing deforestation and forest degradation will invariably require policies and measures to be developed that directly address drivers, many of which operate outside of the forest landscape. However, under REDD+ the carbon impact of these policies and measures only measures and reports carbon pools located within the forest, leaving an accounting gap for other carbon sources or sinks such as agriculture, peat soils and mineral soils on non-forested land, trees outside forests, and many agro-forestry activities. To address this paradox it has been suggested that a more comprehensive landscape based approach (sometimes referred to as REDD++ or Reducing Emissions from All Land Uses (REALU)) be taken in carbon accounting that would account for net emissions and removals across land uses and address leakage between sectors. 91

Such an approach would allow for a more comprehensive and holistic approach to be taken to addressing drivers of deforestation, while fully accounting for the carbon impact of such measures, as shown in Figure 6 below.

While this approach has made little headway in UNFCCC negotiations, the flexibility of NAMAs could allow for the realization of a landscape-level approach to both addressing drivers of deforestation and forest degradation and to carbon accounting. NAMAs can be used to bridge the gap between activities and accounting within the forest, and activities and accounting that occur outside officially defined forest boundaries but affect overall land use change patterns. However, such a proposal faces several barriers. First, a common methodological approach would need to be adopted for RL and MRV systems to be established across a landscape level, tools that have not yet been developed. Additionally, such an approach would invariably require coordination between a variety of stakeholders with jurisdiction over differing land types, a task that could prove difficult for many countries in the region.



<sup>89</sup> Van Noordwijk M, Minang PA, Dewi S, Hall J, Rantala S. 2009. Reducing Emissions from All Land Uses (REALU): The Case for a whole landscape approach. ASB PolicyBrief 13. ASB Partnership for the Tropical Forest Margins, Nairobi, Kenya. Available from: http://www.asb.cgiar.org/PDFwebdocs/ASBPB16.pdf.

<sup>91</sup> Ibid. (REDD++, or reducing emissions from all land uses (REALU), also includes agriculture, and guarantees good land use practices that ensure non-deforestation.)

#### 4.2 An examination of existing national proposals

While both NAMAs and REDD+ remain at early stages in all countries, countries such as Kenya, Indonesia, and Chile have initiated processes looking at either integrating REDD+ and NAMAs or pursuing both tracks of finance for forestbased mitigation activities. Such initiatives can offer early blueprints for other countries to build off of and highlight challenges that countries may face in integration or harmonization. As one of the countries that has provided thought leadership at the nexus of NAMAs and REDD+, Indonesia is examined in this section in addition to the more extensive report found in the Annex of this paper.

#### Kenya

In 2012 Kenya released a comprehensive National Climate Change Action Plan (NCCAP), which included an in-depth analysis of mitigation potential across seven sectors including energy demand, electricity, transport, industry, waste, forestry and agriculture. For each sector a BAU emission scenario was developed through to 2030, followed by a quantitative abatement analysis allowing priority sectors to be identified. In addition to mitigation potential, further analysis looked at the abatement costs of implementing policies and measures to mitigate emissions, allowing the country to prioritize policies and actions with high abatement potential and low costs. 92 The study found that forestry had, by a significant margin, the highest technical abatement potential. A further financial analysis concluded that 90% of potential offsets through 2030 would come from the forestry sector and five of nine priority actions identified were related to mitigation in the forestry sector including agroforestry, forest restoration, reforestation, clean cookstoves and the development of a REDD+ MRV framework.93

In examining funding options to achieve emission reductions, the NCCAP suggested several forestry sector actions (e.g., 960,000 ha of forest restoration) be financed through REDD+, while others (e.g., 240,000 ha of reforestation) be pursued as a supported NAMA. This strategy will allow Kenya to diversify its funding sources for forestry-based mitigation activities by capitalizing on both tracks of funding. What is not clear from the NCCAP, however, is whether NAMA-financed forestry activities will be subject to the established rules for REDD+ or what the rationale was behind pursuing restoration as a NAMA and reforestation as REDD+. Further, it remains unclear what measures will be taken to avoid double counting, a particular concern for projects such as clean cookstoves.

#### Lessons learned from Kenya's experience in NAMA Prioritization\*

- · National development plans should form the starting point (in Kenya, Vision 2030)
- · Senior level buy-in across government institutions is necessary
- The process should be locally owned



Thus, Kenya may have to rationalize to international donors why it is pursuing different financing pathways for similar forestry-based activities (see Chile case study below). For example the NCCAP suggests a USD 300,000 supported NAMA will be submitted for the preparation of a REDD+ MRV system, although the FCPF has dedicated over USD 740,000 to the same activity. The country will also need to develop a method for harmonizing REDD+ and NAMA projects, particularly in relation to establishing reference levels and MRV systems. Voluntary projects from investorled initiatives, such as the Kasigau Corridor REDD+ project, will also need to be integrated into the accounting approach, possibly further complicating creation of a national reporting system. If these separate initiatives result in different methodological approaches, it could prove difficult for the country to eventually establish a credible national REDD+ reporting system during Phase III of REDD+. Regardless, by pursuing a combination of REDD+ and NAMA funding for forestry activities Kenya has set itself on a highly ambitious path for emission reductions: under the NCCAP the forestry sector would transition from a net source of 19 MtCO2e annually in 2010 to a net sink of 28 MtC02e annually by 2030.

Sawyer, D and Murphy, D. 2012. IISD Tools for Prioritizing NAMAs and the Kenyan Experience. Available from: http://www.lowemissiondevelopment.org/docs/Newsletters/UNDP\_Webinar\_Prioritising\_NAMAs\_IISD\_final.pdf. Murphy, D. et al. 2012. National Climate Change Action Plan: Mitigation Executive Summary. Available from:

http://www.kccap.info/index.php?option=com\_phocadownload&view=category&id=36.

#### Indonesia

Similar to Kenya, Indonesia took a sectoral approach to evaluating the prioritization of a NAMA framework in the document Development of the Indonesia NAMA Framework which builds upon the country's low carbon development pathway outlined in the National Action Plan on Climate Change (2007). 94 The country evaluated current emissions as well as potential abatement costs across five sectors: energy, industry, transport, waste, and LULUCF. In contrast to Kenya, BAU scenarios have not yet been developed for each sector and instead the NAMA framework development relied on existing emissions to examine abatement potential. Policies and measures in the LULCF sector were then analyzed, though not prioritized, and based on emissions reduction potential, potential abatement costs and potential co-benefits. In Indonesia, LULUCF accounts for nearly 67% of emissions with the majority of emissions coming from deforestation and forest degradation, including peat fires, and the sector shows high viability for mitigation with a relatively low estimated marginal abatement cost of USD 3 to 14 per tCO<sub>2</sub>e in the forestry and peatland sector. 95 Mitigation from the forestry sector is linked to the National Action Plan to Reduce GHG Emissions, commonly known as Rencana Aksi Nasional untuk Penurunan Emisi Gas Rumah Kaca (RAN/RAD GRK), which has set sectoral targets for forestry and peatland mitigation.

In outlining the NAMA framework, Indonesia was explicit that REDD+ is viewed conceptually as a sub-sector within its land based NAMAs structure. 96 Placing REDD+ within the NAMA structure allows the country to take a comprehensive landscape-based approach to NAMAs, using REDD+ funding for forested areas and supported NAMAs for land-based mitigation activities that fall outside the scope of REDD+.

Indonesia's NAMA framework also demonstrates cognizance of the caution that needs to be applied when integrating REDD+ and NAMAs, particularly with relation to MRV methodologies which must be 'closely aligned' to address issues such as double counting and leakage. Similarly, the recommendation to develop a national BAU scenario (as an aggregate of sub-national BAUs) for land-based NAMAs would align it with the eventual requirements for national reporting of RLs and MRV under REDD+. A NAMA feasibility study for peatland management currently underway highlights some of the advantages of integrating a comprehensive land based NAMA, as peatland management can occur in both forested and non-forested land.

