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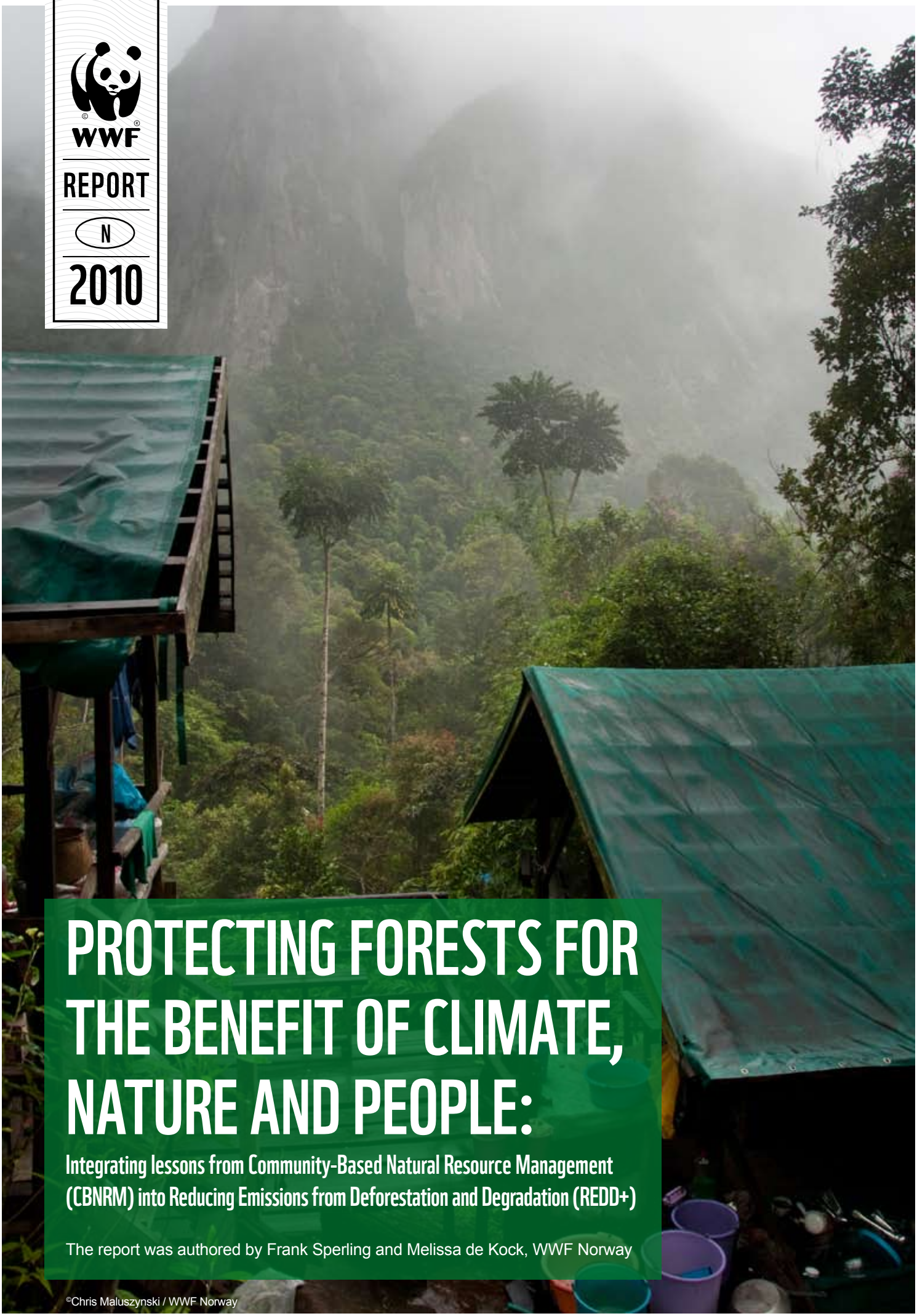

PROTECTING FORESTS FOR THE BENEFIT OF CLIMATE, NATURE AND PEOPLE:

Integrating lessons from Community-Based Natural Resource Management (CBNRM) into Reducing Emissions from Deforestation and Degradation (REDD+)

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CONTENTS

LIST OF ACRONYMS AND ABBREVIATIONS

CAMPFIRE	Communal Areas Management Programme For Indigenous Resources
CBNRM	Community-Based Natural Resource Management
C(B)FM	Community (-Based) Forestry Management
CBD	Convention on Biological Diversity
CO_2e	Carbon Dioxide Equivalent
FCI	Forest Carbon Initiative
FPIC	Free, Prior and Informed Consent
GMA	Game Management Area
IPCC	Intergovernmental Panel on Climate Change
ILO	International Labour Organisation
IUCN	International Union for Conservation of Nature
JFM	Joint Forestry Management
MDG	Millennium Development Goal
MEA	Millennium Ecosystem Assessment
PES	Payment for Ecosystem Services
PFM	Participatory Forestry Management
PPM	Parts Per Million
REDD	Reduced Emissions from Deforestation and Degradation
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
WWF	World Wide Fund for Nature

EXECUTIVE SUMMARY

Emissions from land-use changes need to be urgently addressed if efforts to limit global warming to 1.5 °C above the pre-industrial level are to be successful. The time window for stabilising at the required greenhouse gas concentrations is closing rapidly. REDD+ is recognised as a cost-effective and necessary component of global mitigation strategies.

Reducing Emissions from Deforestation and Degradation (REDD+) represents an essential step towards a better recognition of the value of natural resources in mitigating climate change. The destruction and degradation of forests contributes 12 to 20 per cent of annual greenhouse gas emissions resulting from human activities. In addition, the loss of forests also means loss of future capacity to capture and store carbon in biomass. As part of a broader sustainable land management perspective, REDD+ can be an important step towards effective and immediate emission reductions.

There are increasing resources and political support for strengthening REDD+ readiness within countries and piloting initiatives at a range of scales. Over 4 billion USD have now been pledged by countries for initiate interim REDD+ activities. While further resources are needed for medium to long-term sustainability, these resources present an opportunity to create necessary incentives for the protection and restoration of forest ecosystems. The fact that these pledges were made in the absence of a binding international climate policy regime and a partnership of countries, underscores a strong and renewed commitment to address forest loss in the context of global climate change, which now has to be met by appropriate and comprehensive actions.

Broader coordination of REDD+ capacity development and pilot projects is needed. The growing number of REDD+ initiatives and proliferation of funding sources constitutes a challenge to build comprehensive approaches and standards and also have the potential to overwhelm the absorptive capacity of developing countries. The REDD+ Partnership Process will be important in improving coordination among different bilateral and multilateral initiatives and strengthening the exchange of information and experiences.

REDD+ initiatives should also recognise the vulnerability of different forest ecosystems to climate change as well as their role in buffering against some of the effects of climate change. Primary forests tend to be more resilient to environmental changes than other forest ecosystems. Therefore the protection of primary forests is not only relevant for maintaining the capacity to capture and store carbon, but also for sustaining the delivery of ecosystem goods and services. However, once certain thresholds are crossed, the original forest may be replaced by other forest or non-forest ecosystem types. Therefore, the rapid reduction of greenhouse gas concentrations is also vital for ensuring the integrity of forest ecosystems and maintaining their climate-regulatory functions.

REDD+ efforts will only be sustainable if tangible development and environmental benefits can be delivered within an appropriate time frame. In addition to the overarching objective of reducing greenhouse gas emissions, REDD+ efforts also need to emphasise poverty alleviation by taking a livelihoods perspective in order to provide a sustainable model and development path for forest-rich developing countries. Hence, national REDD+ frameworks need to be mindful of sub-national interests and concerns and accountable to stakeholder groups depending on forests for their livelihoods.

Community-based natural resource management (CBNRM), an incentive-based approach to sustainable natural resource management, presents a number of lessons for REDD+ acquired over more than two decades of testing and implementation. The experience of successful CBNRM in southern Africa is that by enabling communities to actively participate in natural resource management, to have ownership over the resource and to significantly benefit from management of the resource, natural resources will be managed sustainably.

Core elements of CBNRM activities can help to anchor REDD+ activities and ensure that community level concerns are adequately taken into account. When engaging with communities, the following considerations should form an integral part of REDD+ activities:

- **Transfer authority to the community to manage the resources and benefit from resource use.** Authority to manage the resource should be devolved to the lowest level where there is existing or potential capacity.
- **Provide security of rights over resources through the development and implementation of policies and legislation.** The community's security and rights over resources should be enshrined in and supported by relevant policies and legislation and / or a legal framework, and implementation thereof.
- **Apply an incentive-based approach to REDD+.** Local people must receive benefits, be they financial (e.g. individual or communal income) or non-financial (e.g. social, cultural, spiritual), and these incentives must outweigh the costs of conservation. REDD+ initiatives need to provide economic and socio-cultural incentives as well as livelihood alternatives to converting land for agriculture (for example) if they are to be viable and sustainable.
- **Ensure equitable distribution of benefits.** Benefits generated through REDD+ initiatives must be equitably distributed to the majority of the community to encourage their participation in the initiative.

- **Establish effective, accountable and representative community governance institutions.** Local governance institutions comprising community members, which are effective and legitimate[2] (in the eyes of the State and the community), must be established, if they are not in existence already, to govern and manage the resources.
- **Enable active participation by community members, including support for capacity building.** Community participation is integral to the legitimacy of initiatives, and to sound management and improved governance of natural resources.
- **Facilitate equal partnerships and collaboration between stakeholders.** Partnerships where each primary stakeholder is an equal partner are required. This includes building trust between the stakeholders.
- **Include local community members in resource monitoring.** Communities can play an important role in monitoring of the resources, and this data can inform and improve local and national decision-making.
- **Ensure access to information, transparency and accountability.** Communities need access to information (regarding policies, rights, resources and benefits) to enable informed decision-making by communities. There needs to be transparency and accountability regarding decision-making, income and distribution.
- **Provide conflict resolution mechanisms.** Conflict between community members and between the community and other stakeholders may occur, but can be overcome or mitigated through a clear and accepted definition and demarcation of the community, the resource, and the resource use area, and use of participatory planning tools.

[1] However the human and customary rights of all resource dependent peoples, whether or not they have legal security of tenure and rights or not, should be respected (Rights and Resources, 2008).

[2] A balance needs to be found between external legitimacy and internal legitimacy (Roe et al. 2009)

1. Natural resources and human development

Poverty and climate change are among the most pressing and pervasive challenges of the 21st century. While the number of people living in poverty has declined in proportion to the overall population of developing countries, the total number of poor people still exceeds the one billion mark (World Bank 2010).

Economic growth in most developing countries is particularly dependent on natural resource- based sectors. The degradation of natural resources threatens the sustainable provision of goods and services, which are provided by ecosystems, and undermines the source of livelihoods, in particular for the world's poor (e.g. MEA 2005; UNEP 2007). Seventy percent of the world's poor, living in rural areas, depend directly on biodiversity for survival (SCBD 2009).

Climate change further impacts on development prospects (AfDB et al. 2003, World Bank 2010). Changes in temperature and precipitation patterns will influence land productivity and impact on the health of ecosystems (IPCC 2007). This has direct implications for agriculture, fisheries and food security. Shifting distributions of species not only have implications for biodiversity, but also for human health as for example vector- and waterborne diseases spread to new locations (IPCC 2007). Depending on the geographic location, climate change will also translate into increased climate variability with more extreme events, such as heat waves, droughts, floods, and wind storms (IPCC 2007).

Halting the destruction and degradation of natural resources is important for mitigating and adapting to climate change, but also highly relevant for sustainable development and poverty alleviation. In their global aggregate, emissions from land-use and land-use change exceed the annual emissions of the entire transport sector. Most of the net loss of forests[3] occurs in developing countries. Deforestation and environmental degradation also increase local vulnerabilities to climate variability and change when protective vegetation cover is lost, soil is eroded and land productivity declines. Yet, while natural resources provide global and local services that are essential for human wellbeing, these services have largely been undervalued.

The importance of Reducing Emissions from Deforestation and Degradation, Enhancing Carbon Stocks and Sustainable Forest Management (REDD+) is now globally recognised in its importance for limiting global warming. In the context of the international quest to address climate change, discussions are underway that aim to define the scope and architecture and to provide macroeconomic incentives for REDD+. If such an incentive scheme is designed wisely, it has the potential to not only contribute significantly to the mitigation of climate change, but also reduce climate-related vulnerabilities, enable sustainable management of natural resources and promote poverty alleviation. For this to be possible it is important that national level frameworks for REDD+ initiatives are informed by sub-national level conditions and merge top-down and bottom-up perspectives. In this context, existing experiences with community-based natural resource management programmes and practices can provide valuable insights for designing REDD+ initiatives.

1.1. THE IMPORTANCE OF NATURAL RESOURCES

In most developing countries, livelihoods and economic sectors depend heavily on natural resources. Approximately 40 per cent of the world's economy is directly dependent upon biodiversity (SCBD 2009). Biodiversity guarantees essential ecosystem services, such as fresh water and food (UNEP 2007). Agriculture continues to be the main source of employment in many developing countries and contributing significantly to the GDP. For example, African country economies depend on agriculture for about 30 per cent of the GDP (e.g. World Bank 2009). The majority of activities are based on rain-fed agriculture and hence highly sensitive to climatic fluctuations. The prevalence of climate-related disasters also underscores the vulnerability of the continent's population to environmental changes. It is the only continent where droughts continue to cause widespread loss of life.

In light of demographic and socioeconomic pressures, the degradation of natural ecosystems threatens sustainable development paths. It is projected that the world's human population will stabilise somewhere around 9 billion people by the middle of the century (see UN for population scenarios). Most of the population growth will occur in developing countries. This growth is coupled with increasing urbanisation. In connection also with economic changes these demographic trends will place new demands on food production and natural resources. In addition, many natural resource-dependent economies are faced with progressive land degradation issues in the face of a changing climate. In light of these developments there is further urgency with regard to enabling the sustainable use of natural resources and generating appropriate income opportunities for livelihoods.

The impacts of an increasing population in developing countries are exacerbated by global consumption, particu-

larly in the richer countries (e.g. UNEP 2010). There is also the critical need to move towards sustainable consumption patterns globally. While the degradation caused by unsustainable harvesting of natural resources for goods and food may take place in developing countries, it is often caused by consumption demands in the developed countries who buy the food and goods produced, and so "export" their environmental impacts to the developing countries (UNEP 2010).

1.2. DEVELOPMENT PRESSURES ON NATURAL RESOURCES

Human pressures on forests and other natural resources are manifold and depend on global and local circumstances. There are global pressures on forests resulting from the demand for agricultural produce and wood products. Growing populations, land degradation, and lack of alternative options can further aggravate local pressures on forest resources and result in unsustainable use. Poverty is one driver (but by no means the only one) of deforestation and natural habitat degradation. Between 1980 and 2000 in Africa, 60 per cent and by far the highest single cause of deforestation, was conversion of forest to permanent small-scale agriculture. However, this is only the case in Africa, whereas in Asia, Latin America and the Pan-Tropical Region, causes were far more varied (FAO, UNDP and UNEP 2008). As mentioned previously, global consumption demands have a great impact. For example, the international demand for soy and beef has lead to forest clearing in Brazil, and the demand for palm oil has resulted in forest clearing in Indonesia (Hance 2010). Shifting commodity prices and changes in legislation may also influence pressures on land-use types. Hence, whether it is the small-scale farmer trying to carve out a living or a multinational corporation aiming to make a profit from logging, the specific drivers of deforestation will depend on an often complex interplay of global and local factors.

Communities can be the stewards of forests but also be the cause of their destruction. Communities and indigenous peoples in particular have often been highlighted as the stewards of forests. This should be rewarded by the international community and the global importance of this role recognised.

