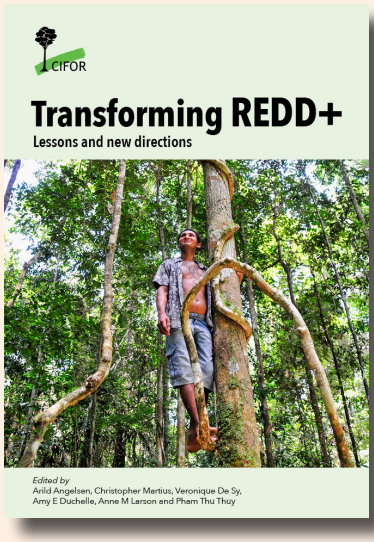
Chapter 16

Conclusions

Lessons for the path to a transformational REDD+

Arild Angelsen, Christopher Martius, Amy E Duchelle, Anne M Larson, Pham Thu Thuy and Sven Wunder



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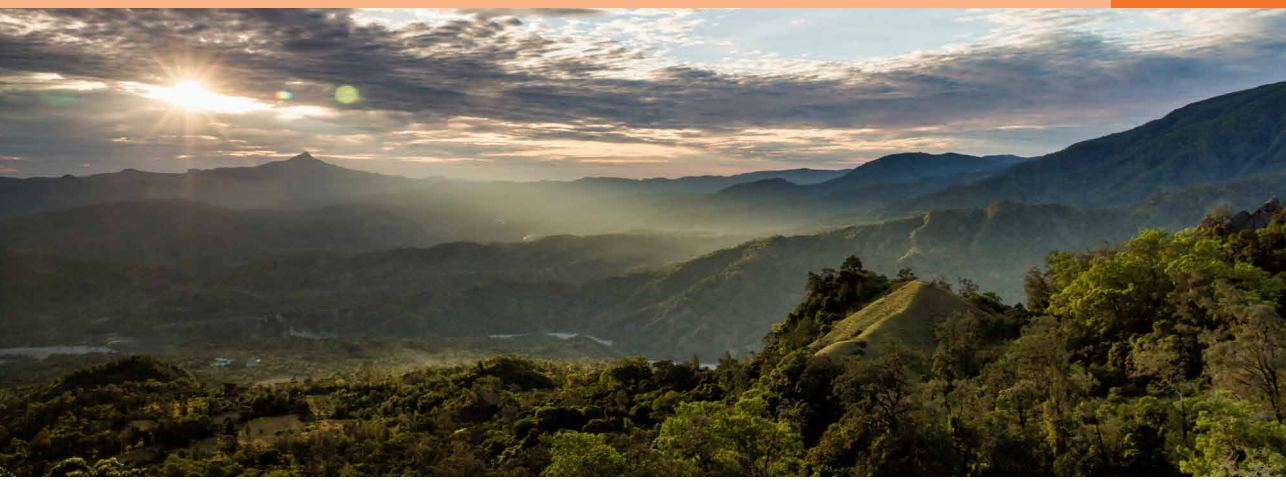
Chapter 16



Conclusions

Lessons for the path to a transformational REDD+

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Key messages

- Results-based payment, REDD+'s innovative feature, has largely gone untested. International funding (both public and private) remains scarce, and demand through carbon markets is lacking.
- REDD+ helped forests gain prominence on the international and some national policy agendas. National REDD+ initiatives improved countries' monitoring capacities and understanding of drivers, increased stakeholder involvement, and provided a platform to secure indigenous and community land rights. Local REDD+ initiatives have achieved modest but positive outcomes for forests. Well-being impacts have been limited and mixed, but are more likely to be positive when incentive components are included.
- For REDD+ to be effective, forest-based mitigation needs to be incorporated in national development and climate action plans, and mainstreamed across sectors and levels of government. A strong positive narrative on how forests contribute to economic development and climate goals can support this integration.