Compared to Kenya, Indonesia has more clearly defined the conceptual relationship between REDD+ and NAMAs, with REDD+ acting as a sub-sector of land-use NAMAs. Further, Indonesia's national reporting of BAUs/RLs and MRV aligns the land-use NAMA with REDD+ requirements, addressing concerns that could arise with integration. Nonetheless, the framework for integrating REDD+ and NAMAs remains relatively abstract and the country must develop concrete frameworks for carbon accounting across the entire landuse sector as well as elaborate a methodology for developing sub-national BAU/RLs for all land uses that can be reconciled nationally. Putting these concepts into action may prove to be difficult. Furthermore, the NAMA framework highlights the difficulties that may arise in coordinating across government agencies at different levels in implement a land-based NAMA.

More information on Indonesia's approach to NAMAs and REDD+ can be found in Table 3 below.





<sup>94</sup> Situemeang H., Lubis, S., et al. 2011. Development of the Indonesia NAMAs Framework. Available from: http://www.paklim.org/wp-content/uploads/downloads/2011/12/GIZ-PAKLIM-Indonesian-NAMA-framework-development-full-report.pdf. 95 Indonesia Ministry of Forestry, 2012. 96 Ibid at page 105.

#### Chile

At COP 15 Chile submitted a NAMA proposal to the UNF-CCC which suggested the country could reduce emissions by 20% from the BAU with international support by 2020, focusing on energy efficiency, renewable energy, and LULUCF sectors. Today Chile stands at the forefront of NAMA development, having submitted three NAMAs to the UNFCCC with 12 more under various stages of development. It was the first country to submit a supported NAMA specifically targeting the forestry sector which was successfully funded by the Government of Switzerland. The NAMA calls for partial funding for implementation of the country's National Forestry and Climate Change Strategy (to supplement funding from the FCPF focusing on governance and legal issues, and development of a strategy for addressing drivers). By contrast, the Forestry NAMA will support development and implementation of a Platform for Generation and Trading of Forest Carbon Credits and implement pilot field activities in reforestation and carbon stock enhancement. 97

In contrast to Kenya and Indonesia's attempts to pursue multiple financing sources, Chile has actually succeeded in securing both REDD+ and NAMA finance in the forestry sector. It has done this in part by clarifying that the forestry NAMA will be linked with REDD+ activities developed through the FCPF, including environmental and social safeguard and MRV requirements. Chile was also strategic in its approach, using the NAMA track to finance activities that would not be funded under REDD+ readiness, particularly the development of a forest carbon credit trading platform. Despite separating the two initiatives, Chile was also able to provide a coherent proposal by tying them together though the National Forestry and Climate Change Strategy.

A main lesson from Chile in the process of pursuing both REDD+ and NAMA funding for REDD+ activities is that donors will ask countries how the two initiatives will be coordinated and act in a complimentary manner. In October 2012 at the 13th Participants Committee (PC) meeting of the FCPF, the PC decided that Chile had only partially met the R-PP standard for National Readiness Management Arrangements because the country failed to mention their forestry NAMA and how it would align with funding provided by the FCPF. As a consequence, the PC asked for Chile to elaborate how the funding from the FCPF for REDD+ readiness would be linked to the implementation of the Forestry NAMA and requested the R-PP to be revised. 98 The revised R-PP from February 2013 contained a thorough explanation of how the activities would complement each other with the goal of fully implementing all the activities described under the National Forestry and Climate Change Strategy.

#### Summary

The cases from Kenya, Chile and Indonesia highlight different approaches and wide differences in conceptual frameworks being taken to integrate NAMAs and REDD+. Whereas Indonesia takes a sectoral approach to land-use NAMAs with REDD+ as a sub-sector of its land-use NAMA, Kenya takes a project-based approach and uses NAMAs and REDD+ primarily as a method for diversifying funding options without clarifying conceptual relationships between the two. In the case of Chile, NAMA financing is used to fill funding gaps in its overall forest mitigation strategy by focusing NAMA finances on areas that are unlikely to be funded through REDD+ readiness.

Clearly relating forestry NAMAs with REDD+ can clarify why a country is pursuing NAMA funding and how the initiatives will integrate, but incoherent or incomplete explanation of harmonization and relationships can increase NAMA/REDD+ integration risks. The flexibility of NAMAs allows countries to pursue new and innovative approaches to REDD+, as demonstrated by Chile using part of its forestry NAMA to develop a forest carbon trading platform which it aims to link with its domestic emissions trading system (ETS). Such approaches may be particularly relevant for countries such as Thailand and Viet Nam, where domestic ETS are planned.

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## 5. Country Studies

In order to better understand where individual countries in South East Asia currently are at in terms of their REDD+ and NAMA development, GIZ project supervisors and incountry expert consultants were requested to prepare short papers outlining the institutional frameworks, policies and projects, current implementation status and comparative

discussion of both REDD+ and NAMAs in their countries. Presented here are short summaries of the main messages in each of the country studies, followed by a comparative analysis between countries. For more details, complete country case studies are available as Annexes to this report.



Country case studies for Lao PDR, Indonesia, Viet Nam and Thailand were provided by GIZ and in-country consultants. This report entails summaries of these country cases, the complete studies can be accessed by following the links below.

Lackmann, S. and Bounphasaisol, T. (2013)

NAMAs and REDD+: Country Study Lao PDR.

http://star-www.giz.de/fetch/9X00pimdg001JQqc09/giz2013-0665en-lao-redd-nama.pdf

Wulan, Y. C. (2013).

NAMAs and REDD+: Country Study Indonesia.

http://star-www.giz.de/fetch/6666X01J00pggl00Qi/giz2013-0664en-indonesia-redd-nama.pdf

Munez, M. (2013)

NAMAs and REDD+: Country Study Philippines.

http://star-www.giz.de/fetch/a0pie12g01J00d00aX/giz2013-0666en-philippines-redd-nama.pdf

Phuong, N. T. (2013)

NAMAs and REDD+: Country Study Viet Nam.

http://star-www.giz.de/fetch/biggV0g1J00Q000bXp/giz2013-0667en-vietnam-redd-nama.pdf

5. Country Studies 3



#### 5.1 Indonesia

Indonesia is fairly advanced in its consideration of both NA-MAs and REDD+. One supported NAMA has been submitted to the UNFCCC registry in sustainable urban transport and a feasibility study is being prepared for another NAMA in sustainable peatland management. Several dozen REDD+ project activities are running in the country, <sup>99</sup> and on-going activities under REDD+ readiness have been funded, with Norway pledging USD 1 billion to support REDD+ readiness.

The country plans to launch both a National NAMAs Registry (planned for July 2013 but not available at time of writing) and a REDD+ National Registry, which will keep centralized records of activities carried out under the two mitigation structures, aiming to facilitate shared learning and greater coordination of activities between implementing entities. Keeping these registries separate, however, may result in a failure to recognize where work could be shared or potential overlaps between REDD+ and NAMAs could occur.

Indonesia has developed a list of mitigation actions they wish to pursue under a RAN/RAD GRK, some of which shall be shortlisted for development as NAMAs and submitted to the UNFCCC. Of these, nineteen are in the land-use sector and include activities in sustainable land management, reduction in the rate of deforestation and land degradation and the development of carbon sequestration projects. To monitor achievements under each mitigation activity, local governments will be required to implement Monitoring, Evaluating and Reporting (MER) systems, which are submitted annually to the National Development and Planning Agency. An MRV structure for REDD+ has been designed in which a 'REDD+ Agency', expected to be operational by July 2013, will carry out MRV of REDD+ activities in future. The national REDD+ Task Force has published a National Strategy for REDD+ and a National Action Plan for REDD+ (STRANAS) and 11 provinces are in the process of finalizing provincial REDD+ action plans (SRAP). There is obviously considerable scope for overlap between these proposed NAMA activities and REDD+, including the planned MRV activities, but it is not clear how they will interact, if at all.

The establishment of a baseline for both REDD+ and land-based NAMAs has, surprisingly, also been carried out on a provincial level. Both use Business-as-Usual (BAU) baselines, but employ different base periods and time horizons for future emissions projections. These different approaches have led to radically different baselines for each of the mechanisms for most of the provinces in which they have been developed. Streamlining baseline establishment will be important if both NAMAs in the land use sector and REDD+ are to be pursued.