However, communities should not be viewed through one lens as always managing resources sustainably, particularly if the incentives to do so are not in place. In some cases communities living in or near tropical forests have little choice or interest in managing resources sustainably. For example, in Madre de Dios, some settlements and clearings are developed by immigrants from the Andean highlands. Often these migrants have left their families and moved to the lowlands as economic and/or climatic shocks destroyed their assets and they needed to look for alternative sources of income (see Sperling and others 2008 for a discussion of the impact of climate-related hazards on communities in the altiplano). Their primary objective is to improve their situation in the short-term, and long-term concerns of sustainability may be secondary. The increasing gold price may further promote extractive and environmentally damaging activities in the Amazon. In this context, communities in the altiplano need support to better manage climate and environmental risks to their livelihoods and thus reduce the need for migration. In addition, as highlighted from experiences in CBNRM (Section 3), livelihood options that are attractive alternatives to extractive practices in the tropical forest need to be developed and promoted.


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Consequently, solutions aimed at reducing deforestation and reversing forest loss will have to be tailored to a broad range of circumstances that drive deforestation and environmental degradation. While standards and regulations and the ability to enforce them may be particularly important to reduce industrial scale deforestation, addressing forest loss from smallholders requires providing alternative livelihood options.

These solutions may include proclaiming further forests as protected areas. However, protected area status is not always enough to ensure biodiversity conservation (SCBD, 2009). Effective management, governance and enforcement of protected areas and other biodiversity-rich areas is also required for effective biodiversity conservation (UN, 2008a), and lack thereof contributes to deforestation and degradation of ecosystems (FAO, 2006a). For example, within the region comprising the WWF Coastal East Africa Network Initiative (coastal areas of Kenya, Mozambique and Tanzania), WWF has identified "poor governance – weak institutions, inadequate/inappropriate policies and implementation strategies, low political will, poor law enforcement, low revenue collection and corruption in the natural resource sector – as being (…) the single most important root cause of biodiversity loss and degradation in priority sites" (WWF 2009).

[3] Net loss of forest means that the size of forest areas that are being lost exceeds the size of new forest areas that are being established through afforestation, reforestation activities or through natural processes. The literature distinguishes between net deforestation and gross deforestation, which only looks at the total area of forests that is being lost. From an ecological viewpoint it should also be recognized that forest types are different. A primary forest tends to support more biodiversity per area than a secondary forest of a comparable size.

In recognition of the important role natural resources play for climate protection and sustainable development, the subsequent sections will explore how forests can be recognized within the global climate policy regime, while ensuring that the communities and stakeholders safeguarding natural forests receive adequate recognition for their important role. The first part of the report provides an overview of the evolving international architecture for Reducing Emissions from Deforestation and Degradation, promoting sustainable forest management and enhancing carbon stocks. Specifically, it provides an overview of the interactions between forests and the climate system and then goes on to discuss the evolving policy and funding framework that is needed to create an incentive scheme for reducing deforestation and safeguarding forests. A discussion of opportunities and challenges for Reducing Emissions from Deforestation and Degradation, Sustainable Forest Management and Enhancement of Carbon Stocks (REDD+) then leads to **the second part** of the report which discusses the experiences and lessons learned from Community-Based Natural Resource Management (CBNRM) activities and their relevance to informing REDD+ architecture. While the report initially looks at the top-down drivers for forest protection, it explores then how bottom-up approaches can help to adequately engage local level stakeholders. The CBNRM section particularly focuses on experiences in Sub-Saharan Africa, where historic evolution and success of CBNRM is well established. The conclusions then further explore how the REDD+ and CBNRM activities can build on thematic linkages and ensure that REDD+ becomes a practical reality.

2. Reducing emissions from deforestation and degradation (REDD+)

2.1 CLIMATE CHANGE AND FORESTS

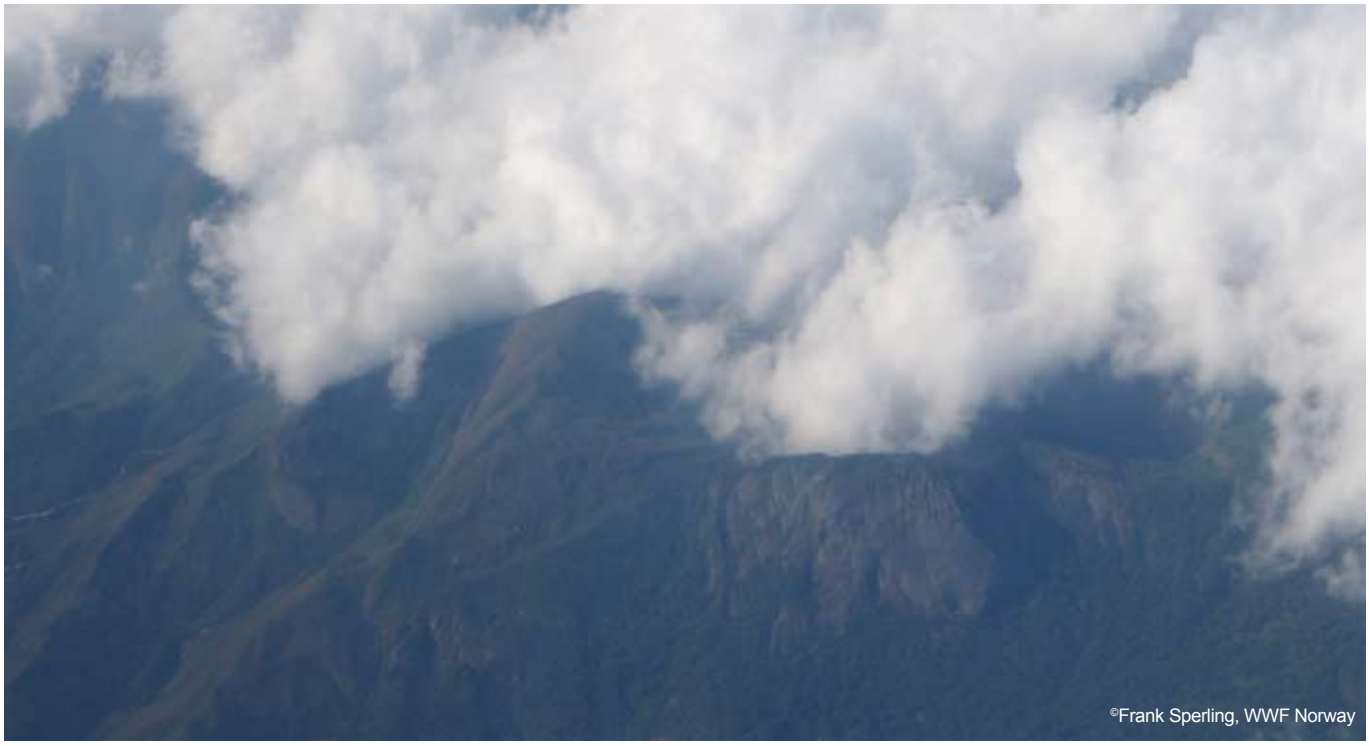
Climate change is already a reality. Over the last century the global average temperature has increased by over 0.7 °C (see IPCC 2007). This increase has been accompanied by a rapidly growing list of observations, which show changes in climatic characteristics and associated responses in physical and biological systems (e.g. Parmesan and Yohe 2002, Root et al. 2003, IPCC 2007,Sommerkorn and Hassol, 2009). The rate and magnitude of some of these changes has been greater than originally anticipated by scientists. This has led to concern that natural systems are more rapidly approaching thresholds where impacts will be grave and irreversible over the foreseeable future (e.g. Sommerkorn and Hassol 2009). For example, the melting of polar ice sheets is progressing much more rapidly than originally projected. Changes witnessed today were until recently not expected before the end of the century. Hence, we may actually underestimate the scope of the problem associated with a projected increase in the average global surface temperatue in the range of 1.8- 4 °C, by the end of the century.

Key vulnerabilities to climate change will multiply with further global warming and increasingly become unmanageable. In the near future,the adverse impacts of climate change will particularly be felt in those regions which are already vulnerable to current climate variability and heavily dependent on natural resource-based activities (Schneider et al. 2007, World Bank 2010). With further increases in the global average temperature, the adverse impacts of climate change will become more grave and widespread. Global temperature increases of 4 °C or more in comparison to present day levels are likely to exceed the adaptive capacity of many natural and human systems with adverse consequences for biodiversity, agricultural productivity, food security and economic development (Schneider et. 2007, Stern Review 2007). The challenge lies in up-scaling climate change mitigation efforts to a level where these grave consequences will be averted and humanity is capable to manage the residual impacts of climate change that no longer can be avoided (Bierbaum et al. 2007).

Urgent action is required to limit global warming to safe levels. The ultimate objective of the United Nations Framework Convention on Climate Change is the *"... stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system…"* (UN 1992). The European Union and several countries have adopted global warming limits of 2 °C or less in comparison to the pre-industrial level as guide posts. Small islands states and developing countries are calling for even more stringent targets, limiting the average global temperature increase to 1.5 °C. It is difficult to ascertain what should be considered 'safe'. However, it is clear that with increasing temperatures, the potential for surprises and crossing critical thresholds, which will have adverse consequences for nature and people, increases significantly. Therefore these targets represent important guardrails for concerted action to mitigate climate change. Any further warming moves human societies further away from recent experience and into unchartered territory.

Greenhouse gas emissions need to peak and then decline rapidly. An atmospheric greenhouse gas concentration at 450 ppm CO_2e[4] is frequently cited as a target for limiting global warming to less than 2 °C above pre-industrial levels. However, in order to reach this mitigation target, research suggests that greenhouse gas emissions need to peak around 2015 at or below 550 ppm CO_2e and then rapidly stabilize at around 450 ppm CO_2e (Meinshausen et al. 2006). Even with this rather ambitious stabilization pathway there is a 50 per cent chance that the target will be exceeded, according to the probabilistic assessments carried out by the researchers. The probability of limiting warming to 2 °C or less decreases and then becomes impossible with greater greenhouse gas stabilisation levels. For example, atmospheric stabilization levels of 400 ppm CO_2e will likely lead to stabilization at around 2 C, while this is unlikely with a concentration of 550 ppm CO_2e and above (see Meinshausen et al. 2006). Drawing on palaeoclimatic records and recognizing the considerable uncertainties in responses of the carbon cycle to global warming, Hansen (2008) does not exclude the possibility that even these warming levels and concentrations are too high and greenhouse gas concentrations should be stabilized at lower levels, i.e. 350 ppm.

Recent probabilistic estimates based on cumulative CO_2 emissions further underscore the need for rapid action. Meinshausen et al. (2009) show that limiting the cumulative CO_2 emission from 2000 to 2050 to 1000 Gt still yields a 25 per cent possibility of exceeding the 2 °C target. Considering that between 2000 and 2006 cumulative emissions were at around 234 GtC, the emission budget for staying within this target would be exhausted well before 2050 (Meinshausen et 2009). In fact, while the world is negotiating targets, reports by the World Bank and others show that the global aggregate CO_2 emissions have continued to increase rather than decrease over the recent years (see World Bank 2010 for a breakdown of emissions by region). For limiting the global average temperature from rising above 2 °C or even 1.5 °C



compared to pre-industrial levels, the time window of opportunity is closing rapidly. Given that current atmospheric greenhouse gas concentrations are now already at 433 ppm CO_2e, urgent action is required. In this context, addressing emissions from deforestation and other land-use changes has to become part of a comprehensive mitigation strategy that reflects the challenge in its ambition.

Emissions from Land-Use and Land-Use Change

Forests cover approximately one third of the world's terrestrial surface, but the area occupied by forests is shrinking rapidly (e.g. IPCC 2007b, FAO 2006 and MEA 2005). Between 2000 and 2005 approximately 12.9 million ha were cleared of forests per year. After taking into account afforestation, landscape restoration and natural forest expansion, this translates into a net loss of forest cover of around 7.3 million ha per year (FAO 2006, see also IPCC 2007). While it has to be kept in mind that these are aggregate estimates based on country statistics with varying levels of accuracy, it is clear that forest cover, and with it the capacity to store and sequester carbon and to maintain biodiversity and important ecosystem services, is being eroded rapidly at a time when humanity needs to limit greenhouse gas emissions urgently.

Deforestation and forest degradation accounts for between 12 to 20 per cent of the annual CO_2 emissions. Earlier aggregate estimates placed the relative annual contribution of deforestation and degradation at up to 20 per cent (van der Werf 2009; see also IPCC 2007, Eliasch Review 2008). However, as new information became available, these estimates were revised downwards to 12 per cent per year in a study by van der Werf and others (2009) for the most recent years. This change in relative contribution to the annual total emission is partly due to growing fossil fuel emissions. Nevertheless, emissions from the forestry sector and other land-uses continue to represent one of the biggest sources of CO_2 and hence have to be considered a crucial component of mitigation strategies, aiming to stabilise emissions at levels that avoid dangerous interference with the climate system.

After the oceans, forests represent the largest natural sink for CO_2. Through photosynthesis, growing forests soak up (sequester) CO_2 from the atmosphere and convert it into above and below-ground biomass. Growing forests take up more CO_2 than they release. In mature forests carbon sequestration is largely balanced by respiration, although recent research suggests that even mature carbon forests can continue to function as sinks under increasing CO_2 concentrations.

Tropical forests are the largest forest carbon sink (Luyssaert et al. 2007; IPCC 2007). In moist tropical forests most carbon is stored in above ground biomass. Depending on the type and density of tree species, the amount varies (Baker et al. 2004). Average storage is about 160 t C per ha in above ground vegetation and 40 t C in the roots (see table 1 for range of estimates). It is often thought that tropical soils are low in carbon content, but soil carbon content varies considerably. Tropical soil carbon stocks are estimated to contain between 40 to 200 t C per ha (Amundson 2001). Tropical forests are currently a net carbon sink, sequestering about 1.3 Gt C annually. The annual carbon uptake lies around 0.6 Gt C in Central and South America, 0.4 Gt C in Africa and 0.25 Gt C in Asia (Lewis et al. 2009).

[4] CO_2e is an abbreviated term for CO_2 equivalent, sometimes also abbreviated CO_2 eq. This translates the global warming potential (GWP) of the various greenhouse gases to into the equivalent GWP of the most abundant greenhouse gas, carbon dioxide (CO_2). The greenhouse concentrations of all gases are then expressed as CO_2e.

TABLE 1. CARBON STOCKS IN TROPICAL FORESTS, GRASSLANDS AND SAVANNAS

Ecosystem	Above ground C Storage (t C/ha	Below-ground C Storage (t C/ha)	Annual Carbon sequestration rate (Gt C)	Annual C emissions from deforestation and degradation (Gt C)
Tropical Forest	170-250(1)	40 (root carbon) 94-191 (soil carbon)	1.31 (total) 0.62 (Central and South America) 0.44 (Africa) 0.25 (Asia) (2)	0.8-2.2 (deforestation) (3) 0.5 (degradation) (4)
Tropical Grasslands & Savannas	2-30	7-54 (root carbon stocks) 174 (soil carbon) (5)	0.5 (6)	0.4-4.2 (due to fire)

Sources: see Trumper et al. 2009, as well as (1) Malhi et al. 2006; Chave et al. 2008; Lewis et al. 2009; (2) Lewis et al. (2009); (3) Houghton (2005); (4) Achard et al. (2004); (5) Grace et al. (2006); (6) Scurlock and Hall 1998 , Note: These are aggregate values. Depending on the variable under consideration there may be considerable spatial and temporal variations, which are not captured in this general overview.