16.1 Success, or lack thereof, depends on expectations

REDD+ has not achieved what many actors expected a decade ago: rapid, cheap and lasting reduction of emissions from tropical deforestation and forest degradation. Generally, one potential explanation for unfulfilled expectations is that the initial hopes were unrealistic. In contrast, with lowered expectations, the smallest advances will be perceived as success. But human nature is ambitious. 'Optimism bias' is among our cognitive flaws; we systematically overestimate the likelihood of our success, and underestimate the likelihood of our failure (Sharot 2011).

In hindsight, many initial hopes for REDD+ were indeed idealistic. Writing on the "dynamics of expectations" in REDD+, Massarella *et al*. (2018, 375) note that typically, in their early stages, international conservation and development programmes get significant funding and much attention, and generate high expectations, which are then rarely fulfilled. High expectations – and some degree of naïveté – play a role in consciously mobilising finances and enthusiasm, thus increasing the chances for success; however, they also drive up expectations, and therefore set the stage for major disappointments.

In this chapter we take stock of nearly a decade of REDD+ initiatives at global, national, subnational and local scales. Inspired by the use of medical metaphors (e.g., Seymour 2018; Wunder 2018), with forest loss being the targeted 'disease' and REDD+ the alleged 'cure', we summarise notable achievements and disappointments (the cure's impacts), and how to explain these (diagnosis). We then look ahead (prognosis), and provide suggestions for how REDD+ could become more transformational (an improved cure). In the epilogue we ask, what will happen to the REDD+ concept itself as it begins to mature?

16.2 On balance, what has REDD+ achieved so far?

We summarise the achievements using main steps in a theory of change (Chapter 2). Most REDD+ initiatives have so far failed to make decisive headway towards stopping tropical deforestation (Box 1.1; Chapters 9 and 10). But it is important to take stock of the building blocks established, and the intermediate milestones achieved. Our evaluation draws on the research presented in this book, as well as an earlier summary of national and subnational REDD+ implementation to date (Duchelle *et al*. 2018a).

16.2.1 Finance and building blocks

The amount of finance committed to REDD+ activities – USD 1.1–2.7 billion per year – falls well short of prior expectations, yet is significantly above past funding for forests (Chapter 3). Readiness funding, combined with dedicated national efforts, has in many countries improved the enabling conditions to address deforestation and forest degradation, including promoting a better

understanding of deforestation drivers, improving forest monitoring capacities, increasing stakeholder engagement, and providing a platform to secure indigenous and community land rights (Lee and Pistorius 2015; Romijn *et al*. 2015; Chapters 6 and 8). But new information as well as political goodwill will be needed by all actors to address issues of participation, transparency, accountability and coordination across sectors and levels of government (Chapters 5 and 7).

Although results-based payment (RBP) is a cornerstone of REDD+, moving from the readiness to the results-based finance stage remains challenging (Chapters 2 and 4). RBP likely contributed to forest policy and governance advances in Brazil, Guyana and Indonesia (Seymour and Busch 2016), but current and emerging RBP initiatives arguably compromise on some key principles, including payments based solely on results and at recipient discretion over how results are achieved, and independent verification of results (Chapter 4). Some forest-rich countries have already made important financial contributions to REDD+ implementation, and this should be better acknowledged in global finance discourses and negotiations (Chapter 3).

At the same time, newer, potentially complementary, global initiatives have appeared on the world stage. Zero deforestation initiatives are considered key for addressing agricultural drivers of deforestation, but are marred by implementation challenges and knowledge gaps (Chapter 13). Several countries are addressing the agricultural sector head-on, including by placing climate-smart agriculture (CSA) on their agendas, but the impacts of these initiatives on forests is uncertain, and often not monitored (Chapter 14). Similarly, although restoration is critical to enhancing carbon stocks (the 'plus' in REDD+), few initiatives track their carbon impact progress, or deal effectively with the drivers of degradation (Chapter 15).

16.2.2 REDD+ intermediate outputs and outcomes

A decade of national and international debate has drawn attention to key REDD+ dimensions that can make a difference in forest-based mitigation, such as addressing equity concerns, ensuring inclusive decision-making (Pham *et al*. 2017b), providing transparent and accountable information and data (Khatri *et al*. 2016), and promoting the participation of indigenous peoples (Brockhaus *et al*. 2017). More than 50 countries now recognise the important role of reducing forest-based emissions in their NDCs, and a similar number have elaborated national REDD+ strategies.