The country has begun to consider potential overlaps between land-use NAMAs and REDD+, such as considering whether safeguards should be integrated into their voluntary mitigation actions in the land-use sector. There is, however, still concern from some Indonesian sectoral ministries as to whether integrating REDD+ and NAMAs should be pursued, largely due to the ambiguity in international negotiations around both mechanisms. In the face of uncertainty, there is concern that Indonesia's proactive domestic decisions will become inconsistent with international negotiations. Moreover, since REDD+ discussions and modalities are more advanced compared to NAMAs, there is also worry that the integration of REDD+ into NAMAs will undermine REDD+ negotiations and delay the implementation of REDD+ mechanisms. Some parties are also concerned that financial commitments that have been made by developed countries, particularly to finance the REDD+ readiness phase, will be lost with the integration of REDD+ into NAMAs, although why a country would withdraw such funding is not clear.

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#### 5.2 Lao PDR

The land use change and forestry sectors are the main source of greenhouse gas emissions in Lao PDR, accounting for 83% of national emissions. The country has made progress in REDD+ readiness, but has made little headway in pursuing the development of NAMAs. This is partly due to a lack of institutional understanding of NAMAs. However, Lao's 2<sup>nd</sup> National Communication (2013) discusses the option to "test the potential of new UNFCCC mechanisms to enhance sinks, particularly in NAMA and REDD+" and Lao's (2010) Strategy on Climate Change mentions that all mitigation actions identified in the paper can be considered as nationally appropriate mitigation actions. The activities covered include the forestry and land-use change sectors, and mention REDD+ as a mitigation activity.

Lao has made no NAMA submissions to the UNFCCC registry but is working on a feasibility study for a municipal sustainable urban transport NAMA with support from the Japanese Ministry of Energy. 100

REDD+ activities in Lao have been piloted in several provinces and districts, and the country is moving from a project to jurisdictional approach. Lao became a member country of the Forest Carbon Partnership Facility in 2008, and its REDD+ R-PP was completed and accepted in late 2011. Since then, implementation has been on hold pending clarifications of REDD+ responsibilities due to internal re-organization of the Lao government institutions to take responsibility for REDD+ preparation. As of June 2013, responsibilities have been reassigned and R-PP should move forward.

Whilst NAMAs may not have been pursued in any concrete form in Lao PDR, this does present the opportunity to ensure that a future NAMA structure can be designed to be streamlined with the existing REDD+ framework (e.g., ensuring coordination with the institutional set up of REDD+ agencies), especially if activities in the landuse sector are to be pursued.

#### 5.3 Viet Nam

Just over half (53%) of Viet Nam's emissions arise from the land-use sector, which includes agriculture. As a result, the agriculture and LULUCF sectors feature as two of three focal sectors put forward for greenhouse gas mitigation options in Viet Nam's 2<sup>nd</sup> National Communication (2010).

A National NAMA Working Group has been established to coordinate and support the development of NAMAs in Viet Nam. Currently, NAMAs are being explored in the cement and waste sectors, both at feasibility study stage. In addition to these, technical guidelines for NAMA development (in Viet Namese) have been developed with support from the United Nations Development Program (UNDP) to provide guidance to national stakeholders.

With regards to REDD+, Viet Nam is a member of the FCPF and participates in the UN-REDD Program. The country has established National and Provincial REDD+ Steering Committees, as well as six technical working groups on MRV, benefit distribution mechanisms, local implementation, governance, safeguards and private sector engagement. By 2015, REDD+ activities will be piloted in at least eight provinces.

To date, it seems that there has been little if no coordination between the NAMA Working Group and the REDD+ Steering Committees. A first step would be to facilitate communication between these two groups, especially where NAMAs in the land-use sector are to be considered. Since no NAMAs in the land use sector have yet been discussed, there is an opportunity to ensure that design of such a NAMA is conducted in close coordination with the REDD+ Steering Committees on both a national and local level.

5. Country Studies





### 5.4 Philippines

The Philippines is at a fairly preliminary stage with REDD+ Readiness preparations, and has not yet developed any official NAMA concepts. Although no concepts have been submitted to the UNFCCC or officially identified as NAMAs, the Philippines does have a number of programs, projects, strategies, plans and efforts that it has classified as "NAMA-related." One such "NAMA-related" program is the Low Emission Capacity Building Program (LECB), which is developing robust greenhouse gas inventories at a national level for the transport, agriculture, waste and industrial sectors, and will act as a precursor for the establishment of an MRV system for NAMAs. 101 It is within these same sectors that the Philippines plans to develop its official NAMAs. While there may be overlap between potential NAMAs and REDD+ activities, concept development in the Philippines is still at a preliminary stage, and these risks have not yet been considered.

The Philippines has established a National REDD+ Strategy (NRPS), and activities within that strategy currently focus on capacity building and the development of demonstration activities. The country has plans to implement a National REDD+ Registry, which will facilitate the environmental integrity, transparency and efficiency of REDD+ activities.

### 5.5 Thailand

Thailand is in the process of completing its R-PP REDD+ readiness preparations and has begun examining NAMAs with a focus on the energy, industry and transportation sectors. NAMA prioritization is based on the National Climate Change Master Plan and the country aims to submit a NAMA pledge to the UNFCCC secretariat in December 2013. In the energy sector, biomass NAMAs will form the primary basis for domestically supported NAMAs. 102

Thailand presented its REDD+ R-PP to the FCPF Participants Committee in March, 2013. The R-PP received conditional approval, contingent upon addressing five issues including the need for additional consultations with civil society. 103 Thailand hopes to have the R-PP completed by the end of 2013. Currently there are no field-level activities related to REDD+.

At present it does not appear that Thailand has intentions of integrating NAMAs and REDD+. With energy accounting for 70% of the country's emissions, this sector will be the focus for the country in developing NAMA proposals. However, Thailand's R-PP identified fuel wood collection as a driver of degradation in Thailand and there is potential for double counting if renewable energy programs including rural electrification targeting communities that currently rely on fuel wood as an energy source.

# 6. Matrix of REDD+ and NAMA Implementation in focus countries

Table 2: Analysis of the design concepts and approaches of NAMAs and REDD+

	Country	NAMA Status	REDD+ Status	
	Indonesia	<ul> <li>Mitigation action plans for five sectors (energy, including transportation; industry; forestry and peat land; agriculture; and waste sector)</li> </ul>	<ul> <li>Indonesia-Norway Letter of Intent (LOI) on REDD+</li> <li>Presidential Instruction No.10/2011</li> <li>National Strategy for REDD+ (June 2012) REDD+/forest carbon management regulations</li> </ul>	
		Potential Overlap  The REDD+ and NAMAs framework in Indonesia covers all sources of financing: unilateral, international support, and the possibility of market-based options. With international support and potential for market-based options, risk for double counting between REDD+ and NAMAs is present.		
	Lao PDR	No NAMAs officially submitted to the UNFCCC.	<ul> <li>Projects supported by bilateral initiatives</li> <li>Received USD 200,000 R-PP formulation grant for FCPF, awaiting disbursement of implementation grant.</li> <li>Forest Investment Program pilot country</li> </ul>	
upport		Potential Overlap  Lao PDR's Climate Change Strategy defines all mitigation activities as NAMAs, including the forestry sector and REDD+.  MRV of strategies or policies (72% of NAMAs submitted to date) difficult due to timescale and attributing effects of a policy or strategy.		
Level of Support	Viet Nam	<ul> <li>Nordic Partnership Initiative supporting NAMA in cement sector.</li> <li>Japan and United Nations Economic and Social Commission for Asia and the Pacific providing support for NAMA in the waste sector.</li> </ul>	<ul> <li>UN-REDD (phase II: funding for project implementation and results-based payments; provincial REDD+ action plans and pilot field activities)</li> <li>National REDD+ Action Program</li> </ul>	
		Potential Overlap  Viet Nam's Second National Communication identifies 28 GHG 'mitigation options.' These options cover three focal sectors: agriculture, energy and LULUCF. All potential NAMAs are based on these 'mitigation options.' 92.4% of total GHG emission reduction potential in Viet Nam is from the LULUCF sector.		
	Thailand	<ul> <li>Started examining NAMAs for transportation, energy and industry sector</li> <li>GIZ to assist Thailand to develop the MRV system for transport sector and possibly also NAMA development in this sector</li> </ul>	Bilateral support on capacity building and technical assistance	
	Philippines	No NAMAs officially submitted to the UNFCCC.	<ul> <li>Bilateral support on capacity building and technical assistance</li> <li>Executive Orders, organization of multi- stakeholder REDD+ Council is underway</li> </ul>	