As forests are destroyed in favour of other land-use practices, carbon stocks are being lost. About 2000 Gt C are stored in the world's terrestrial ecosystems, which act currently as a net sink sequestering around 1.5 Gt C annually. While exact estimates are difficult, the world has lost approximately 225 million ha of forest due to human activities, and annual net deforestation lies around 7 million ha in recent years (Eliasch Review 2008, World Bank 2010). The highest deforestation rates are found in the tropics. The replacement of forest by other land-use types also means that the ability to sequester carbon is usually reduced.

As a result of deforestation and other land-use changes, about 5 to 6 Gt CO_2 were released into the atmosphere each year on average during the 1980s and 1990s (see IPCC 2007). If deforestation rates are not effectively curtailed, the loss of tropical forests is estimated alone to add 87 to 130 Gt C in total to the atmosphere, which is roughly equivalent to the emissions from fossil fuels over the current decade (Houghton 2005; Gullison 2007). As forests disappear, so does an important future capacity to sequester CO_2 from the atmosphere. With few exceptions the carbon sequestration rates from forests significantly exceed those of other land-use types.

While industrialised countries tend to have the highest total emissions from fossil fuel use and per capita due to consumption-based lifestyles, developing countries are catching up in total aggregate emissions if emissions from land-use changes are also taken into account. This is particularly the case in South America, Africa and Southeast Asia, where the major tropical forest biomes are found and deforestation is most pronounced due to population growth, infrastructure development, agricultural expansion and unsustainable logging practices (MEA 2005, FAO 2006). Brazil and Indonesia rank first and second in terms of total CO_2 emissions over the period from 1990 to 2005, contributing about 32.4 per cent (equal to 1830 million metric tons) and 25.9 per cent (1459 million metric tons) of total land-based emissions (see World Bank 2010 for details). Hence, developing countries have to view themselves as part of the solution to address climate change. The recent commitments by Brazil and Indonesia to halt and reverse forest loss are promising steps in the right direction.

The role of forests in promoting climate resilience

Forests are more than carbon sticks. Forests provide a range of ecosystem services that play an important role in regulating the climate and buffering against the effects of climatic changes. Tropical forests, through evapo-transpiration, release water back into the atmosphere. This water condenses, forms clouds and ultimately falls again as rain. Thereby large forest ecosystems regenerate their own rainfall. Clearing of forest areas and replacement with pasture and grass lands reduces evapo-transpiration and can promote desiccation (drying) of adjacent regions (e.g. Salati and Vose 1984; Shukla et al. 1990). Forests also help to protect soil against wind and water erosion, promote water storage and help to buffer against extreme rainfall events by mediating run-off. Thereby forests can play an important role in reducing the impact of climatic hazards, protecting watersheds, coastal areas and mountain slopes.

Maintaining primary forest cover can help to maintain resilience to climatic changes. Primary forests tend to be more resilient to (human induced) environmental changes, including climate change, than secondary forests and plantations (see Thompson et al. 2009 for detail). This level of resilience, the ability of the forest ecosystem to return to its original state following a disturbance, is usually higher in complex forest ecosystems with high genetic and species diversity. Therefore, maintaining the complexity of forest ecosystems will not only be relevant to maintaining the long-term potential of the forest to capture and store carbon, but it is also important for the sustained provision of ecosystem goods and services. However, there are limits to resilience. Once climate changes exceed certain thresholds it is possible that the original forest ecosystem is replaced over time by other forest or non-forest ecosystem types with associated consequences for the climate, biodiversity and livelihoods depending on forest resources.

Vulnerability of forests to climate change

Forests are also not immune to the effects of climate change. Climate change will influence species composition, which may potentially alter the carbon storage potential of forest ecosystems. Changes in temperature and hydrology may also promote die-back of tropical forests (e.g. Fung et al. 2005; Hutyra et al. 2005; Nepstad et al. 2007; Huntingford et al. 2008). Environmental degradation may further increase vulnerabilities and also reduce the uptake of carbon (Nepstad et al. 2008). This is not an argument against the protection of forest ecosystems. Rather it is important that we understand where the thresholds of these ecosystems lie and take into account these sensitivities.

Over time the role of forest ecosystems as carbon sinks may be diminished. The uptake of carbon may decline or be reversed towards the second half of the century as the ecosystems are becoming carbon saturated (White et al. 2000; Cox et al. 2000; Cramer et al. 2001; Joos et al. 2001; Schaphoff et al. 2006). Degradation further constrains the sequestration of carbon by forests (Nepstad et al. 2008). Climatic changes may also affect the uptake and release of carbon from forest ecosystems. For example, persistent drought conditions in the Amazon region during 2005 led to a decline in above-ground biomass and release of 1.2 to 1.6 Gt C (Phillipps et al. 2009). This further underscores the need for rapid action so that global warming does not cross thresholds where the sink capacity of forests is being diminished and forests may actually become a source of greenhouse gases.

Time is of the essence. We need to act now if we want to reduce emissions effectively. Any year of waiting and deliberation is a lost year. We need to avoid crossing the thresholds where forest ecosystems no longer act as carbon sinks and protect important ecosystem services, but instead become sources of, and act as a positive feed-back loop to global warming.

2.2 OVERVIEW OF REDUCING EMISSIONS FROM DEFORESTATION AND DEGRADATION (REDD+)

As noted above, if global warming is to be kept to safe levels, greenhouse gas emissions need to peak within the next ten years and then drop rapidly. This will be difficult without including incentives for Reducing Emissions from Deforestation and Degradation (REDD). REDD provides a comparatively low financial cost option for achieving near-term emission reductions (Stern Review 2007, Eliasch Review 2008). In addition, REDD can provide important socio-economic and environmental co-benefits at national and local levels, if an appropriate governance structure and resource allocation scheme is put in place. For REDD to be sustainable, it has to create tangible benefits for local stakeholders and a careful balance between global and local interests has to be struck.

The scope of REDD has been expanded to REDD+. The 'Plus' in the acronym refers to sustainable forest management and enhancement of carbon stocks, in addition to the REDD activities focused on reducing deforestation and forest degradation. Thereby REDD+ is no longer focused on minimising greenhouse gas emissions from reducing deforestation and forest degradation and hence maintaining existing carbon stock. It now also includes activities that increase the uptake and storage of carbon. In this context it is important that forests are not purely recognised for their carbon value, but also for the other services they provide. There is the potential danger of equating plantation forests with primary forest merely because of their carbon value. However, primary forests provide a much broader array of ecosystem goods and services. As discussed in preceding sections, primary forests, as complex systems, tend to be more resilient to environmental changes and hence provide a more viable long-term option for carbon storage than plantations and secondary forests.

Evolution of REDD+ architecture

The interest in REDD+ shows growing attention to the role of natural resources in addressing the climate change challenge. Under the Kyoto Protocol only afforestation and reforestation are recognised as eligible activities. Activities aimed at halting deforestation and reducing degradation were excluded due to conceptual and methodological concerns. At the Conference of Parties (COP) in Montreal in 2005, discussions around Reducing Emissions from Deforestation (RED) were intensified and then expanded in scope to also include degradation (REDD), as well as sustainable forest management and enhancement of carbon stocks (REDD+). Ultimately, REDD+ would represent an important step towards re-evaluating natural resources in their contribution to stabilising the global climate system, leading the way towards a full carbon accounting of emissions from agriculture, forestry and other land-uses (AFOLU).

In 2007, the UNFCCC outlined in the Bali Action Plan and Bali Road Map steps towards a new agreement to address climate change post 2012. The Bali Action Plan specifically recognises "Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the roles of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries" (2/CP13), as an integral part of climate change mitigation efforts. The global climate agreement was to be concluded in Copenhagen in 2009.

Despite large scale efforts, Copenhagen failed to reach a substantial political agreement for addressing climate change post-2012. Copenhagen did not reach a binding agreement. In the Copenhagen Accord 25 countries agreed on a set of targets and immediate initiatives, but these were only taken note of in the COP and not endorsed, in part because the Accord was negotiated by a smaller group of countries and there was the feeling of exclusion. However, the number of countries supporting the accord has grown since COP15[5]. The accord recognises the importance of moving ahead with REDD+ and setting up an appropriate funding mechanism. The failure of Copenhagen to reach a comprehensive agreement will further increase the pressure to reach a conclusion

at future policy summits. Any further delay in the implementation of emission cuts will make it more difficult to stay within 2 °C of global warming. Further delay means also that solutions are needed that can help to reduce emission rapidly. Therefore, the inclusion of forests and other land-use practices will need to remain an important part of any global mitigation strategy and likely increase in importance. However, it is important that capacity development and pilot initiatives on REDD+ are advanced in the meantime, so lessons learned can be incorporated into the policy debate while early emission reductions are already being achieved.

While no overarching political agreement could be reached in the climate negotiations, considerable progress has been made on methodological issues and funding for REDD+ during and after COP15 in Copenhagen. Building on the Bali Road map, Copenhagen did show that parties are moving closer on several issues on REDD+. The Subsidiary Body on Scientific and Technological Advice (SBSTA) reached a decision on REDD+ methodologies which was submitted to the Conference of Parties (COP) of the UNFCCC. In the draft LCA text there was more progress on REDD+ than many other issues in Copenhagen. The Copenhagen Accord, while not endorsed by the UNFCCC, has called for funding as well as set up of a mechanism to fast track REDD+ implementation.

The financial cost of REDD+

There are a variety of broad estimates on the costs of REDD+. The Eliasch review (2008), for example, estimates that halving emissions from the forestry sector by 2030 would cost between 17-33 billion USD, provided forests are included in a global trading scheme.

However, the costs of damages resulting from the impacts of unavoided climate change are considerably higher (Stern 2008). Not only does the inclusion of REDD+ activities increase the probability of stabilising climate below 2 °C of global warming, it also helps to reduce the associated costs for doing so (e.g. Eliasch Review 2009). Other assessments also conclude that the inclusion of REDD+ activities in mitigation strategies is cost-effective (e.g. McKinsey and Company, 2009). Nevertheless, a substantial amount of resources are needed to make REDD+ a reality.

The costs for REDD+ can be divided into costs for capacity development and enabling activities and costs for implementation of activities that produce emission reductions. Implementation activities can be divided further into pilot and demonstration activities, activities that generate carbon credits and, finally, activities that would be part of a formal compliance regime and linked to a cap and trade system (provided there is a UNFCCC agreement on REDD+). Hence, over time there would be progression from a non-market, public financed efforts to strengthen capacities to increasingly market-oriented activities.

Funding for REDD+

The majority of funding for REDD+ activities to date is provided through non-market based resources. Additional resources are available through the voluntary carbon market, but are limited in scope. Norway is leading donor support for advancing REDD+, supporting bilateral and multilateral initiatives. In the wake of Copenhagen, six countries - Norway, the USA, Australia, the UK, France and Japan - have committed 3.5 billion USD to jumpstart REDD+ initiatives as interim finance support.

Multilateral initiatives focusing on REDD+ include the UN REDD and the Forest Carbon Partnership Facility (FCPF), administered by the World Bank. Both UN REDD and FCPF are focused on capacity development and testing of REDD+ approaches (Box 1). Other financial mechanisms administered by the World Bank such as the Forest Investment Program (FIP) and the BioCarbon Fund are focused on forest sector reform and carbon sequestration from afforestation, reforestation and other land-use-based activities, respectively. In addition to the Climate Investment Programme of the World Bank, the climate change funding of regional banks such as ADB's Climate Change Fund are part of the international funding architecture for REDD+ and related climate change efforts.

The REDD+ Partnership Process

The interim REDD+ Partnership Process has been established to improve the coordination and funding of REDD+ initiatives, and to strengthen transparency and access to information. In light of the above developments, both the French and Norwegian governments announced in the wake of Copenhagen their intentions to follow up with high-level meetings. This grew into a joint facilitation effort for establishing an interim REDD+ partnership process, which began with a meeting in Paris on March 11, 2010, and concluded with the Oslo Climate and Forest Conference (OCFC2010) in Oslo on May 27, 2010, where the REDD+ partnership document was endorsed by 59 countries. The REDD+ partnership countries represent all major tropical forest basins and include donor countries that have led in supporting REDD+ efforts. Further countries are invited to join the partnership (see www.oslocfc2010.no for updates). Table 2 summarises the pledges made by donor countries to support interim REDD+ activities.

The interim REDD+ partnership process has to be viewed as an important opportunity to advance interim REDD+ initiatives and generate practical learning experiences, which can then further inform policy decisions within the UNFCCC. One measure of success for the partnership could be the willingness of its partners to develop and adhere to a shared set of principles and standards. The WWF network on REDD+ has developed a set of guiding principles for engagement in REDD+ (see Box 2). These principles focus on climate protection, but also recognise the importance of REDD+ activities supporting poverty alleviation, respecting the rights of indigenous peoples

[5] See UNFCCC, http://unfccc.int/home/items/5262.php for details on countries supporting the Copenhagen Accord.

BOX 1

MULTILATERAL INITIATIVES ON REDD+

The World Bank and UN are spearheading multilateral efforts for advancing capacities and operational experience concerned with REDD+.

The Forest Carbon Partnership Facility (FCPF): The World Bank designed the FCFP as a mechanism to pilot REDD+ activities. A Readiness Fund has been created to develop capacities of countries to engage in REDD+ by establishing baselines and emission scenarios, developing strategies to address causes of deforestation and degradation and establishing monitoring, reporting and verification systems for REDD+. A carbon fund has also been established for testing carbon transaction in selected countries which have shown progress on REDD+ readiness. The FCPF originally targeted 20 countries, but is now including a total of 37 countries (14 in Africa, 15 in Latin America and the Caribbean, and 8 in Asia and the Pacific). Target capitalisation for the readiness fund is 185 million USD. For the carbon fund the target capitalisation is currently around 200 million. There are thirteen donor countries participating in the FCPF.

UN REDD: Representing a joint effort of FAO, UNEP and UNDP, UN REDD is focused on advancing work within the UN system focused on reducing emissions from deforestation and degradation. Emphasis is placed on developing in-country capacities for advancing national strategies and mechanisms and to ensure that REDD+ solutions and standards are based on sound science. UN REDD pilot countries are Bolivia, the Democratic Republic of Congo, Indonesia, Panama, Papua New Guinea, Paraguay, Tanzania, Vietnam and Zambia. The total funding volume for UN REDD is currently (2010) around 87 million USD, including contributions of around 84.4 million USD by Norway and 1.9 million USD by Denmark.

Sources: World Bank, UNDP; www. http://www.climatefundsupdate.org/listing/un-redd-programme

and local communities, and maintaining or enhancing biodiversity and ecosystem services. The Partnership should also succeed in leveraging resources for early action and showcasing how these resources have led to results on the ground through a true collaborative and coordinated effort between developed and developing countries and multilateral institutions.

TABLE 2. COUNTRY PLEDGES FOR FAST-TRACK INTERIM REDD+ ACTIVITIES (2010-2012), OSLO CLIMATE FOREST CONFERENCE, MAY 27, 2010.

Country	Pledged Amount (million USD)
Australia	120
Denmark	10 (only 2010)
Finland	21
France	330
Germany	438
Japan	500
Norway	1000
Slovenia	2.5
Spain	27
Sweden	63
UK	430
United States	1000

Remarks: Where applicable, pledge amounts are based on an exchange rate of 1.24 USD/EUR. Some pledges also include loans in addition to grants. Source: REDD+ Partnership document. Oslo Climate Forest Conference, May 27, 2010

2.3 WWF AND REDD+

The WWF and other civil society organisations have an important role to play in presenting perspectives from local stakeholders and communicating experiences from the field. Currently there are a broad range of bilateral and multilateral activities underway that have focused on enhancing countries' readiness for REDD+ efforts, helping to shape negotiation positions, informing national strategies, testing methodologies and piloting projects with a view to move towards carbon finance transactions. However, as there is currently no final agreement within the UNFCCC, there is still considerable uncertainty on the ultimate scope of REDD+. Furthermore, coordination challenges between the different multilateral and bilateral initiatives remain. As such, there is currently considerable opportunity to inform negotiations, improve stakeholder awareness, approaches and methodologies for REDD+ activities and engage in REDD+ partnership process, UNFCCC and other key operational and policy forms. Particularly, the linkages between policy and operational concerns, between national and local level stakeholder perspectives need to be strengthened. Here, WWF and other NGOs which combine field work with technical and policy work can provide valuable input into policy processes and REDD+ strategy formulation.