	Country	NAMA Status	REDD+ Status
Status of implementation (Concept/. Proposal or planning/Implementation)	Indonesia	<ul> <li>National Action Plan</li> <li>Presidential Decree (47 main action plans and 71 supporting activities)</li> <li>31 National Provisional Action Plans have been developed, including Provincial Baseline</li> <li>Integration of these action plans into Mid-term Development Planning</li> <li>MER System (in progress).</li> </ul>	<ul> <li>Indicative Map</li> <li>National Strategies</li> <li>National Action Plan</li> <li>Progress on Local Strategies and a Local Action Plan</li> <li>Central Kalimantan MRV system pilot program UNREDD (finished October 2012)</li> <li>FCPF</li> </ul>
	Lao PDR	Feasibility study for municipal transport sector NAMA conducted-awaiting approval from the Ministry of Environment Japan.	<ul> <li>Jurisdiction and Nested REDD+ Approach (JNR) in Houaphan Province</li> <li>Project in Luang Prabang province</li> <li>Two projects in Attapeu province</li> <li>Bi-lateral donors assisting with national MRV system</li> <li>REDD+ technical task force and REDD+ institutions have been created</li> </ul>
	Viet Nam	<ul> <li>Concept development stage: NAMA in the cement sector (support from Nordic Partnership Initiative)</li> <li>NAMA in the waste sector</li> </ul>	• National REDD+ Action Program for 2012-2020 approved in June 2012
	Thailand	<ul> <li>An emission target NAMA has been elaborated and will be approved by the cabinet (within 2013). Also, NAMAs is included in the National Climate Change Master Plan as one tool to help reducing GHG emissions. In addition, sector NAMAs are likely to be developed</li> </ul>	<ul> <li>R-PP with conditional approval, final approval expected end 2013</li> <li>Two pilot sites identified by DNP</li> <li>REDD+ Pilot Project implemented by WWF (with support by BMU)</li> </ul>
	Philippines	<ul> <li>In the capacity building and planning stage of NAMAs</li> <li>Organizing which national institutions will have control of the creation and implementation of NAMAs</li> <li>Technical Working Group established to develop 'NAMA Roadmap' including forest sector</li> <li>Mitigation initiatives and some 'NAMA-related' programs exist</li> <li>It is envisioned by the government that project management and implementation arrangements from other programs (such as LECB) may also serve NAMAs</li> </ul>	<ul> <li>Completion of the UN-REDD Philippines         Program Support to the Initial Readiness         Process</li> <li>Support to REDD+ Readiness phase 2012-         2017 by GIZ through BMU funded projects         includes establishment of REDD+ Registry</li> </ul>

	Country NAMA Status		REDD+ Status		
	Indonesia	<ul> <li>Energy (including transportation); industry; forestry and peat land; agriculture; and waste sectors</li> </ul>	<ul> <li>'Five' REDD+ categories: Reducing deforest- ation; Reducing forest degradation; Conservation of carbon stock; Sustainable Forest Management; Carbon enhancement</li> </ul>		
		Potential Overlap			
		A national consensus is required to determine activities under REDD+ and National Provisional Action Plans			
Scope(s)	Lao PDR	Transportation sector	Primarily avoided deforestation		
Soc	Viet Nam	Cement and waste sectors	<ul> <li>Avoided deforestation, sustainable forest management, and enhancement of carbon stocks</li> </ul>		
	Thailand	<ul> <li>Renewable power, energy efficiency in industry, Buildings, Transport (Biodiesel), Transport (Environmental sustainable trans- port policies)</li> </ul>	Not clear yet (REDD+ activities are likely to cover all five REDD+ activities)		
	Philippines	<ul> <li>NAMA Roadmap development planned for various sectors (Agriculture, Forestry, Energy, Waste, Transport, Industry)</li> </ul>	National with demonstration activities, all five REDD+ activities included		
	Country	NAMA Status	REDD+ Status		
	Indonesia	National, Provincial and District     Project, district, provincial and national	Project, district, provincial and national		
	Lao PDR	Municipal (central Vientiane)	Project and jurisdictional (provincial)		
Scale	Viet Nam	National and sub-national (provincial)	National and sub-national (provincial)		
Š	Thailand	<ul> <li>Project-based, and Policy -based, Municipal to national level (domestically-supported and international-supported NAMAs)</li> </ul>	Project (WWF) and national level strategies		
	Philippines	• Unknown	Demonstration stage		
	Country	NAMA Status	REDD+ Status		
	Indonesia	<ul> <li>National level: 26(41)% under BAU by 2020</li> <li>Provinces develop BAU baselines as</li> </ul>	<ul> <li>Developing RLs at the Provincial Level (sum will be used as a national baseline)</li> </ul>		
ice levels		formulated in the National Provisional Action Plans	<ul> <li>Some projects use VCS methodology (e.g., Rimba Raya – VCS VM0004), some have not articulated baseline methodologies</li> </ul>		
Baseline/Reference levels		Potential Overlap It is agreed that the baselines for National Provisional Action Plans and SRAP should be harmonized; both between national and subnational levels, as well as across sectors.			
Base	Lao PDR	Estimated using a transport demand forecast	<ul> <li>Houaphan province: RLs based on JNR nested REDD+ requirements</li> <li>Currently undefined in other projects</li> </ul>		
	Viet Nam	Under development in waste sector	<ul> <li>Developing interim national forest reference level (2010)</li> <li>Forest Reference Level is under development at the provincial level</li> </ul>		

	Country	NAMA Status	REDD+ Status	
Baseline/Reference levels	Thailand	baseline scenarios for renewable power, energy efficiency in industry, Buildings, Transport (Biodiesel), Transport (Environmental sustainable transport policies)have been developed on behalf of ONEP (Office of Natural Resources and Environmental Policy and Planning)	<ul> <li>National and provincial RL to be developed and formulated within the Technical Working Group on Reference Emission Level (REL) and MRV. The carbon stored in forests was estimated in Thailand in 1989, 1994 and 2006. On this basis calculations have been conducted whose figures are going to be analyzed during the first Readiness phase for the development of a national baseline.</li> </ul>	
Base	Philippines	NAMA approaches considered for Waste and Energy sectors	<ul> <li>No current baseline or reference levels</li> <li>Prototype MRV System for subnational level available for upscaling</li> </ul>	
	Country	NAMA Status	REDD+ Status	
	Indonesia	<ul> <li>Monitoring progress of National Provisional Action Plan implementation and changes in activity data</li> <li>MER to be carried out annually at national level</li> <li>Local level: Bappeda province will coordinate MER process and submit MER report to Ministry of Home Affairs and the State Ministry of National Development Planning</li> </ul>	<ul> <li>MRV system under Norway LOI: first stage will monitor progress of REDD+ implementation</li> <li>Stage 2 will employ GHG Inventory Methodology (IPCC 1996/2006)</li> <li>Conducted every two years; all reports submitted to Ministry of Environment</li> <li>Ministry of Forestry improving National Forest Monitoring System (Satellite Imagery</li> </ul>	
		Potential Overlap  The Ministry of Environment is developing an integrated national MRV system for both NAMAs and REDD+ activities.		
MRV structure	Lao PDR	<ul> <li>Transport activities and emission factor measurement done using activity- structure-intensity-fuel model</li> </ul>	<ul> <li>Houapanh Province: MRV based on JNR requirements</li> <li>MRV structure currently undefined in other projects</li> </ul>	
Σ	Viet Nam	Under development in waste sector	<ul> <li>Framework for MRV system developed under Phase I of UN-REDD (2010)</li> <li>Currently reviewing existing national forest inventory and monitoring systems</li> <li>MRV under development at the provincial level</li> <li>Piloting participatory forest carbon monitoring at the local level</li> </ul>	
	Thailand	Under the Technical Sub-Committee of NCCCP, the MRV working group for energy, waste, and agriculture sector will be appointed (within 2013). These working groups will be responsible for the development the MRV system for its own sector. The MRV for transport sector is under discussion among Office of Transportation and Traffic Policy and Planning (OTP, ONEP, and Thailand Greenhouse Gas Organization (TGO).	• A "Monitoring, Reporting and Verification" system for emission reduction to be developed within the national REL and MRV Development Technical Working Group (TWG) under the REDD+ Task Force during the Readiness implementation phase.	
	Philippines	Core technical working groups have been formed, and a Terms of Reference (ToR) document signed, to create an MRV system	Core technical working groups have been formed, and a ToR document signed, to create an MRV system	
		Potential Overlap The Core and Sectoral Technical Working Groups determine the long-term needs and institutional system (used by REDD+ activities).	s formed by the Climate Change Commission will ization for both NAMAs and an MRV	

	Country	NAMA Status	REDD+ Status	
	Indonesia	• Undefined	<ul> <li>Provincial level: REDD+ Social and Environmental Standards</li> <li>National level: Principles, Criteria and Indicators for REDD+ Safeguards in Indonesia has been developed by REDD+ Taskforce</li> <li>REDD+ Safeguards Information System being established by Ministry of Forestry</li> </ul>	
		Potential Overlap It was proposed that safeguard issues also be integrated in the National Provisional Action Plans for the land-based sector.		
Safeguards	Lao PDR	• Undefined	<ul> <li>In place for Wildlife Conservation Society's JNR project in Houphan province</li> <li>Possibility for REDD-Social and Environmental Standards</li> <li>Undefined in other projects</li> </ul>	
	Viet Nam	• Undefined	<ul> <li>Sub-technical working group on safeguards (2011)</li> <li>Establishing national safeguard roadmap</li> <li>Piloting participatory process for addressing social safeguards (social and environmental assessment)</li> </ul>	
	Thailand	• Undefined	<ul> <li>During the Readiness phase a Safeguard Information System according to the World Bank's safeguards policies and the Cancun agreement will be designed as an integral part of the monitoring strategy.</li> <li>A Technical Working Group on Strategic Environment and Social Assessment (SESA) and Safeguards will be formed and aiming to ensure that REDD+ policy/REDD+ scheme, do no harm and instead should do good to all environmental and social aspects</li> </ul>	
	Philippines	Undefined	Proposed Framework and Guidelines drafted for finalization	

	Country NAMA Status		REDD+ Status	
	Indonesia	<ul> <li>The State Ministry of National Development Planning national registries for National Provisional Action Plans</li> <li>National Council on Climate Change to launch prototype of NAMAs National Registry (July 2013) to facilitate registry of mitigation activities to UNFCCC</li> </ul>	Task Force developing a REDD+ Agency for a REDD+ National Registry	
	Lao PDR	• Undefined	Undefined	
	Viet Nam	• Undefined	• Undefined	
Double counting	Thailand	• Undefined	<ul> <li>REDD+ Information Center will be formed managing national carbon registry to verify and document carbon emission reductions from implemented REDD+ measures that would trigger the release of REDD+ payments and ensure that double accounting does not take place.</li> <li>The Information Center will work in close collaboration with the TWG on REL and MRV. The proposed Thailand national forest monitoring system (THAIFORM) monitoring design would serve as a National Carbon Accounting System.</li> <li>Experience from carbon registry in the energy sector within TGO will be included.</li> </ul>	
	Philippines	• Undefined	<ul> <li>A framework is being developed for a registry/carbon account and crediting system that also includes safeguards</li> </ul>	
Country NAMA Status			REDD+ Status	
	Country	NAMA Status	REDD+ Status	
	Country Indonesia	NAMA Status  • Undefined	REDD+ Status  • Undefined	
			• Undefined  ns, regarding REDD+ credit as part of NAMAs in	
ation		<ul> <li>Undefined</li> <li>Potential Overlap</li> <li>There is a potential issue with offset mechanism</li> </ul>	• Undefined  ns, regarding REDD+ credit as part of NAMAs in	
ntial for credit generation	Indonesia	Undefined  Potential Overlap  There is a potential issue with offset mechanism the context of Indonesia's voluntary commitments.	• Undefined  ns, regarding REDD+ credit as part of NAMAs in t.	
Potential for credit generation	Indonesia  Lao PDR	<ul> <li>Undefined</li> <li>Potential Overlap</li> <li>There is a potential issue with offset mechanism the context of Indonesia's voluntary commitment</li> <li>yes</li> </ul>	<ul> <li>Undefined</li> <li>ns, regarding REDD+ credit as part of NAMAs in it.</li> <li>yes</li> <li>Proposed benefit distribution system has been developed</li> <li>Trust fund for REDD+ will be established under Viet Nam Forest Development Fund during piloting results-based payment of</li> </ul>	

• Generating forest carbon credits is being

explored

## 7. Country Recommendations

### 7.1 Comparative Analysis of Country Case Studies

Of the countries reviewed, it is clear that Indonesia is most advanced in its planned implementation of both REDD+ and NAMAs. It is the only country to have submitted a NAMA to the UNFCCC registry and to be considering a NAMA in the land-use sector (on sustainable peatland management). Planned implementation of a National NAMA Registry and REDD+ National Registry shows foresight and presents a tool to better coordinate activities across government departments. Indonesia is also the only country to discuss implementation of a national monitoring structure for mitigation activities. The country's MER system will require local governments to report to a national government agency on their mitigation activities, which could include NAMAs. Indonesia has also developed a NAMA baseline for the landuse sector, based on a business-as-usual scenario.

And finally, Indonesia is the only country study that appears to have considered the potential consequences of implementing both NAMAs and REDD+ at a national level, with the country expressing concern as to how safeguards should be considered, the risk of compromising sources of REDD+ finance and the difficulties in moving forward in the face of abstract definitions of what constitutes a NAMA.

Since other countries are far less advanced in their consideration of how NAMAs could be integrated with REDD+, with none showing an indication of having considered this previously, a number of lessons can be learnt from the Indonesian model, namely:

- Coordination of activities at national level is vital: establishing national REDD+ and NAMA registries is one way
  to do this, as is holding regular workshops where attendees
  are present from both working groups.
- Streamlining baseline establishment for both REDD+ and land-use sector NAMAs is important: different baselines are now established for Indonesia, casting doubt over the accuracy of future performance-based payments under the two mechanisms. Those developing NAMAs should pull from experience in RL development under REDD+ in which a country must develop a national REDD+ forest RL or may aggregate sub-national RLs, and including use of a stepwise approach to develop and improve RLs over time. 1014
- Establishing a national MRV framework for both NAMA and REDD+ activities in the land-use sector is important.

Since most activities start at the local level, Indonesia has taken the approach of developing local MER structures, which could apply to NAMAs and require local governments to report annually to a national government agency, who then aggregate all results at the national level. The REDD+ MRV structure, however, appears to function independently of MER. It is not clear how these two structures will be harmonized, if at all.

 Following outcomes of the climate change negotiations regarding both mechanisms will allow countries to better plan the course that is right for them.

As can be expected, all countries are considerably further in their REDD+ framework development/pilot implementation than they are with their NAMA development. NAMAs could pull considerably from the experience gathered to date in establishing REDD+ readiness, including the creation of national registries to record mitigation actions and baseline establishment.

Analyzing the SWOT of integrating REDD+ and NAMAs allows users to develop an analytical perspective on integration and identify strategic options which will optimize integration of the two initiatives. The SWOT analysis below highlights some of the main synergies and divergences under the current regimes (Figure 7). Areas needing to be addressed range from methodological and capacity building issues to mitigation of political risks that could arise from harmonizing the two initiatives.