Through its Forest Carbon Initiative (FCI), WWF is developing its strategic approach to REDD+ and harmonising its operational activities. In its engagement on REDD+, WWF aims to combine its international policy work with its global reach and field presence. At the international level, WWF seeks to influence negotiations on REDD+ in the United Nations Framework Convention and also ensure that linkages with other relevant policy frameworks are build such as the Con-

vention on Biological Diversity. This includes linking to WWF's advocacy work on Zero Net Deforestation Commitments. At the national level emphasis is placed on supporting REDD+ readiness of countries, providing input on institutional structures and financing. Activities undertaken at subnational scales and as individual projects are being developed to gain experience in testing REDD+ approaches for a variety of geographical locations and deforestation situations, developing robust standards and gaining insights into requirements for scaling up forest conservation efforts in a REDD+ context. These operational activities are accompanied by cross-cutting work on monitoring, reporting and evaluation (MRV) and financing on REDD+.

WWF has developed a set of Guiding Principles to inform engagement in REDD+ activities (Box 2). These principles focus on climate protection, but also recognise the importance of REDD+ activities supporting poverty alleviation, respecting the rights of indigenous peoples and local communities, and maintaining or enhancing biodiversity and ecosystem services. Furthermore sufficient resources for early action need to be leveraged, and these resources need to deliver results on the ground, which are an outcome of a true collaborative and coordinated effort between developed and developing countries and multilateral institutions. The REDD+ principles, receiving also co-signatures from Greenpeace and CARE, were provided as input to the REDD+ partnership document in conjunction with additional feed-back on the REDD+ partnership document. These principles serve as a general guide to ensure that forests are recognised for their role in mitigating climate change, but also for the other important services they provide for nature and people. Matching the principles with targets and indicators, the WWF uses these principles in engagement in policy process, such as the UNFCCC and CBD, and its own operational work.

The geographical focus of REDD+ activities by WWF is on the major tropical forest basins, which enables insights into activities at multiple scales and within a broad range of political, environmental and socio-economic contexts. WWF is receiving support from NORAD for developing and expanding project activities in Lac Tumba, DRC, Kutai Barat, Indonesia and Madre de Dios in the Peruvian Amazon. REDD+ aims to develop national strategies that enable programmatic rather than project-based activities, though it is clear that in the interim phase this optimal set-up may not always be feasible nor practical (see figure

BOX 2

WWF REDD+ GUIDING PRINCIPLES

REDD+ offers a unique opportunity to address the dire consequences of ongoing forest loss and forest degradation while benefiting the planet's climate, biodiversity and people.

We believe that the following principles set a global benchmark for success in tackling the problem of deforestation and forest degradation at the scale and pace needed to prevent catastrophic climate change, to avoid further decline in biodiversity, to promote human well-being and to support low carbon development.

Principle 1: CLIMATE
REDD+ demonstrably contributes to greenhouse gas emission reductions with national targets working toward a global objective.

Principle 2: BIODIVERSITY
REDD+ protects and/or enhances forest biodiversity and ecosystem services.

Principle 3: LIVELIHOODS
REDD+ contributes to sustainable and equitable development by addressing the underlying causes of deforestation and forest degradation.

Principle 4: RIGHTS
REDD+ recognises and respects the rights of indigenous peoples and local communities.

Principle 5: FAIR & EFFECTIVE FUNDING
REDD+ mobilises immediate, adequate and predictable resources for action in priority forest areas in an equitable, transparent, participatory and coordinated manner.

Source: WWF with Greenpeace and Care; distributed at Oslo Climate and Forest Conference, 2010.

1). In the absence of national approaches, countries may pilot and learn from REDD+ activities undertaken at the subnational or landscape level. Project-based activities can also provide important lessons for making REDD+ operational and scaling it up. WWF international engagement and work with government and local level stakeholders can help facilitate exchange of experiences, identify practical methodologies and promote linkages between top-down and bottom-up approaches. The aim has to be the building of functional national and international policy frameworks for REDD+ that are compatible with local level realities.

SALES OF ACTION IN REDD+ PROJECTS AND PROGRAMMES

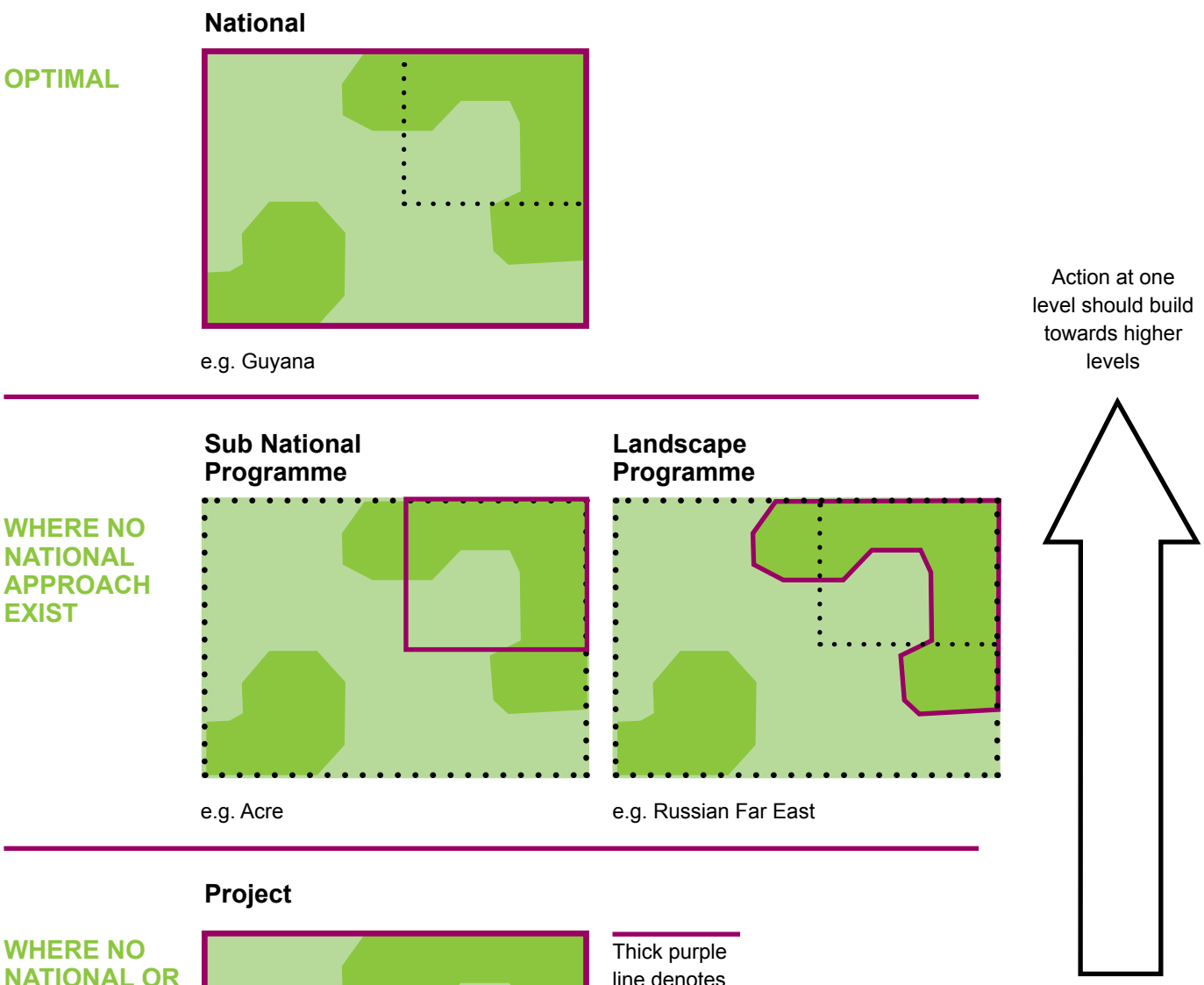


Figure 1. Scales of Action in REDD+ Projects and Programmes. While a national framework for enabling programmatic approaches to REDD+ is the desirable and ultimate aim, initial learning may take place predominantly at subnational scales (Source: Paul Chatterton, WWF FCI)

2.4 GLOBAL VERSUS LOCAL OPPORTUNITIES AND CONSTRAINTS

A key challenge for functioning policies and measures for REDD+ will be to appropriately recognise and address possible trade-offs between the provision of local and global goods and services and to consider the practical implications for a broad range of stakeholder groups. The environmental, social and economic conditions and incentives on the ground will ultimately determine whether a forest is left standing or destroyed.

Climate change mitigation benefits and limitations for REDD+

The global interest in conserving tropical forests is rooted in their relevance to the global climate system and their importance to biodiversity. The primary measure of success for REDD+ is the amount of carbon that is maintained or additionally stored in biomass instead of being released into the atmosphere. Hence, from a global perspective, predominant concerns are to ensure that emission reductions are real. As a result, the debate on monitoring and verification has occupied a central stage in the negotiations on REDD+. Whether or not high biodiversity values should influence the prioritisation of REDD+ initiatives and project site selection and how this can be achieved, is still part of the ongoing debate. The REDD+ partnership process has the potential to further explore this by supporting interim financing support for REDD+ initiatives.

The timing of benefits from REDD+ will depend on the type of activities undertaken (see IPCC 2007b for a more detailed discussion). Reducing emissions from deforestation and degradation would provide immediate climate benefits, but once this is assured there will not be much more changes to the carbon stock of the protected forest area. By contrast, benefits from activities focused on enhancing carbon sinks or promoting afforestation will grow over time while requiring upfront investments.

Maintaining or increasing forest areas may have implications for emissions from other sectors. The reduction of area available for agriculture may promote the intensification of agricultural practices on existing areas or greater dependency on agricultural imports (IPCC 2007b). Both activities could potentially increase emissions in these sectors. Reduced access to timber may also lead to the use of alternative, more energy-intensive materials (e.g. concrete, aluminium or plastic). The inclusion of sustainable forest management in the scope of REDD+ may help alleviate some of these pressures. In general, the portfolio of REDD+ activities will need to take into account the demands and needs of local stakeholders and how multiple land-use demands within a given area or landscape can be addressed.

Environmental and socio-economic co-benefits

REDD is also recognised in its potential for delivering environmental and socio-economic co-benefits. In the above section the value of protection of forests for ensuring the provision of ecosystem services and enhancing resilience to climatic changes has been noted. This has to include a focus on livelihood and development needs, so possible synergies and trade-offs are recognised early.

Protection of forests and reduction of degradation can benefit biodiversity. There is some analytical evidence that forest areas characterised by high carbon stocks overlap with forest areas characterised with high biodiversity, but these synergies between carbon stocks and biodiversity also vary (Strassburger et al. 2009). Hence, it is important to ensure that forest areas that are rich in biodiversity (and endemic biodiversity in particular) do not suffer as a consequence of forest conservation driven primarily by climate change mitigation concerns. Maintaining biodiversity has also to be considered an important insurance against the potential effects of climate change.

In theory REDD+ can have significant benefits for indigenous peoples and local communities. REDD could thus result in empowerment of local communities, through ownership of the resource and decision-making over its use and resultant benefits, increased political power and increased recognition of local people's rights over resources (Rights and Resources 2010). Such benefits would most likely require the development of improved legislation that secures land tenure for local communities and devolves responsibility of access, use, management and rights to enable local communities to equitably[6] benefit from the resources, which would result in enhanced income opportunities, in addition to securing the provision of ecosystem services and improving the governance of the forests (Funder 2009).

As yet, however, the actual mechanisms for implementing REDD are not clearly stipulated. Thus it is not possible to know to what extent and in what manner REDD will impact positively or negatively on indigenous peoples and local communities. It is clear that the decisions that will be taken on REDD at an international level and national architectures for REDD will impact significantly at a local level in developing countries. Interest from developed countries in implementing REDD is high and increasing. As such, REDD may be implemented quickly, perhaps too quickly for developing countries, particularly local communities, to keep up, particularly as the scale of REDD is likely to be huge and implementation of it complex. If the local communities are to benefit and their livelihoods improved as a result of REDD+, concerted efforts will need to be made to ensure that this happens, that equitable benefit distribution mechanisms are developed and are effective, that there is accountability, effective monitoring, conflict resolution and development of 'small scale' REDD+ (Funder 2009; Focali 2009; Peskett et al. 2008).

If the mechanisms to implement REDD+ do not enable local participation, it is possible that communities depending on forest resources will not benefit but may in fact be negatively impacted by REDD+. These negative impacts can include loss of access to forest resources, which in turn will further impoverish poor communities and increase their vulnerability.

This can have particularly negative impacts on women whose income and food security in part is reliant upon harvesting of forest products. It is a possibility that local people who currently manage forest resources may be pushed aside by local elites, governments or private investors in an effort to receive the REDD+ funding (Seymour 2008). REDD+, as in some forms of forestry management, may also result in local communities' social and cultural practices being restricted or ignored (SCBD 2009).

Indigenous Peoples[7] including forest dwelling communities have indicated their concern at the way in which REDD+ could be implemented, the negative impacts it may have, and their wishes regarding REDD+ at a number of global meetings. These meetings include the Global Indigenous Peoples Consultation on Reducing Emissions from Deforestation and Forest Degradation, held in the Philippines in November 2008, the Indigenous Peoples' Global Summit on Climate Change held in Anchorage, Alaska (2009), the COP 15 in December 2009, where the International Indigenous Peoples' Forum on Climate Change (IIPFCC) delivered a statement of their concerns and requirements regarding the climate change negotiations, and the World People's Conference on Climate Change and the Rights of Mother Earth in Cochabamba Bolivia (April 2010). These common concerns have included their exclusion from climate change and REDD+ discussions, which could result in lack of recognition for critical and required uses of forest resources by local people, the potential lack of equitable benefit sharing, and that REDD+ will be undertaken without the free, informed and prior consent of local communities, as has been the case with much natural resource exploitation in the past. Communities and indigenous peoples are also concerned that they have inadequate access to REDD+ policy processes and other relevant information. Thus their ability to gain the necessary insights and capacity to understand processes that may ultimately directly impact on them is limited. Given the significant resources pledged for REDD+ activities and a lack of a clear framework and standards to guide its responsible implementation, there is also considerable fear that REDD+ could lead to the displacement of indigenous peoples and forest dwelling communities, and to competing land claims and ignorance of human and indigenous peoples' rights. As the overarching goal of REDD+ is to reduce greenhouse gas emission, which is likely to be the main driver for determining monetary benefits, there is also concern that other important benefits, such as biodiversity, social and cultural values of forests will be overlooked (Forest Peoples Program 2007 in Seymour 2008; SCBD and UNDP 2008; Galloway McLean, Ramos-Castillo, Gross, Johnston, Vierros and Noa 2009; Rights and Resources, 2010).

These concerns underscore the importance of ensuring that REDD+ does indeed translate into benefits for indigenous peoples and communities and is not a negative top-down initiative that erodes their rights and livelihoods.

In this context it is crucial that communities have ownership of REDD+ activities that take place in their localities and have the potential to impact on their livelihoods. Key elements required for REDD+ as identified by Indigenous Peoples' include:

(i) Active participation of indigenous peoples and communities in REDD+ activities;
(ii) Recognition of communities and their rights over land and resources by governments;
(iii) Clarification of communities' land tenure rights;
(iv) Capacity building to enable communities to actively participate in and negotiate on REDD+;
(v) Adherence to the International Conventions recognising Indigenous Peoples' and community rights and the need for Free, Prior and Informed Consent..
(vi) Respect and recognition of traditional knowledge systems. (SCBD and UNDP 2008; Galloway McLean, Ramos-Castillo, Gross, Johnston, Vierros and Noa 2009; IIPFCC 2009).

[6] The fair and ethical, though not necessarily equal, division of benefits between stakeholders / participants.

[7] In Southern Africa, the term Indigenous Peoples is not used as it is in South America for example, and rather 'local communities' is the commonly used term. These local communities have some claim to the area / resources, be it legal or traditional. Thus for the purposes of this report, local communities as described in this report are considered in the same sense as Indigenous Peoples.

2. Community-based natural resource management (CBNRM)

While pilot projects and early action activities may take place at sub-national scales, REDD+ activities ultimately have to be anchored in national policy frameworks in order to avoid leakage, i.e. the displacement of deforestation activities from one place to another. Nevertheless, even within a national setting, REDD+ activities will only be successful if they adequately address local circumstances and generate support from communities depending, to varying degrees, on forests for their livelihoods. As the following sections will show, the experiences generated from Community-Based Natural Resource Management (CBNRM) can help to address the concerns by indigenous peoples and forest dwelling communities with REDD+ outlined above and help to strengthen the linkage between overarching national frameworks and local level practicalities.

3.1. OVERVIEW OF CBNRM

Community-Based Natural Resource Management (CBNRM) is a rights-based approach to management of natural resources, in which local communities obtain the authority and rights to sustainably manage, use and benefit from natural resources in their surrounding area (Box 3). The aim of CBNRM is to improve both biodiversity management as well as local livelihoods and thus contribute to poverty alleviation, through sustainable natural resource management. CBNRM empowers local people to participate in management of resources, and to make decisions over the use of resources and resultant benefits. A core element of CBNRM initiatives is the development and strengthening of accountable local institutions to manage the natural resources and the benefits generated from the management of the natural resources for the community (Child and West Lyman 2005; Fabricius, Matsiliza and Sisitka 2002; Tsing, Brosius and Zerner 2005; Roe et al. 2009).

CBNRM addresses poverty[8] in the broader sense of the word – in terms of financial poverty but also inequity, lack of services, lack of voice and lack of respect. Poverty alleviation outcomes resulting from CBNRM include recognition and provision of rights (over resources but also of basic human rights), upholding dignity, empowerment and enabling access (to resources, information, services). It enables improved governance, both internal - in terms of management of community institutions - but also of the natural resource base, in addition to increased income and food security through supplementary income or services provided through CBNRM (SCBD and UNDP 2008; Rights and Resources 2008; Weaver and Skyyer 2005; de Kock 2007).

CBNRM emerged in southern Africa in the 1980s amongst government agencies and donors as a new way to approach natural resource management and was in contrast to the existing fortress conservation approach, characterised by exclusion and even expulsion of local people (Jones and Murphree 2004; Attwell 2005). It has since expanded regionally and globally, and there are currently CBNRM projects (or variants thereof) throughout the world, including in Asia, Africa, North America and South America (see for example, CBNRM.net 2009). Reasons given for the departure from existing exclusionary conservation practices to one which takes local people and their traditional knowledge into account include the limited capacity of governments to manage and protect wildlife adequately through the structures inherited from colonial administrations, the recognition of the rights of indigenous peoples in international human rights law, and the emergence of these peoples as a social movement (Jones and Murphree 2004; Colchester 2004; Marks 2005).

BOX 3

DEFINITION OF "CBNRM" IN THIS REPORT

The term "CBNRM" has slightly different understandings in different parts of the world (see (Adams and Hulme 2001; Barrow and Murphree 2001; Roe, Nelson and Sandbrook 2009). For the purposes of this report, CBNRM is the transfer of authority to local people or institutions to collectively and actively manage and use natural resources. This definition of CBNRM is applied predominantly in Southern and parts of East Africa in wildlife and more recently in forestry management. It entails a shift not only in ownership, but also in power. The transfer of authority also requires institutional reform at national and local level and policy reforms (Roe et al. 2009).

Source: WWF

[8] People are often described as living below the poverty threshold if they live on less than US$1 (WTO 2004), US$2 or more recently, US$1.25 a day (Ravallion, Shaohua, and Prem 2008). Poverty, however, is also a lack of access to essential services and infrastructure, food insecurity, illiteracy, vulnerability, lack of respect, inability to participate and exclusion from participation, lack of skills, lack of representation, or lack of power over decisions (Jamieson, Goodwin and Edmunds 2004).

Initially, wildlife was the primary focus of this community-based approach to natural resource management. In recent years CBNRM has expanded (and continues to do so) to include community forestry management, fisheries and other natural resource management (for example non-timber forest products[9], management of wetland areas). Conservation agriculture has also emerged in CBNRM as a means to improve local land husbandry.

CBNRM, in which local communities manage or co-manage natural resources, including wildlife and forests, can also be one type of Payments for Ecosystems Services (PES) (Frost and Bond 2008; Roe et al. 2009). Payments for Ecosystem Services' (PES) involves providing incentives in the form of financial payments to people or institutions to maintain ecosystems and associated ecosystem services, rather than converting them to another use. Payment can be made by governments to local land-owners and resource users, such as local communities, to sustainably use and manage natural resources (Emerton, Bishop and Thomas 2006). REDD+ is also a form of PES.

3.2 INTEGRATING CBNRM INTO REDD+

3.2.1 RATIONALE FOR INTEGRATING LESSONS FROM CBNRM INTO REDD+

The rationale for enabling communities to equitably benefit from the conservation and sustainable use of natural resources is entrenched in a number of international protocols and agreements including the Convention of Biological Diversity (UN 1993a). The preamble of Agenda 21 (1993b) states that to tackle increasing poverty and deteriorating ecosystems, "integration of environment and development concerns and greater attention to them will lead to the fulfilment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future." Principle 10 of **the Rio Declaration** states that: "Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided." (UN 1992). **The ILO Indigenous and Tribal Peoples Convention (ILO Convention** 169) (1989), recognises traditional rights over lands and resources, including the rights to "participate in the use, management and conservation of these resources", and to benefit from activities undertaken on their land or using the resources. The **UN Declaration on the Rights of Indigenous Peoples** (UNDRIP) (adopted by the UN General Assembly in September 2007) recognises indigenous peoples' rights over "the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired." It also highlights the need for their free, prior and informed consent regarding initiatives which affect their lands and resources, including development, use or exploitation of resources.

REDD+ is likely to be implemented (and is already being proposed) for forested areas owned (traditionally or otherwise) by communities or upon which communities depend. As such, the lessons learned from other natural resource management strategies implemented in areas in which local people have a stake are relevant to it. Section 2.4 highlighted the concerns and wishes of Indigenous Peoples' regarding REDD+ and its implementation. Many of the concerns relate to other natural resources, not only forests under REDD+, and have been addressed through testing and implementing CBNRM (including CFM) in sub-Saharan Africa over the past 25 years. Thus the successes and challenges from CBNRM experiences can provide a number of lessons from which REDD+ initiatives can learn and which should be considered in the design and implementation of REDD+ projects which may impact on communities.

REDD+, and other forms of PES implemented in communal areas, will face similar challenges and have similar requirements as experienced in other natural resource management initiatives which impact on local communities, and which can be addressed by applying the principles of CBNRM. As highlighted in Roe et al. (2009), "the fundamental issues of resource tenure, governance, and institutional reform remain the same". The interest from governments, donors and NGOs in PES and REDD+ has the potential to spark the development of 'new' ways of doing activities which have already been tested or proven in CBNRM and will only serve to waste valuable time and resources unless the lessons from CBNRM are considered in the development of REDD+ architecture and implementation (and other forms of community-based PES). The proponents of REDD+ (including climate change advisors and government officials) should be aware of the numerous lessons and principles deduced from CBNRM, and seek ways to integrate the learnings and principles into REDD+. It is also important that in areas where CBNRM is already practiced, a new management regime for REDD+ should not be imposed over the existing one.

CBNRM experience has shown that incentive-based and participatory approaches to natural resource management can result in improved conservation, livelihoods and governance of the resource base, if certain conditions are in place (as described in section 3.2.2). Natural resources will only be conserved as long as they are economically beneficial and can be used as a viable livelihood strategy by the local people, or are socially or culturally valuable for the community. Where the natural resources are of little or no benefit to local people, they will be lost or degraded. So, the more benefits that natural resources can generate or the more value they have for the community in question, the more likelihood they have of being maintained and/or improved (Barrow and Murphree 1998; Emerton 2001; M.J. Murphree 2005; FAO 2006). REDD+ will thus also need to be incentive-based in community areas to promote forest conservation.

[9] Nuts, vegetables and fruits, herbs, spices, honey, fibres, resins and gums (FAO, 2006)

In contrast, it is likely that the exclusionary conservation strategies employed until the 1980s in southern Africa contributed to communities' distrust for subsequent conservation initiatives and of organisations carrying the conservation message (Child 1998). These exclusionary tactics did not enhance conservation in the long run and when the money for enforcement dwindled, poaching and encroachment increased. Likewise, it is believed that exclusion from REDD+ schemes could result in communities clearing forests purposefully (Lawlor and Huberman 2009). Poaching and habitat encroachment resulting from exclusionary strategies has been reversed in countries such as Namibia, as well as in Botswana, Zimbabwe and Zambia, through CBNRM initiatives which devolved management responsibility and returned the rights to communities to sustainably use and benefit from wildlife. Please refer to Box 4 for a description of the national CBNRM Programme in Namibia and Box 5 for a description of a site specific example of CBNRM in Zambia.

It is argued that in many forests in parts of the developing world, such as in Tanzania, community involvement in forest management contributes to improving forest resources more so than other forms of forest management such as state managed approaches (Roe et al. 2009; Funder 2009). Please refer to Box 6 for an overview of Participatory Forest Management in Tanzania. It is contended that the reduced effectiveness under state-managed approaches is in part due to the insecurity of local communities' tenure in the forests, where they have no legal use rights and therefore no incentive for sustainable management, and in part due to lack of regulation and enforcement of forest laws. Authorities lack the required resources and elites influence the allocation of utilisation rights (Scheyvens 2008). As in community-based management of wildlife resources, under certain conditions community forestry management is an effective means to address local challenges and needs in developing countries. Mechanisms to do so include participatory land-use planning, community monitoring

BOX 4

NAMIBIAN CONSERVANCY PROGRAMME

The Namibian Conservancy programme, a government sponsored programme supported by a number of NGOs including WWF, enables local people living on communal lands to use wildlife and nature-based tourism enterprises as an additional livelihood strategy once registered as a communal conservancy. Communal conservancies cover 15.9% of land in Namibia (see map in Fig. 2), complementing the state managed protected area network. More than 230 000 community members are involved in conservancies and broader CBNRM Programme, which generated 43 million Namibian DollarsI (N$) n community benefits in 2009 (NACSO 2010). It is important to note that though this money may not amount to much on an individual level, these funds have enabled Conservancies to fund their own operational costs and where possible undertake benefit distributions - either on an individual level or to villages. In the case of village payouts, the villages have collectively decided how to spend that money and have enabled the villages to undertake projects such as construct maize storage facilities, school buildings, ceremonial buildings, and boreholes, which benefit the whole village and which would not have been possible without that money (de Kock 2007). It is rare that CBNRM becomes the sole or even primary source of income for rural people living on communal land, but rather the CBNRM income or benefits are supplementary to people's existing livelihoods (e.g. farming) and are valuable as an additional livelihood diversification strategy (Magome and Fabricius 2005; Weaver and Skyer 2005). Income and benefits from Namibia's CBNRM Program increased from approximately N$ 600,000 in 1998 (four conservancies) to N$43 million in 2009 (59 conservancies) (NACSO 2010). The community in a registered conservancy retains all the revenue generated from the conservancy, for example from hunting and tourism concessions and/or community campsites.

Since inception of the programme in the mid-1990s, the attitudes of many local communal area residents have changed from resentment of the state managed wildlife (previously only the state got the benefits, whilst the community bore the brunt of its existence) to seeing wildlife as a community asset. The change in attitudes is attributable to the increased income and other benefits local communities receive from wildlife enterprises and management. Benefits include meat, employment, empowerment through participation and authority to make decisions regarding resource use. The change in attitude has resulted in improved governance over the wildlife and a significant recovery of wildlife populations, with population trends of all species (with the exception of lion and hyena in some conservancies in the north east of Namibia) either stable or increasing. The increasing wildlife populations have resulted in increased tangible benefits for the communities – including cash pay-outs, job creation, tourism enterprise development, meat (from trophy hunting) (Jones 1998; Child 2003; Weaver and Skyer 2005; Nott and Jacobsohn 2005; WWF in Namibia 2009).

The Government of Namibia has implemented a stewardship programme where it relocates Black Rhino to private or communal areas where it believes, based upon suitable habitat and wildlife population trends that introduced rhino will thrive. It has translocated a number of Black Rhino to community conservancies in recent years because of the vastly improved governance of resources evident and there are plans to translocate further Black Rhino to communal conservancies (pers comm. G Stuart-Hill, Natural Resources Advisor, L. C. Weaver, Director, WWF in Namibia, March 2010).

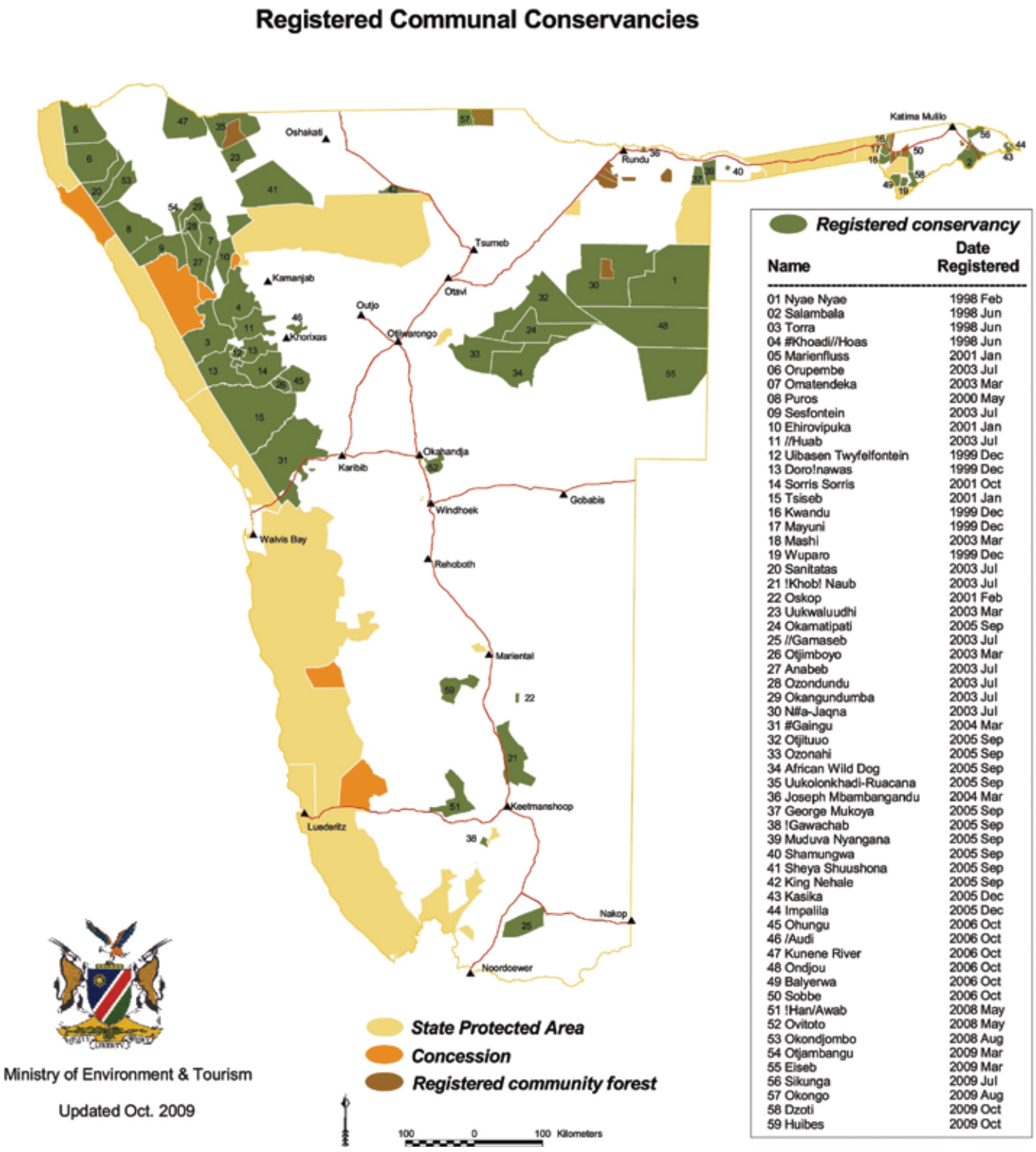


Figure 2: Map indicating additional land under conservation in Namibia as a result of CBNRM
Source: MET 2009

BOX 5

MUFUNTA GAME MANAGEMENT AREA, ZAMBIA

The Mufunta Game Management Area (GMA) (community wildlife management area) was proclaimed in 2007. Community management of the wildlife resource as provided for in the Zambia Wildlife Act, the voting in of a Community Resource Board (CRB) from the local community as co-managers of the resource, local participation in land use planning, appointment of 20 village scouts and the receipt of livelihood benefits has lead to increased wildlife in the GMA.