Creating an efficient system for financing and implementing mitigation in the forestry and land use sector that integrates REDD+ and NAMAs requires the strengths and opportunities of integration to be capitalized while weaknesses are mitigated to the greatest degree possible. Capacity building will likely play a main role in this, as most countries analyzed here have limited understanding as to what a NAMA is much less how they can design and implement one in their own country. In some cases, however, a policy of nonintegration may be more appropriate depending on country specific circumstances. To this end, three distinct scenarios have been created which demonstrate feasible routes for NAMAs and REDD+ to co-exist. Analyzing the benefits and drawbacks of each scenario can assist in understanding which scenario is most appropriate for a given host country based on its capacity, existing progress with REDD+ and NAMAs, and desire to potentially integrate the two financing tracks for land-use mitigation activities.

Figure 7 —

Strengths, weaknesses, opportunities and threats of integrating NAMAs and REDD+.

### **STRENGTHS**

- Potential for more holistic capacity-building & cross sectoral interaction
- Drivers of deforestation are approached more holistically
- Could combine different sectors in a landscapel evel approach
- Improved transparency & comparability
- Would bring safeguard discussions to NAMAs
- Increases opportunities to meet emission reduction targets
- Promotes streamlining and integration of legal framework & strategies relating to mitigation

### **WEAKNESSES**

- No existing institutional alignment between REDD+ and NAMAs
- Many countries lack capacity to integrate measures
- Methodologies for landscape based accounting are lacking
- Lack of political interest to integrate in countries where forestry accounts for majority of emissions
- Decisions made under UNFCCC for the two initiatives are not consistent
- NAMAs could undermine progress made under REDD+, potential to slow negotiations
- REDD+ could complicate NAMAs or hinder flexibility
- Integration could cause excessive confusion

### **OPPORTUNITIES**

- Creates ability to capitalize on both NAMA and REDD+ funding sources
  - Hedges against the risk that funding windows for one initiative fails to materialize
- Allows for better tracking of climate financing
- NAMAs can learn from progress made on RLs, MRV, and safeguards under REDD+
  - Transaction costs could be reduced if MRV systems are well-integrated
- Opportunity to assign one authority for all mitigation actions and reporting
- Could create a common registry for all activities
- Decreased risk of double counting (with proper integration)

### **THREATS**

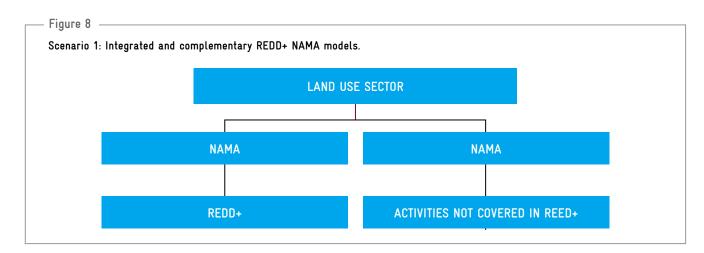
- REDD+ could become even more complex bringing in new methodologies allowed under NAMAs
- Risk of double counting (with poor integration)
- Integration of the mechanisms could cause progress of both to become delayed
- The need to coordinate between government agencies could lead to higher costs and delays or "deadlock"
- Forestry NAMAs
- .



### 7.2 Scenario 1: Integrated REDD+ NAMA

In this first scenario, NAMAs would be permitted across the entire land-use sector. However, separate NAMAs would be developed for those activities carried out that fall under REDD+ and those that do not – e.g., addressing emissions from agriculture (see Figure 8). In effect, an exclusive REDD+ NAMA would be developed that capitalizes on both

NAMA and REDD+ finance, but which is bound by the guidelines and boundaries of REDD+ (e.g. safeguards, eligible mitigation activities) that do not currently exist within the NAMA framework. Any activities falling outside that which is eligible under REDD+, such as emissions arising from agriculture, will be covered under a separate NAMA covering a different scope of activities.



NAMA finance could be used as a performance-based payment whereby emissions avoided or reduced through REDD+ would earn NAMA finance. Alternatively, since NAMAs may be used to facilitate fast start field activities that are not financed under Phase I of REDD+, NAMA finance could facilitate the proliferation of forest mitigation activities at a quicker pace than REDD+ alone. Finance could eventually transition exclusively to REDD+ funds, or a combination of REDD+ and NAMA finance could be pur-

sued assuming a robust, spatially explicit registry is created. Under this registry, emission reductions financed by REDD+ and emission reductions financed by NAMAs would need to be clearly delineated. Such an approach would provide the advantage of diversifying potential funding sources. The table below outlines the main elements and their application for REDD+ integrated within a land use sector NAMAs approach.

Table 4: Overview of Scenario 1 Design Elements

Design Element	Scenario Application	
SCOPE	Any components covered under REDD+ would include only those activities eligible under REDD+, namely:  Reducing deforestation; Reducing degradation; Forest conservation; Sustainable management of forests; Enhancement of carbon stocks.  An activity eligible under a NAMA could cover anything outside of the above or be used to compliment funding from REDD+ sources for the above activities.	
Scale	Project, jurisdictional or national scale of implementation would all be feasible under this scenario, eventually moving towards national implementation for REDD+.	
Reference levels/Baselines	Reference levels will need to be established based on the scale at which the activities take place, but sub-national reference levels will be established only as an interim measure, eventually being reported or aggregated at the national level as per current REDD+ agreements. This fits well with the NAMA structure, which is host-country led at governmental level. The same reference levels should be established for both REDD+ and a land-based NAMA.	
MRV	For those activities falling under REDD+ (and for a REDD+ NAMA) the MRV framework will follow the more stringent framework established under REDD+. In this case, subnational MRV systems could be established as an interim measure, eventually transitioning to national level reporting, or an aggregation of several sub-national MRV systems, depending on the MRV decisions made at the UNFCCC. Depending on the emerging MRV framework for NAMAs, countries likely also will need to report activities as part of their National Communications to the UNFCCC and have these reviewed through ICA. This will be relevant for any activities falling within a NAMA.	
Safeguards	All seven safeguards would apply to the REDD+ NAMA.	
Funding sources	REDD+ NAMA, financing could come in the form of unilateral, supported, or credited NAMAs depending on the progress of the country, which could be supplemented through REDD+ finance. This allows a country to capitalize on diverse external sources of funding that may be bilateral, multilateral or even private-sector funding.  NAMA finance could come from the Green Climate Fund and fast start finance. REDD+ funding could come from existing readiness sources, bi-lateral performance based payments from donors or multilateral development banks, the private sector, or from the Green Climate Fund.  Under a NAMA framework support for the program does not have to take the form of financial support, but can include financial, technical and/or capacity building support.	
Policies and measures	The flexible nature of what constitutes a NAMA means that the policies and measures eligible are not restricted. The NAMA could support Phases I, II or III of REDD+ development.	

- Allows for the capitalization of funding streams from both NAMAs and REDD+
- Allows for quick-start implementation without needing to wait for ear-marked REDD+ finance or lengthy Phase I readiness processes to be complete
- Avoids the risk of possible future regulation requiring supported NAMAs in the forestry sector to apply
- Reduces risks of double-counting
- Allows for innovative approaches to be financed by NA-MAs which may not be pursued under REDD+ readiness funding
- Increases credibility of NAMA activities carried out in forestry sector due to adhering to internationally agreed REDD+ safeguards, MRV frameworks etc.

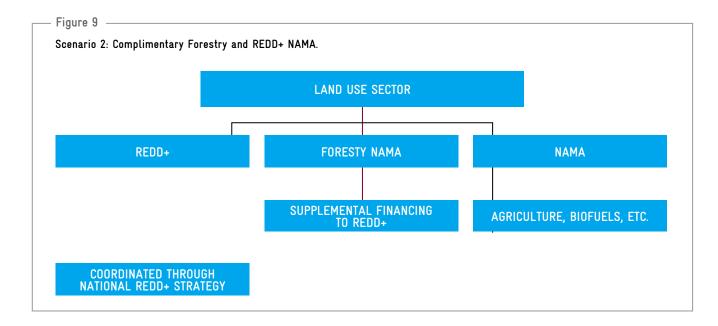
### **Drawbacks**

 Requires NAMA activities in the forestry sector to be bound by REDD+ requirements, which is likely to be more costly than developing a more lax NAMA in the forestry sector.