The Mufunta GMA was highly poached and degraded in 2006 (when WWF started work in the area). In an aerial wildlife survey undertaken in 2006 by the Zambia Wildlife Authority only a few wildlife species and in limited numbers were observed during this survey. However during foot patrols in 2009, which were of necessity fairly limited in geographic scope, village scouts observed many more species (and on average, more numbers too) than during the extensive 2006 survey, including Elephant, Roan, Wildebeest, Buffalo and Lions (none of which were observed during the aerial survey). In 2009, 14 suspected poachers were apprehended and convicted by the community appointed village scouts, who also confiscated eight guns, 46 bicycles, 206 snares, 76 pieces of ammunition, five spears and four axes from suspected poachers.

Livelihood activities (such as fish farming, bee keeping, horticulture and traditional crafting) supported by WWF in the GMA provide alternatives to income from poaching activities. As a result, there has been an overall improvement of food security at household level from the sale of produce as well as production for own consumption for community members in the enterprise / commodity groups.

The Mufunta Land-use and Natural Resource Management Plan is a mechanism to balance the needs for development and conservation, and has zoned the GMA into various use zones such as for wildlife and for development. Once signed off by the government (anticipated in 2010), land allocation will be done in consultation with the CRB using the GMA Plan as a guiding tool. The development of the plan in a participatory manner through dialogue among traditional leaders, local communities, line ministries, private sector, policy makers and cooperating partners, has resulted in buy-in to this plan by all stakeholders. It has also provided a platform for open dialogue on numerous natural resource management issues, as has the development of enterprises and commodity groups.

One of the lessons resulting from this project is that conservation approaches that do not address issues of poverty make little sense to local communities who are trying to provide food for themselves and their families. Unless the Mufunta GMA results in household benefits in the short-term people will not see value in conserving the resources in the GMA. It is therefore important for conservation initiatives in community areas to facilitate and strengthen income generating activities.

(WWF-Zambia 2010)

of resources through which data can be obtained for relatively low costs and feed into state monitoring and evaluation mechanisms and regulation (Funder 2009).

REDD+ initiatives need to provide economic and socio-cultural incentives as well as economic alternatives to converting land to agriculture, for example, if they are to be viable and sustainable (Grainger et al. 2009). While the benefits and impacts of REDD+ on both biodiversity and communities are dependent upon the mechanism adopted and how it is implemented, the sustainability of REDD+ initiatives will be dependent upon the effective participation of indigenous peoples and local communities in a REDD+ mechanism and resultant benefits reaped by the local communities. Including local communities in natural resource management and incorporating their needs and concerns in the design and implementation of REDD+ initiatives, rather than excluding them, is likely to contribute to increased protection of forests. This will contribute to achieving the required 'permanence' of REDD+ in developing countries.

Local communities' concerns, such as poverty, need to be addressed in REDD+ in order to contribute to REDD+'s sustainability. This point is argued in "Making REDD Work for the Poor" (Peskett et al. 2008) where it is stated that REDD+ will attain improved sustainability in the long term in cases where poverty is linked to deforestation and that project risks will be reduced for investors and buyers by ensuring poor people are supportive of policies and measures. Integrating poverty alleviation into REDD+ may reduce the potential for REDD+ to cause conflict over resources and thus reduce implementation risk.

Over and above these pragmatic reasons for including local people in REDD+ initiatives and ensuring that they benefit from them, there is also a moral argument that the poor should have a right to an equitable share in any benefits where they have a legitimate claim (Peskett et al. 2009). This is supported by UNDRIP, ILO69 and the other international conventions highlighted previously, which recognise indigenous people's rights in natural resource governance and benefits. The

BOX 6

PARTICIPATORY FOREST MANAGEMENT IN TANZANIA

In East Africa, Tanzania has led the way with Participatory Forest Management (PFM) where it has been conducted since the early 1990s. Currently PFM is operational in 53 of the 126 districts in mainland Tanzania. PFM has been conducted in a variety of forest types, including National Forest Reserves, Local Authority Forest Reserves, Village Land Forest Reserves, Community Forest reserves as well as private reserves. PFM has been divided into joint forest management (JFM) at central forest reserves and community based forest management (CBFM) with communities on their own land (WWF Tanzania 2009).

The development of PFM in Tanzania was driven by two key factors.

- Recognition in central government that there was neither the financial nor the political capacity in government to manage Tanzania's forests without the support of the resident local communities.
- Political will to decentralise government to the lowest level, which has resulted in improved district and village governance systems.

PFM was included in the National Forest Policy in 1998 and the Forest Act of 2002 and subsequent regulations. Participatory Forest Management (PFM) has become a central part of the country's approach to forest management. Enabling legislation for the new policy was passed with the new Forest Act of 2002 which provides the legislative foundation for the implementation of Participatory Forest Management (PFM) in Tanzania through which communities, groups or individuals can own, manage or co-manage forests (under a wide range of conditions) (ibid).

Restoration of communities' traditional rights to grazing and fodder areas from which local people can sell forest products (through the Forest Act) has resulted in improved incomes for local people, and improved conservation of forest lands (SCBD 2009).

TABLE 3: EXAMPLES OF AMOUNT OF LAND UNDER CONSERVATION FROM COMMUNITY MANAGEMENT

Namibia	13.1 million hectares (131, 000 km^2) 15.9% of the country
Zimbabwe	4 million hectares (40,000 km2) of communal land managed for wildlife production 10,2% of the country
Tanzania	More than 3.6 million hectares (36, 000 km2) of forests and woodlands managed as Village Land Forest Reserves (either entirely under the control of locally elected village governments, or co-managed forests between villages and local or central government) 3,8% of the country

(NACSO 2010; Roe et al. 2009;)

implementation of REDD+ could result in restriction of access to the forest and subsequent loss of income and food security, removal of existing rights to forest resources, exclusion from decision-making, increasing food insecurity and rising costs of food (Funder 2009, Focali 2009; Stickler et al. 2009), and thus increased poverty. Within REDD+ forest areas, reduced access for communities to forest resources may result in increased poverty, and thus unsustainable management of valuable biodiversity, whereas in areas where communities have rights over the resource and benefits from it, that resource is more likely to be conserved.

REDD+ institutional architecture should, where geographically possible, build on the institutions, mechanisms and initiatives already in place for CBNRM, such as participatory forest management institutions (Funder, 2009) or community wildlife management committees, so as to avoid 'reinventing the wheel'. Otherwise REDD+ initiatives and local institutions may develop in isolation and in parallel to existing CBNRM ones, leading to confusion and duplication of existing or previous activities. As Roe et al. (2009) point out, "local systems of accountable governance take time to evolve, as mechanisms of accountability develop and adapt to local social norms." Thus rather than reinventing the wheel and wasting time and money on developing institutions and accountability and trust in those institutions, one should build upon those existing structures. REDD+ initiatives should also build upon existing approaches and partnerships and not seek to replace existing natural resource

management strategies. Instead they should supplement or support them, for example, through obtaining additional funding (Jacobsohn 2004; Roe et al. 2009). If such institutions or mechanisms are not in place where a REDD+ initiative is to be implemented, the experience from institution building in CBNRM should be considered.

3.2.2 SUMMARY OF CBNRM CORE ELEMENTS THAT SHOULD GUIDE REDD+ PRACTICES

Core elements and lessons distilled from CBNRM successes and failures, particularly in Southern and East Africa, which should be considered when preparing to implement a REDD+ initiative, are highlighted below. These elements have been identified through CBNRM experiences as ones which do or would contribute to the sustainability of CBNRM initiatives. As such, they can contribute to the sustainability of REDD+ initiatives.

1. Devolution of authority to the community to manage resources and benefit from resource use

Authority to manage the resource should be devolved to the lowest level where there is capacity and/or where capacity can be developed. Local people and their representatives should make the decisions on how to manage the resources and ensuing benefits. At a local level, the initiative, its aims, and the way it is implemented and managed must be supported and determined by the majority of the community. The initiative should not be controlled from above (e.g. state, chiefs, or even a committee if it does not interact with the local people/ ground level) (Fabricius et al. 2005; Child and West Lyman, 2005; Murphree, 2005; Jones and Murphree, 2004; Child 2003; Barrow and Murphree 1998). Bond et al. (2010) stress that communities should determine how the financial benefits are allocated, rather than the use of funds being prescribed by the government (or other outsiders). Authority to make decisions over the resource will engender a sense of ownership over the resource, and authority to make decisions over the resulting benefits will create a sense of value for the resource, both of which can contribute to improved management of the resource by the community. Ownership is also discussed in point 2 below.

2. Providing security of rights through policies and legislation

The community's security and rights over resources should be enshrined in and supported by relevant polices and legislation, and the implementation thereof (Murphree 1991 as cited in Murphree 2005; IIED, 1994; Gibson and Marks 1995; Child and West Lyman 2005; Fabricius et al. 2005; Jones and Murphree 2004; Schuerholz and Baldus 2007). This will provide a basis for sustainable resource management and will also protect the communities from outside interests. ¬It is important to clarify rights before initiatives commence, in order to prevent conflict and inequitable benefit and cost distribution. Who has rights over the land, the trees and eventually the carbon finance will be play a critical role in the implementation and the success of REDD+.

In order for the resources to be valued and protected, the resource needs to be (or perceived as) a community good and not a state asset. Thus local people must own, or have de facto ownership over the resource in question, supported by legislation, and they should be aware of this ownership (Child 2003; Weaver and Skyer 2005). Rights and ownership over the resource are thus important for the conservation of resources.

It is crucial to note that rights alone do not automatically lead to improved conservation. If the land is more valuable to the community under agriculture, then conservation will not be a priority (Barrow and Murphree 1998). Education, knowledge of the value of conservation and of the aspects of sustainable development should be an integral aspect of an initiative to devolve authority if conservation of a resource is the ideal outcome. Furthermore, it is important to recognise that security of rights over one resource can result in conflict. As the rights may pertain to only one resource, governments may still grant harvesting concessions for the other resources without discussing it with the community. Communities need to be aware of what their rights are, and to which resources they pertain.

3. Providing incentives for sustainable natural resource management

Local people must receive benefits, financial (eg. individual or communal income) and/or non-financial (e.g. social, cultural, spiritual), for conservation efforts, and these incentives must outweigh the costs of conservation for those communities. Communities will have more incentive to manage natural resources sustainably if they receive tangible benefits (Barrow and Murphree 1998; Fabricius et al. 2005; Bond et al. 2010). Receipt of direct benefits has resulted in changed behaviour and attitudes amongst local communities towards managing the resource responsibly, which has resulted in improved natural resource management (Weaver and Skyer 2005). Benefits are not limited to financial benefits alone, they may include rights and the authority to use resources and land tenure, cash income and employment, receipt of meat from the hunting concessionaire, and assistance to develop alternative livelihood activities. The link between the benefits received and the source of the benefit (e.g. the resource and the improved state of the resource) needs to be clear (Child 2003).

REDD+ beneficiaries are theoretically the global population, whereas those who will bear the brunt of ensuring that forests remain in a healthy state are the local communities who rely on those forests for their own well-being. This is the case in the provision of most ecosystem services, where a larger population benefits from their provision, while a small population bears the disproportionate costs of securing those services. Consequently, the people who will maintain the forests for REDD+, potentially at the costs of their own livelihoods, should

[10] The human and customary rights of resource dependent people, should be respected, whether they have legal security of land tenure and rights or not (Rights and Resources 2008).

obtain direct financial (and other) benefits for doing so (Bond et al. 2010).

The benefits or incentives must be greater than, or be felt by the community to be greater than, the transaction and opportunity costs of the project. Costs for communities engaged in natural resource management or affected by natural resource management include increased human-wildlife conflict, restriction to resources upon which they depend, financial costs for patrolling and boundary clearing, as well as awareness-raising of other community members regarding conservation, and transaction costs for engagement in the initiative (e.g. attending meetings and so on).

Sustainable management and use of the resource must also be more productive and beneficial to the local people than alternatives such as livestock farming or agriculture. If competing livelihood activities are more economically viable or beneficial, the natural resources will not be maintained (Turner 2005; Barrow and Murphree 1998). Thus, the multitude of livelihood strategies, land-use and socio-cultural matters, such as rights and tenure, related to forestry management and use, will thus also need to be considered in REDD+ implementation.

4. Ensuring equitable distribution of benefits

Benefits generated through the initiative must be equitably distributed to the majority of the community to encourage their participation in the conservation activity. Benefits should be distributed so that those bearing the brunt of the initiative (eg. restricted access to resources) or those doing the most for the sustainability of the project benefit appropriately according to their input or the impact (Barrow and Murphree 1998).

Payments for REDD+ are a means to providing the required incentives to communities, but in order to provide adequate incentives to communities to sustainably manage the forest, payments will have to be equitable. Thus, benefit distribution mechanisms and plans should be identified at the outset (IIED 1994; MET 2005).

In Namibia, Conservancy Committees are responsible for distributing the funds received from the hunting or tourism concession to the community members. Funds generated by the Conservancy are then, once the operational costs of the Conservancy are covered, distributed by the Conservancy Committee to villages / households / members. One of the Government requirements that need to be fulfilled prior to the registration of a Conservancy in Namibia is that the conservancy must provide a plan for the equitable distribution of benefits arising from the Conservancy (MET 2005). For example, in the case of Salambala Conservancy, benefit distributions are paid out to the villages within the Conservancy from the funds generated by the Conservancy. As there are a large number of community members, and the funds generated are not enough to make an impact at an individual level, it was decided to make the payments at the village rather than individual or household level. Other conservancies with

fewer residents make individual payouts. When the Conservancy Management Committee decides that there are sufficient funds to make a payout, the Committee writes letters to authorities in each village notifying them of the time, date and venue of the distribution. An announcement is also made on the local radio to distribute the message as widely as possible. The money is presented to each village's Induna, a village development committee member and/or a Conservancy Management Committee member, who are jointly accountable for the money. The village members decide collectively (in meetings) how to spend the money and / or whether to open a bank account and deposit the funds for future use (de Kock 2007).