- For the above reason, NAMA funds that are not bound by REDD+ requirements may not be mingled with REDD+ funds. Clearly defined boundaries must be set for where funding will be used.
- RL and MRV methodologies not well defined and can get complex across a variety of land uses. Would likely require high in-country capacity.
- Requires a degree of coordination between government institutions (i.e. those responsible for REDD+ activities and those overseeing and reporting on NAMA activities).

### 7.3 Scenario 2: Complimentary REDD+ and Forestry NAMA

In the second scenario, both REDD+ and NAMA mechanisms are developed side-by-side, in which a forestry NAMA is designed to supplement REDD+ financing and further cover those activities not covered under REDD+ in the landuse sector (Figure 9). In this scenario, the forestry NAMA would follow the rules established under REDD+ activities and be coordinated through a national REDD+ strategy or action plan. The NAMA would essentially function as a supplemental financing pathway to fill any gaps left by REDD+.



A similar approach has been adopted by Chile (see Section 4.2), where the country has chosen to pursue REDD+ finance for those activities covered under REDD+ and NAMA finance for those activities that would not be covered under Phase I of REDD+, such as pilot reforestation activities and the development of a carbon credit trading platform.

In this manner, Chile is using NAMA financing to supplement its overall REDD+ strategy, with NAMA activities complementing and supporting those classified as REDD+ readiness activities. The below table gives an overview of main elements and their application for REDD+ within a complimentary REDD+ and Forestry NAMA approach.

Table 5: Overview of Scenario 2 Design Elements

Design Element	Scenario Application
SCOPE	Any components covered under REDD+ would include only those activities eligible under REDD+, namely:  Reducing deforestation;  Reducing degradation;  Forest conservation;  Sustainable management of forests;  Enhancement of carbon stocks.  With the flexibility of NAMAs, NAMA funding should primarily target activities within the National REDD+ strategy or Action Plan that would not receive funding thorough REDD+.
Scale	Any components covered under REDD+ would allow sub-national approaches in the interim, eventually transitioning to national implementation of REDD+. For those activities covered with NAMA finance, activities could take place at any scale.
Reference levels/Baselines	Sub-national reference levels will be established only as an interim measure, eventually being reported or aggregated at the national level as per current REDD+ agreements. The same reference levels should be established for both REDD+ and a land-based NAMA.
MRV	For those activities falling under REDD+ the MRV framework will follow the more stringent framework established under REDD+. In this case, subnational MRV systems could be established as an interim measure, eventually transitioning to national level reporting, or an aggregation of several sub-national MRV systems, depending on the MRV decisions made at the UNFCCC. Depending on the emerging MRV framework for NAMAs, countries likely also will need to report activities as part of their National Communications to the UNFCCC and have these verified through ICA. This will be relevant for any activities falling within a NAMA.  Since REDD+ involves both policies and projects, the MRV structure will need to account for more than simple project-based MRV (i.e. an MRV system will need to be established for policies also). The structure of the MRV framework will depend on the emerging decisions made by the UNFCCC as main technical issues remain unclear for both REDD+ and NAMAs.
Safeguards	All seven safeguards would apply both to the REDD+ and forestry NAMA program, as the Forestry NAMA is guided by the National REDD+ strategy or action plan.
Funding sources	Primary funding could come from either REDD+ or NAMA sources depending on which path provides the country with the best financing opportunities. As NAMAs provide more flexibility, activities not covered under REDD+ could seek support under the forestry NAMA. Eventually countries could earn performance based payment through either REDD+ or NAMAs.  NAMA finance could come from the Green Climate Fund and fast start finance. REDD+ funding could come from existing readiness sources, bi-lateral performance based payments from donors or multilateral development banks, the private sector, or from the Green Climate Fund.
Policies and measures	The flexible nature of what constitutes a NAMA means that the policies and measures eligible are not restricted. The NAMA could support Phases I, II or III of REDD+ development.

- Allows for the capitalization of funding streams from both NAMAs and REDD+
- Allows for quick-start implementation without needing to wait for ear-marked REDD+ finance or lengthy Phase I readiness processes to be complete
- Reduces risks of double-counting
- Allows for innovative approaches to be financed by NA-MAs which may not be pursued under REDD+ readiness funding
- Increases credibility of NAMA activities carried out in forestry sector due to adherence to internationally agreed rules (e.g., REDD+ safeguards, MRV frameworks)

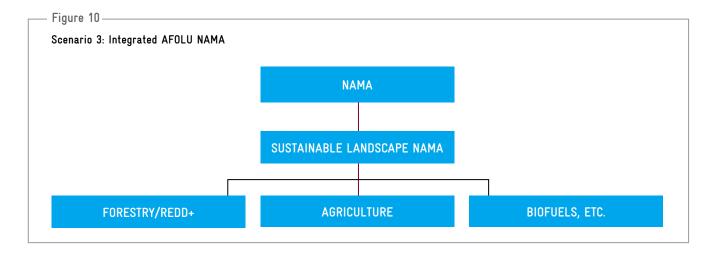
### **Drawbacks**

- Requires NAMA activities in the forestry sector to be bound by REDD+ requirements, which is likely to be more costly than developing under less strict NAMA rules
- Conversely, NAMA funds not bound by REDD+ requirements may not be mingled with REDD+ funds. Clearly defined boundaries must be set for where funding will be used.
- Requires a degree of coordination between government institutions (i.e., those responsible for REDD+ activities and those overseeing and reporting on NAMA activities)

### 7.4 Scenario 3: Integrated AFOLU NAMA

In a third scenario, a single NAMA would integrate mitigation activities across all agriculture forestry and other landuse (AFOLU) sectors. <sup>105</sup> This approach integrates carbon emissions, emission reductions, and emission removals that occur beyond the forest frontier, allowing for a more holistic 'landscape-based approach' to environmental management and planning. Integrating across all sectors also allows for a more comprehensive approach to be taken toward addressing drivers of deforestation, which often occur outside the forest's margins. Carbon accounting would be integrated across the landscape creating a more comprehensive emission reduction estimate and giving the system higher environmental integrity. Within the boundaries of the forest, REDD+ requirements must apply in order for the system to work cohesively.

This approach has been taken by Indonesia, who has made clear that REDD+ is viewed conceptually as a sub-sector within its land-based NAMA structure. Placing REDD+ within the NAMA structure allows the country to take a comprehensive landscape-based approach to NAMAs, using REDD+ funding for forested areas and supported NAMAs for land-based mitigation activities that fall outside the scope of REDD+ (Figure 10).



Financing for such an approach would be primarily through NAMAs, though there is flexibility to include REDD+ financing for readiness activities and Phase II or Phase III performance-based payments. Since carbon accounting is integrated across the landscape and REDD+ requirements apply to the entire forest, performance-based payments from REDD+ funding sources would simply be deducted from forest area emission reduction estimates within the

Sustainable Landscape NAMA, and NAMA financing could be adjusted accordingly. Such a scenario could be attractive if the supply of REDD+ performance-based payments surpasses global demand, allowing the host country to receive REDD+ payments where demand exists while financing other forest areas through NAMA streams. The integrated AFOLU NAMA approach's main elements are outlined in the table below.

Table 6: Overview of Scenario 3 Design Elements

Design Element	Scenario Application
SCOPE	The entire AFOLU sector would be covered
Scale	Project, jurisdictional or national scale of implementation would all be feasible under this scenario, with national scale providing the highest degree of accounting integrity. REDD+ would require national level reporting.
Reference levels/Baselines	Reference levels would need to be developed using a variety of methodologies for different land use types. Reporting a national level baseline would provide the greatest integrity and allow for access to REDD+ funding. This fits well with the NAMA structure, which is host-country led at governmental level.
MRV	A variety of carbon accounting tools are available for AFOLU projects through voluntary standards such as the VCS which could provide the basis for MRV in each AFOLU land use type. Similarly, ASB and the World Agroforestry Centre (International Centre for Research in Agroforestry or ICRAF) have outlined a number of carbon accounting tools which could be used for AFOLU. Interim subnational evolving to national level reporting of MRV would be required for forestry activities to receive REDD+ funds.
Safeguards	Best practices would require applying all seven Cancun Safeguards to the entire Sustainable Landscapes NAMA and would be a requirement for activities in forest areas to access REDD+ funds.
Funding sources	Most likely the NAMA would be submitted as a supported NAMA, which is therefore able to capitalize on external sources of funding, which can be bilateral, multilateral or even private-sector funding. Funding could, for example, come from the Green Climate Fund and fast start finance. REDD+ funding could come from existing readiness sources, bi-lateral performance based payments from donors or multilateral development banks, the private sector, or from the Green Climate Fund.
Policies and measures	The unrestricted nature of what constitutes a NAMA means that the policies and measures eligible will be defined under a REDD+ framework. The NAMA could support Phases I, II or III of REDD+ development.