As noted earlier, the framework for REDD+ will ultimately be set at the national level. The challenge lies in ensuring that funding for REDD+ reaches from national scale to stakeholders at the local level that safeguard and depend on the sustainable use of forest resources. For example, in Namibia, Conservancy Management Committees enter into contractual agreements with the hunting / tourism concessionaires (MET 2005; de Kock 2007). These contracts stipulate the amount and schedule of payments to the communities. In the case of REDD+, however, the government may be the entity which receives the payment for the avoided deforestation and degradation, not the community, and an agreement will need to be developed between the community and the government through which the community receives an equitable percentage of the income. The experience from Namibia from the contracting of concessions between the private sector and communities could guide the implementation of agreements between governments and local communities, which could ensure the equitable distribution of income from REDD+ initiatives.

There are also other examples of benefit distribution in CBNRM where the government receives the income and distributes a percentage to the community, and which can guide equitable benefit distribution in REDD+. In Zambia and Zimbabwe, the Zambia Wildlife Authority (ZAWA) (Zambian parastatal responsible for wildlife management) and the Rural District Councils (local government) respectively are paid by the hunting operator. They in turn disburse a percentage of the income to the communities. In the case of Zambia, the community receives 50 per cent of the income from wildlife (including 5 per cent for the Traditional Authority) (Hamilton et. al. 2007) and in Zimbabwe, communities participating in CAMPFIRE receive 55 per cent of the income (Jonga 2006). In the absence of legislation governing equitable benefit distribution of income from REDD+, it will be necessary to negotiate strong contracts between all the participating parties at the outset of the initiative to ensure equitable benefit distribution. However, it has also been found that in some cases – when funds from CBNRM are channelled through the government rather than being paid directly to the relevant community - problems can occur in terms of administration, transparency and accountability (Bond et al. 2010; Pers. Comm.[11]).

These experiences can guide the implementation of individual site-based initiatives, which feed into the national REDD+ programmes.

5. Establishing effective and accountable community governance institutions

Local governance institutions comprising community members, which are effective and legitimate[12] (in the eyes of the state and the community), must be established, if they are not in existence already, to govern and manage the resources. These institutions should be independent of external authorities, strong and adaptive and representative of the community and their requirements and be democratic (Fabricius et al. 2005; Jones and Murphree 2004; Child and West Lyman 2005; Child 2005). Good governance, as highlighted previously, is crucial to effective biodiversity conservation. Good governance will also promote downward accountability by community institutions to their constituent communities. It can also circumvent the capture of resources and benefits by the elite, which can prevent benefits from reaching the poorest.

Governance in CBNRM by community institutions has faced challenges in terms of management effectiveness and distribution of benefits (Child et al. 2007 in Bond et al. 2010). In an effort to improve governance of community institutions in Namibia, there is a move away from the previous situation, in which elected community members used to fulfil both representative and executive functions, to an alternative approach where community representatives employ someone to carry out the executive role (Bond et al. 2010). This reduces the potential for conflicts of interest, which were previously experienced when the roles were merged.

6. Enabling active participation by community members, including supporting capacity building

Community participation (and thus their capacity to participate) is integral to legitimacy of initiatives, and to sound management and improved governance of natural resources (Barrow and Murphree 1998; Jones and Murphree 2004; Fabricius, 2005). As Sayer et al. (2007) point out, "too many conservation programmes contain time bombs in the form of frustrated local stakeholders who will continue to contest the legitimacy of the historical decisions upon which conservation programmes were based. As democracy spreads and population densities rise, these latent land disputes will surface and conservation organisations should anticipate them and deal with them." Thus, local people must actively engage in and benefit equitably from the initiative. Morally, any decision to put areas of forest or an entire forest off limits needs to be done, if not by those who are dependent on it, use it or own it, then in consultation with them. This is supported by the international conventions mentioned previously, which highlight the need for free, prior and informed consent pertaining to activities and

[11] Co-author's personal communication with Zambian community stakeholders.during the Integrated Development Planning process for the Zambian component of the Kavango-Zambezi TFCA, June 2007-February 2008.

[12] A balance needs to be found between external legitimacy and internal legitimacy (Roe et al. 2009)

interventions which may affect traditional rights over resources and to resources. In practice, local communities are often the ones who know which areas of the forest they use and why, and they are aware of the traditional and cultural uses of the forest. Prior to implementation of any REDD initiative, it will thus be important to understand how communities use the resource, and how they wish to use it. Prior to implementation of any REDD+ initiative, it will thus be important to understand how communities use the resource, and how they wish to use it.

There may be barriers restricting local people, in particular, from participating effectively in planning processes, which will need to be addressed. These barriers may include poverty, communication, transport issues and low levels of education or literacy, language, gender issues, power issues, having to take time out from their daily subsistence activities, culture, and access to information, finance to fund their participation, and the need to empower community members to participate effectively. These potential barriers should all be taken into consideration when planning and budgeting for the REDD+ initiative to enable local people to participate effectively.

Capacity building is required to overcome such barriers and enable communities to participate and manage their resources, and also to empower communities to lobby for their rights over resources and for improved governance, reforms and benefit distribution (Child 2003; Child and West-Lyman 2005). Communities need to be made aware of their rights (and ownership) over the resources, the value of the resource, and have the required skills and expertise to manage the resources and resultant income and to negotiate with (and stand up to) other stakeholders. Adequate time is thus needed to bring community members to a level where they can participate (Sandwith et al. 2001; Bhandari 2003; Norton et al. 2001; Taylor 2001; Berkes 2003; du Pisani and Sandham 2006). Capacity building is also required within civil society and government to enable government officials and civil society to support the communities and implement the policies appropriately. REDD+ interventions will need to be paced according to the capacity of participants.

It should not be assumed that local people will take on the responsibility and the costs of natural resource management simply because they are given the opportunity to participate and benefit from the resource base when other key issues are unresolved or ignored (such as land tenure, rights and ownership of the resource for example), or if the benefits do not outweigh the costs (Fabricius 2005).

7. Facilitating equal partnerships and collaboration

Partnerships, where each primary stakeholder (see Box 7 below) is an equal partner, are required. Partnerships are required between local communities and government agencies, with NGOs as supporters for communities, and as supporters or challengers where necessary for governments, and with the private sector as an investor in the community resource. There is a potential imbalance of power between communities and the government and with the private sector. This can be addressed by the facilitation, technical support from an external agency and provision of capacity building, and through security of tenure for communities and their knowledge of their rights (Jones and Murphree 2004). It is also important to consider that devolution of authority is basically the removal of power from

BOX 7

STAKEHOLDERS

Stakeholders are people or institutions who / which have a vested interest or 'stake' in the initiative, and who are (potentially) affected, or can affect, the development, establishment and implementation of the initiative. They have something to lose or gain if the initiative is implemented. Their involvement or lack thereof can affect the sustainability of the initiative.

Primary stakeholders are:
- **directly** affected, positively or negatively, by the initiative, and,
- those whose **permission, approval and / financial support** is required Secondary stakeholders are:
- **indirectly** affected by the initiative

Tertiary stakeholders:
- not affected or involved, but who **can influence opinions** either in favour or against the initiative (Hesselink et al 2007)

See **Annex 1** regarding stakeholder holder engagement.

[13] Increasingly the concept of 'rights-holders' rather than stakeholders is being raised in the REDD+ debate. See for example, the Social and Environmental Standards for REDD (in draft form currently) facilitated by the Climate, Community and Biodiversity and CARE (2010).
[14] Pers. Comm., June 2010. M. Sichilongo, Coordinator, Regional CBNRM Programme, WWF Zambia.
[15] It is acknowledged that improved monitoring of the effects of CBNRM is required in CBNRM, particularly regarding livelihoods.

the government, and this can engender fear amongst the government and lead to conflict. It should also be noted that there can be imbalances between NGOs and communities and the private sector and communities, which need to be considered and balanced.

CBNRM in southern Africa has been facilitated and implemented through successful collaborations between communities, government and NGOs. Support organisations, such as the CAMPFIRE Association (Zimbabwe) or the Namibian Association of CBNRM Support Organisations (NASCO), provide capacity building, technical support and policy inputs in CBNRM and, as such, are crucial in promoting CBNRM in those countries (Bond et al. 2010).

Conservation partnerships require trust, and building trust with communities may take time. However, trust can result in the required attitudinal change to conservation. In Mufunta GMA there was initially a lack of trust between the communities and local district authorities and the conservation organisation due to a history of animosity and forced removals. This was counteracted over time through proactively considering people's needs and concerns, and extensive dialogue with community members (WWF Zambia 2010). When seeking to build trust it is important to consider past relationships and stakeholders' perceptions of each other, being transparent in all engagement and communicating frequently. For example, the Zambian National CBNRM Forum, supported by WWF, has contributed significantly to creating an enabling environment for conservation by bringing together different stakeholders - government, private sector and the community to discuss natural resource management issues and to work together on these issues[14].

8. Support community-based monitoring of resources

Communities can and do play an important role in the monitoring of resources, and this data can inform and improve local decision-making. The data they collect can also feed into national level monitoring strategies and contribute to improved decision-making at national, subnational and local levels. Monitoring, reporting and verification of avoided deforestation and land-use change will be a crucial element of REDD+ initiatives. Remote sensing techniques will need to be supported and complemented by on the ground monitoring (Bond et al. 2010). Local level monitoring efforts can draw and build upon existing community level monitoring activities used in CBNRM. In Namibia, community representatives record information from physical sightings of wildlife on patrols in addition to counting spoor, poaching incidents, human-wildlife conflict, etc. in the "Event Book" (also known as management-orientated monitoring systems - MOMS). Other natural resources are also monitored in the Event Book[15]. Monthly audits of these Events Books are done and data are collated into an annual

BOX 8

SETTING HUNTING QUOTAS IN NAMIBIA: PREVENTING LEAKAGE AND IMPROVING MANAGEMENT THROUGH COLLABORATION

The experience of the quota setting for the huntable game on conservancies in Namibia also feed into REDD+ implementation, and can ensure appropriate oversight of the forest resources at both a local, site based level, and at the national level: thereby avoiding potential leakage whilst ensuring local participation and ownership and thus contributing to improved resource management.

Prior to conservancies, the quotas for the huntable game were set solely by the Ministry of Environment and Tourism, but conservancies now play a lead role in this process. The community develops a suggested quota based upon the wildlife utilised the previous year, the community's own annual monitoring data obtained from their Event Books (See point 8), and the results of the annual game count which is undertaken jointly by community members and the Ministry of Environment and Tourism, with technical support from WWF and partners (IRDNC and other members of the Namibian Association of Community Support Organisations [NACSO]). This quota is presented by the community committee to the Ministry of Environment and Tourism at a meeting, where the quota is discussed, negotiated and approved. The Ministry considers issues such as overall carrying capacity of the region, and knowledge of the quotas that will be or have been granted to the other conservancies in the area in their discussions and negotiations on the quota. Thus, although the quota and subsequent income generated is specific to a single conservancy (or in some cases, shared between two) the government retains an overall, bigger picture overview of the wildlife that is being put on quota for the year, thus ensuring that the wildlife utilised each year is within sustainable limits. This system incorporates collaboration between stakeholders (point 7), local monitoring (point 8) and active participation by the community, thus enhancing ownership of the resource and sustainable use thereof by the local community.

account together with the data collected from annual game counts. Importantly, community monitoring of the resources also contributes to generating a sense of ownership over the resource, and by including local people into the annual game counts and day-to-day monitoring, it builds local capacity and integrates local knowledge into the monitoring system (WWF in Namibia 2010).

An example for quota setting in Namibia is described in Box 8 and illustrates some of the general points outlined in the preceding points. The process entails local level decision-making (point 1), participation (point 6) and resource monitoring (point 8), and collaboration between stakeholders (point 7), can guide REDD implementation in terms of enhancing local ownership improving management over the resource, and also prevent leakage.

9. Ensuring access to information, transparency and accountability

Communities need access to information (regarding policies, rights, resources, benefits) to enable their informed decision-making. There needs to be transparency and accountability regarding decision-making, income and benefit distribution. If not, this can lead to mistrust and antagonism between the community and the government authority responsible for receiving and then distributing the fees for wildlife use, as in some cases in GMAs in Zambia, or between the community and the committee representing the community. Furthermore, if there is no transparency regarding how much income is generated and there is a feeling (real or perceived) that the funds are not reaching the community members because of corruption or mismanagement, either within the government agencies or even at the local level, there will be no incentive for the community members to conserve the resources, and they are likely to stop doing so[16] (Sandwith et al. 2001; Metcalfe 2003).

10. Providing conflict resolution mechanisms

Conflicts between community members and between the community and other stakeholders may occur, but can be overcome or mitigated through a clear and accepted definition and demarcation of the community, the resource, and the resource use area, and use of participatory planning tools.

Conflicts may include:

a. Conflict amongst community members. This can be caused by the fact that the community is not homogenous (one rarely is), by the project itself, for example, regarding how to use the resources or benefits, or competition over resources, land or authority, or by the introduction of new / different cultures (Jones and Murphree 2004). Tensions can also develop between traditional authorities and newer community institutions. This has been managed in some respects in Namibia and in Zambia where the Traditional Authorities are engaged in the development of the community wildlife area and respective institutions from the outset and become the patrons of the Conservancy (Jacobsohn, 2004) or in the case of GMAs in Zambia, patrons of the Community Resource Board responsible for the co-management of the resources in the GMA[17].

b. Conflict between multiple user groups. This can happen between communities and government authorities who engage hunters on communal land without discussing it first with the community, or between hunting and photographic tourism concessionaires who both operate in one area, or commercial loggers who have concession from the government, but the community was not engaged in the appointment[19].

Ways to mitigate such conflicts include:

- The community involved in or impacted by the initiative, the resources over which that community will have rights or on which it depends (e.g. the forest), and the geographic extent of the resource, must be defined and legitimised (by the government and the community) to prevent external exploitation of the resource, prior to implementation of the initiative. This should be done by the community or in a participatory manner. If the community defines itself, there is greater potential for developing an authority with required external and internal legitimacy (Jones and Murphree 2004; Atwell 2005).
- Participatory development of land-use plans by or with the community, and approved by the community and the relevant local, traditional and government authorities - can resolve or avoid conflicts over land-use. These plans should define how the resource can be used and zone certain areas for certain types of resource use (eg. hunting or photographic tourism). In the Mufunta Game Management Area in Zambia, a management and land-use plan was developed with input from the community, the traditional authority, the Zambia Wildlife Authority and the district council. This land-use plan delineates areas for development (e.g. where people can settle and plant crops) and those set aside for wildlife conservation[20]. Although the plan is currently awaiting Parliamentary approval, it is highly likely that it will be successfully implemented and achieve both conservation aims and development needs, as it has the buy-in of the community, those people whose activities will determine whether the plan is successfully implemented or not. The support of the community was obtained through their active participation, where they agreed what land would be allocated for various types of use. In Namibia, where some conservancies have both

[16] Information obtained by a co-author when participating in the Integrated Development Planning for the Zambian component of the Kavango-Zambezi TFCA, June 2007-February 2008.
[17] Pers. Comm., June 2010. M. Sichilongo, Coordinator, Regional CBNRM Programme, WWF Zambia
[19] Pers comm. November 2009, O. Tembo, Mufunta GMA Project Manager, WWF Zambia
[20] Pers comm. November 2009, O. Tembo, Mufunta GMA Project Manager, WWF-Zambia.

photographic and hunting excursions on the same conservancies, land-use plans are being developed with the communities[21] to prevent potential conflict between these two types of tourism.

In addition to the above points, other important considerations include:

- **The need for political will and support.** Virtually all of the above steps require political will and associated, supporting decision-making.
- **One size does not fit all, and the local context and policies need to be taken into consideration, as well as the political and socio-cultural dynamics of the coun try and the involved community.** There is no blueprint, but there are general principles that can guide sustainable community management of resources. As national REDD+ initiatives will be guided by the national strategies, there is a risk that governments will simply impose a blueprint on all projects, which is likely to threaten the sustainability of those initiatives.
- **Natural resource management approaches need to reconcile biodiversity conservation and socio-economic needs.** In many, if not all cases, the reality is that when people are trying to put enough food on the table, or in some more 'affluent' areas, to pay for school fees for their children, the conservation of the environment is not going to be their priority in comparison to these other, more pressing needs. As experienced in both the Mufunta GMA in Zambia and in WWF experiences of working in CFM in Tanzania, local communities are more likely to be willing to talk about conservation issues if they know that project staff promoting conservation issues are aware of, and willing to assist them, in their livelihood needs. For example, WWF staff working in Kilwa, Rufiji and Mafia in Tanzania, commented that community members were more open to ideas of fisheries management after Mari-culture and microfinance initiatives were started[22]. Community members initially resistant to the idea of the GMA in Mufunta, gradually started to be open to discussing it when they saw that a number of people were receiving training and other kinds of support for enterprise development[23]. The importance of integrating poverty alleviation into REDD+ (as it is in CBNRM) has also been discussed in a number of publications and forums as mentioned previously (see for example: Peskett et al. 2008; Funder 2009; Lawler and Huberman 2009).

Integrating the core elements of CBNRM as described above are a means to operationalise the various guidelines and standards that are being developed for REDD+, notably the WWF, Greenpeace and CARE REDD+ Guiding Principles (2010), but also the Guidelines Regarding Indigenous Peoples and REDD developed for the UN-REDD process, the Climate, Community and Biodiversity Alliance's REDD+ Social and Environmental Standards (2010), amongst others.

Many of the challenges likely to be faced by REDD+ regarding poverty alleviation, participation and equitable benefits for local communities are the same as those faced in CBNRM. Thus, the challenges or even the failures experienced in CBNRM present as much of an opportunity for learning for REDD+ as do the successes. These common challenges include: insecure land tenure and lack of recognition of community rights on 'state' owned land, lack of consultation by government with local communities, community suspicion for government, conservation agencies and international organisations, illegal harvesting of natural resources, lack of enforcement of legislation, lack of information dissemination and transparency, lack of capacity (both within governments and in local communities), lack of awareness, lack of equitable benefit distribution, lack of access to credit, limited access to markets, high transaction costs, weak governance of natural resources, elite capture and corruption, no free, prior and informed consent, fear from governments to devolve authority, lack of understanding of natural resource-poverty linkages, lack of community representation in policy debate at national levels and exclusion from decision-making processes (Maginnis, 2009). These are all issues that need to be addressed in the implementation of REDD+.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[21] Pers comm. November 2009. C. Weaver, Director, WWF in Namibia.
[22] WWF Tanzania, 2009
[23] WWF Zambia, 2010

4. Synthesis and recommendations

4.1 HOW CAN REDD+ WORK AT THE LOCAL LEVEL?

REDD+ has the potential to change the macroeconomic forces that currently drive deforestation and environmental degradation by providing incentives for maintaining forest cover, reducing degradation, enhancing carbon stocks and promoting sustainable forest management. It may therefore provide developing countries with alternative options to manage their natural wealth.

With the growing global interests in combating climate change, developing countries are becoming stewards of natural systems that are essential to the global climate system. This has the potential to transform the relationship between developed and developing countries but also the relationship between national and local stakeholders.

While REDD+ strategies will focus largely on the national scale, they will likely only be successful if they consider subnational circumstances. Only if the protection of natural resources gains sufficient support from the public and key stakeholder groups will REDD+ efforts achieve the scale that is necessary for limiting global climate change to safe levels. This requires that stakeholder groups receive monetary and non-monetary benefits that act as an incentive for them to support such efforts. Therefore, effective revenue distribution systems, governance structure and conflict resolution systems need to be in place in order to ensure that these benefits are realised. In addition, it will be essential to demonstrate how effective and sustainable forest and natural resource management can provide co-benefits that enhance local level resilience to climatic shocks or improve land productivity, in order to counteract deforestation pressures. A clear understanding of the factors that have contributed to the success and failure of CBNRM will thus provide critical information for the planning of REDD+ interventions.

As REDD+ efforts move from preparation and capacity development towards implementation of activities focused on generating emission reductions, there is need for rigorous but practical monitoring, reporting and verification (MRV) methods, which enable performance-based payments. In this context, the involvement of local governments, academic institutions and forest dwelling communities that govern, explore and depend on forest resources respectively, will be important in order to ensure understanding and to gain local ownership of actions aimed at safeguarding tropical forest ecosystems.

As national and subnational architectures for REDD+ are evolving, it is important that REDD+ efforts recognise and build on existing and successful conservation initiatives instead of overwhelming them. Otherwise, there is a danger that this new global effort undermines and possibly destroys relationships that have been built over years or even decades. The knowledge and experience from successful CBNRM and other conservation efforts needs to be integrated into programme architecture, so that successful land-use practices, institutional relationships and stakeholder participation is strengthened and not undermined.

4.2 HOW REDD+ CAN BENEFIT FROM CBNRM AND VICE VERSA

CBNRM programmes can be considered as pilot initiatives for operationalising REDD+ (Bond in Roe et al. 2009). The elements of CBNRM may need to be adapted to take into account the REDD+ architecture at national levels. However, CBNRM provides a foundation upon which REDD+ initiatives can be developed, given that important relationships and governance structures at local and subnational levels have already been developed and established. Building on successful CBNRM structures can therefore save considerable time and costs. There are a number of lessons, both positive and negative, which can guide REDD+ and prevent needless failures. Given the urgency of implementation, it would not be efficient to ignore these lessons as using existing knowledge from CBNRM will hasten the start-up of REDD+ initiatives.

As rights over resources are transferred from the government to the local level in CBNRM, this can be done within REDD+ too. What is proposed in this report for REDD+ on communal lands - in terms of community management of natural resources and decision-making authority over those resources and resulting benefits - is something that governments have already recognised and made commitments to in CBNRM (including CFM) in southern and East Africa.

Integrating CBNRM lessons into REDD+ initiatives can contribute to the sustainability of REDD+ through ownership, local buy-in, and receipt of benefits. The concept of sharing benefits with communities and enabling their active participation is not a new concept, and government authorities should not shy away from it simply because of the large amounts of money now involved. In fact, these potentially large amounts of money can contribute to strengthening existing CBNRM approaches by increasing benefits for local people and providing additional incentives for sustainable natural resource use.

On the other hand, the new-found interest in REDD+ from donors and governments is an opportunity to address

CBNRM challenges afresh, such as security of land tenure and rights. It is an opportunity to diversify income streams for communities, to increase income and benefits for them, and also to make their CBNRM initiative more resilient.

Enabling conditions for REDD+ within existing CBNRM initiatives may include:

- The community already wishes to protect and manage the forest resource, and plans to monitor harvesting.
- The area is already agreed to by the community and designated geographically as a protected area under local, national or customary legislation.
- A community institution to manage resources is already established and is representative and legitimate both internally and externally (e.g. a Community Resource Board as in the case of Zambia).
- There are village scouts / community games guards (or similar) to monitor the resource.
- The community institution already has contacts and partnerships with supporting organisations and other stakeholders working in the area.

4.3 RECOMMENDATIONS FOR THE WAY FORWARD

The overarching purpose of REDD+ is to reduce emissions from deforestation and degradation as well as enhance carbon sequestration and storage. While climate protection is the key driver behind this renewed effort to protect the world's forest, it is also clear that REDD+ activities will only be viable if they adequately recognise development issues and provide sustainable livelihood options. As summarised in the REDD+ Guiding Principles developed by WWF and further discussed in this report, REDD+ activities need to safeguard biodiversity, promote sustainable livelihoods, and ensure the rights of indigenous peoples and communities. Communities that act as stewards of forests need to be rewarded and empowered to fulfil this role in the future. Building on lessons learned from CBNRM, this can be ensured by:

(i) Incorporating the 10 core elements of CBNRM outlined in section 3.2.2 into REDD+ initiatives, as part of the operationalisation of REDD+ activities:

- Devolution of authority to the community to manage resources and the benefit from sustainable use.
- Providing security of rights over resources supported through policies and legislation.
- Applying an incentive-based approach to REDD+
- Ensuring equitable distribution of benefits.
- Establishing effective, accountable and representative community governance institutions.
- Enabling active participation by community members, including support for capacity building.
- Facilitating equal partnerships and collaboration between stakeholders.
- Including local community members in resource monitoring.
- Ensuring access to information, transparency and accountability.
- Providing conflict resolution mechanisms.

(ii) Monitoring REDD+ engagement of developed and developing countries and ensuring that equitable benefit sharing mechanisms are established for communities depending on forest resources for their livelihoods.

(iii) Ensuring equitable community participation in the development of national REDD+ strategies.

(iv) REDD+ initiatives should be developed concurrently from both the top, at a government level, and from the bottom up, working with the community and with their free, prior and informed consent.

(v) Integrating REDD+ initiatives into existing community initiatives where feasible, rather than developing two parallel initiatives which may involve the same people, the same geographic area, resource and issues but double the opportunity and financial costs.

Civil society organisations have a role to play in developing stakeholder capacities, at government, civil society and community level, to understand and engage in REDD+ and ensure that community level concerns are communicated and recognised in the development of the international, national and subnational policy frameworks of REDD+, so that these efforts contribute to protection of the global climate for the benefit of people and nature.

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ANNEX 1:
Engaging stakeholders, stakeholder analysis and suggestions for undertaking community stakeholder engagement in REDD+

ENGAGING STAKEHOLDERS

There are different ways in which to engage stakeholders, for example:

- Establishment of a multi-stakeholder representative organisation / forum, representative of all the stakeholders, to facilitate the participation of all stakeholders and information exchange.
- Broad stakeholder meetings, where all interested parties can be invited to attend.
- Smaller groups which are appointed by stakeholders to discuss matters on their behalf
- Through institutional structures established by the National REDD+ Structures
- Steering Committees or Project Advisory Committees, where selected primary stakeholders provide guidance and oversight to management of particular components or activities of the project
- Provide information through newsletters and community radio shows. The information should be provided in an easily accessible manner. I.e. electronic newsletters may not be the best medium if stakeholders do not have access to email, and local languages must also be taken into consideration.
- Village meetings
- Participatory planning, assessments and monitoring
- Sensitisation and environmental education of stakeholders

(de Villiers, 1999; Sandwith et al., 2001; Katerere, Hill and Moyo, 2001; Metcalfe, 2003; Ali, 2007)

When engaging with stakeholders it is important to bear in mind that most stakeholder groups comprise different people with often similar but nonetheless different needs (Griffen, et al.; 1999).

Furthermore, there is a difference between passive consultation, where stakeholders are simply informed of the process, and active engagement – where stakeholders have power and decision-making authority (Ali, 2007). Active engagement is an important element of CBNRM.

STAKEHOLDER ANALYSIS

Stakeholder analysis includes the identification of stakeholders, and identifying their interest (i.e. 'stake') in the initiative. Some stakeholders will only need to be informed of the process whilst others will need to play an integral role in planning and development processes.

Stakeholders can also identify themselves, and in fact ideally should do so in CBNRM activities. However, realistically there are often cases where as a first step, the project implementers need to conduct a preliminary stakeholder analysis. This will most likely be the case in REDD+. Opportunities can also be provided by national governments for communities to register themselves as stakeholders or interested and affected parties. This requires communications and awareness-raising, as stakeholders can only register themselves if they are aware of the REDD+ initiative and know how and where to register.

Levels of engagement with them will differ according to the category of stakeholder (primary, secondary, etc) and also depend on their 'stake' in the issue, but if they are going to be affected, or can affect the REDD+ initiative, they should have an opportunity to be informed of the process and be able to participate in it.

Ways to assess who stakeholders are and the appropriate level of engagement with them can include identifying:

- All potential supporters and all potential opponents. Engage the critics as well as the supporters.
- People's interest in the REDD+ initiative: e.g. do they live in the area, own land there, use resources, etc?
- How they will be affected (positively or negatively) by the REDD+ initiative.
- How their activities affect the REDD+ initiative (timber harvesting, agriculture in the proposed area, etc).
- Motivation for their interest (financial, social).
- The information they will require and how to communicate it to them.
- Their perceptions of the initiative.
- Who do they influence and who influences them?

However, the ideal situation is if the stakeholders identify themselves. It is also important to understand the needs, interests and concerns of various stakeholders.

SUGGESTIONS FOR UNDERTAKING COMMUNITY STAKEHOLDER ENGAGEMENT IN REDD+

- **Communication** should be exchanged between all parties, not just a one-way flow from one to another. Local community members should be provided with adequate information, in a suitable and accessible format, to enable them to participate effectively.

- **Open Dialogue:** Start talking to local people living in or adjacent to the REDD+ site about the proposed initiative as early as possible in the development process. Political level discussion should be brought down to a local level as soon as possible, and communication should be open and transparent. This will assist to allay suspicion and diminish the effect of potential misunderstandings regarding the impact of REDD+ on communities.
- **Awareness-raising:** Begin sensitisation campaigns for local people about REDD+. This will ensure that the correct information is disseminated about the REDD+ initiative from the outset and will also ensure that misunderstandings do not cause challenges to the development process at a later stage.
- **Potential areas of conflict:** Identify any points of possible conflict, such as differing views on where existing protected area boundaries are, and ways in which to jointly overcome these issues in a mutually acceptable manner.
- **Benefits and negative impacts**: Identify the ways in which REDD+ initiatives may impact, positively and negatively, on the local people. Start seeking ways to avoid or mitigate the negatives.
- **Support organisations:** Involve local NGOs with existing relationships to support the communities in various aspects, such as negotiation skills.
- **Enterprise development:** Identify potential, feasible enterprises from which local people can benefit. These can include tourism products based upon the identified natural resources, or veldt product development, or other required local enterprise development, such as a sewing enterprise.
- **Allow adequate time:** Building relationships and trust to enable open engagement can take time. It also takes time to seek people's views, reconcile different views, and to provide feedback on the process. Local people should also be given adequate time to digest information, disseminate it to the broader community and provide feedback on plans.
- Develop **joint vision** and objectives.
- Identify **shared resources** and other shared issues
- **Flexibility:** the process should be flexible to accommodate stakeholder requirements. Plans need to be able to evolve as people's understanding of a situation evolves and as more information becomes available. Periodic reviews should be built into the process.
- Provide **appropriate incentives** for stakeholders to become involved.
- Take potential barriers to participation into consideration in planning and budgeting.
- Incorporate **local knowledge** and use of resources into the REDD+ implementation plan / management plan.
- Involve participants in **defining the participation process;**
- Treat stakeholders as **partners,** not as obstacles.
- Consider appointing a **stakeholder facilitator** or community specialist to manage the participatory processes.

(Adapted from Sandwith et al., 2001 pertaining to local stakeholder engagement in transfrontier conservation areas).

NOTES

NOTES

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BIODIVERSITY

New species continue to be found, but tropical species' populations have fallen by 60% since 1970

BIOCAPACITY

Per capita productive land now half the level of 1961

DEVELOPMENT

There are 1.8 billion people using the internet, but 1 billion people still lack access to an adequate supply of freshwater

AWARENESS

34 per cent of Asia-Pacific CEOs and 53 per cent of Latin American CEOs expressed concern about the impacts of biodiversity loss on their business growth prospects, compared to just 18 per cent of Western European CEOs

WWF

Why we are here.
To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.