- Allows for the capitalization of funding streams from both NAMAs and REDD+
- Integration of mitigation activities across entire landscapes allows for drivers to be addressed more holistically, both inside and outside the forest
- Promotes a wider 'landscape approach' to be taken to natural resource management and planning (i.e., even addressing drivers of carbon emissions outside forests)
- Carbon accounting will be more comprehensive
- Reduces risks of double counting
- Encourages further development of landscape level RL and MRV methodologies
- Allows for innovative approaches to be financed by NAMAs which may not be pursued under REDD+ readiness funding
- Increases credibility of NAMA activities carried out in forestry sector due to adhering to internationally agreed issues (e.g., REDD+ safeguards, MRV frameworks).

### **Drawbacks**

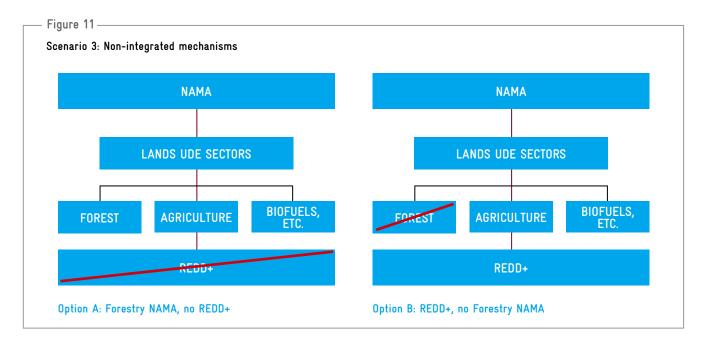
- Applying REDD+ restrictions across entire landscape may limit the flexible nature of NAMAs.
- RL and MRV methodologies not well defined and can get complex across a variety of land uses. Would likely require very high in-country capacity.
- Would require significant coordination across agencies responsible for administering different land use types.
- Submitting a single landscape-level NAMA would be a significant undertaking requiring significant research and background information.



### 7.5 Scenario 4: Non-integrated mechanisms

No inherent requisite exists for the integration of REDD+ and land-use based NAMAs, and indeed there may be benefits from pursuing a single financing track. Under this scenario countries may choose from pursuing exclusively NAMA financing for forestry based policies and measures,

or exclusively REDD+ financing for forestry based policies and measures (Figure 1). Such an approach may be attractive to many developing countries with difficulties in coordinating across agencies or weak capacity for implementing stringent registries and undertaking potentially complex carbon accounting.



While countries could pursue both financing tracks without integration in the early stages of REDD+, it is unlikely that this could be a long term solution when countries transition to Phase III of REDD+ without some form of integration as described in Scenarios 1 and 2. This is due in part to the fact that if forestry NAMAs are allowed to operate with different standards for RLs, safeguards and MRV, it is unlikely that a credible national REDD+ reporting system could be operationalized.

Non-integration would likely be the simplest of solutions and help avoid many of the potential drawbacks of integration mentioned in the SWOT analysis (Figure 7), such as risks for double counting, the need for coordination between institutions, potential for the integration of the two initiatives to cause political deadlock, REDD+ impinging on the flexibility of NAMAs, or NAMAs undermining the more stringent rules that have been decided upon for REDD+. On the other hand, a policy of non-integration would also fail to capitalize on the opportunities and strengths presented by integration. Keeping the initiatives separate, however, would not necessarily preclude landscape-based approaches from being taken; it would simply necessitate that all activities occurring inside forested area be financed by either NAMAs or

REDD+ and not both. In other words, the financing source does not necessarily define the paradigm taken to natural resource management.

Choosing between REDD+ or NAMA financing would be the prerogative of the individual country, and there are benefits and drawbacks to pursuing either approach. Pursuing REDD+ and its eventual requirements for national RL and MRV reporting and application of Cancun Safeguards would create a more credible and effective system, though it would limit the flexibility allowed by NAMAs. By contrast, pursuing a NAMA-only approach could prove difficult as individual policies or measures would face the same scrutiny that project-based REDD+ face, such as an inability to fully account for leakage. Therefore, it may be necessary to create a single NAMA integrating all policies and measures to address deforestation and forest degradation, which in function would look very similar to REDD+. Regardless of which financing track is decided upon, the country would be limiting itself and have less finance options than if an integrated approach were taken. Table 7 outlines the important elements of a nonintegrated approach for REDD+ and NAMAs.

Table 7: Overview of Scenario 4 Design Elements

Design Element	Scenario Application	
SCOPE	Only forestry for REDD+, flexible if pursued as a NAMA.	
Scale	Depending on financing source chosen.	
Reference levels/Baselines	More rigid requirements if REDD+ financing stream is chosen, while NAMAs would present more flexibility.	
MRV	More rigid requirement if REDD+ financing stream is chosen, while NAMAs would present more flexibility.	
Safeguards	REDD+ necessarily requires the application of the Cancun safeguards. While forestry NAMAs would not necessarily face such restriction, finding access to international financing could prove difficult if they are not applied.	
Funding sources	In early stages both NAMA and REDD+ financing streams could be pursued, but eventually a country would select one single source.	
Policies and measures	The unrestricted nature of what constitutes a NAMA means that the policies and measures eligible would have a wide degree of flexibility under that framework. If REDD+ finance is pursued, policies and measures would be restricted to addressing the five activities defined under REDD+.	

- Allows for initiatives to move forward without potentially cumbersome collaboration between government institutions
- Allows for NAMAs to maintain their flexible characteristics.
- · Less complicated accounting procedures
- Decreases risks of double counting (as only NAMA or REDD+ finance would be used)

#### **Drawbacks**

- In the long-term would limit the financing flexibility for countries
- Compartmentalizing between forest and non-forest area may limit the likelihood that a landscape-based approach is taken
- Could fail to account for carbon in the entire landscape
- Fails to capitalize on the positive aspects of integration

### 7.6 Conclusions

The structure through which countries wish to coordinate their land-use NAMAs and REDD+ activities will depend on the individual needs, capacities and situations of the host countries. Each model has its benefits and drawbacks and these should be carefully considered by countries to decide which scenario they wish to apply. However, regardless of the model pursued it is clear that some degree of coordination, even if only a sound definition of boundaries, will be essential. Kenya's approach, in which funding is sought from both NAMA and REDD+ sources for the same activities, provides a lesson in the need for programmatic clarity. Ambiguity over boundaries and how funding is to be used is likely to leave potential donors with less confidence and could risk jeopardizing funding for all activities.

Regardless of the model applied, the main aspects countries should consider are:

- Clearly define the boundaries of those activities falling under a land-use NAMA and those falling under REDD+, and for which activities funding is sought
- Establish a communication channel between land-use NAMA and REDD+ agencies at national level (e.g., organize regular workshops or conference calls, and designate responsibilities for communication)
- Establish national registries for all REDD+ and NAMA activities and link the two where land-use NAMAs are concerned
- Streamline baseline establishment for REDD+ and landuse sector NAMAs
- Coordinate MRV activities nationally, since REDD+ and NAMAs will both be subject to international verification. Streamlining approaches to reporting and allocating responsibilities at government level will help to ensure cohesive and efficient communication and could help to reduce transaction costs
- Ensure UNFCCC focal points and negotiators closely follow outcomes of UNFCCC meetings and provide feedback to countries. Since both mechanisms are still in development, this is essential to be prepared for any outcomes.
- Respect internationally established REDD+ safeguards for land use-based NAMAs to maintain credibility

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