The initiation of REDD+ led to hundreds of 'demonstration activities,' with currently more than 350 REDD+ projects in 53 tropical countries covering 43 million ha (Chapter 10). While some can report positive outcomes (Chapters 10 and 11), others are limited by their inability to address agents and contextual drivers of deforestation, including broader issues such as tenure security, which in some cases must be addressed at higher levels (Chapter 8).

Against the background of the challenges of early national- and project-level approaches to REDD+, subnational jurisdictional approaches – government-led, holistic approaches to forest and land use across legally defined territories – have begun to emerge. They encourage alignment between REDD+ incentives, sustainable supply chain initiatives, domestic policies and finance to address the interconnected issues of deforestation, rural livelihoods and food security (Nepstad *et al*. 2013a). A recent analysis of progress towards jurisdictional sustainability in 39 states and provinces in 12 tropical countries, which hold 28% of the world's tropical forests, highlights formal commitments to reducing deforestation and concrete actions to implement these pledges (Chapter 12).

16.2.3 REDD+ impacts on forests and people

Lessons on the effects of REDD+ interventions are useful to inform the design and implementation of REDD+ policies and measures at higher scales. But the lack of studies that use a counterfactual scenario to reliably measure REDD+ impacts limits broad conclusions. At the national level, no particular forest conservation policy instrument stands out as a 'silver bullet'. Achieving the multiple objectives of REDD+ will likely require policy mixes that are sensitive to local contexts (Chapter 9). Although subnational jurisdictional approaches hold promise, there has been little rigorous assessment of their outcomes thus far (Boyd *et al*. 2018; Chapter 12). At the local level, the few studies that focused on carbon/land-use outcomes show moderately encouraging results (Chapter 10), while the more numerous studies on well-being show small and mixed results, which are more likely to be positive when incentive components are included (Chapter 11).

Results based on rigorous evaluation of 23 local REDD+ initiatives in CIFOR's Global Comparative Study on REDD+ (GCS REDD+; Box 1.2) highlight some important, though still quite embryonic, lessons. First, more than half of the 23 initiatives reduced deforestation at the community level, although with small effect sizes (Bos *et al*. 2017; Chapter 10). Second, no systematic negative impacts of REDD+ on local welfare were observed at these sites (Sunderlin *et al*. 2017; Chapter 11), with some site-level evidence of significant livelihood benefits (Duchelle *et al*. 2018c). Third, issues embedded in national law, such as land tenure, cannot be fully addressed at the project scale. For instance, while REDD+ interventions did not worsen smallholder tenure insecurity, there is little evidence that implementers' efforts to address tenure security produced notable results (Sunderlin *et al*. 2018; Chapter 8). Fourth, while there are examples of REDD+ projects enhancing women's participation in village decision-making (Kariuki and Birner 2016; Sharma *et al*. 2017), there is also evidence that implementers could do more to promote gender equality and safeguard women's rights (Larson *et al*. 2018; Chapter 11). Very little of this knowledge and experience has been applied to REDD+ decision-making at the national level; most REDD+ strategies are gender blind and a lack of concern for gender issues prevails among national organisations working on REDD+ in developing countries (Pham *et al*. 2016).

Fifth, meaningful participation in local REDD+ initiatives is often limited, including non-comprehensive free, prior and informed consent and insufficient attention to integrating local needs (Chapters 7 and 11). Finally, incentives for smallholders and communities can significantly alleviate the burdens of land-use restrictions, including those delivered through national-level policies (e.g., through law enforcement or protected areas), which are associated with some REDD+ initiatives (Duchelle *et al.* 2017; Chapter 11).

Our findings mirror the long-recognised micro–macro paradox of development aid (Mosley 1987; Arndt *et al.* 2010): satisfactory results at the project level are not necessarily matched at the macro level (with some notable exceptions, e.g. Brazil). Development aid literature offers a number of explanations, which – translated to the REDD+ context – include: crowding-out of other conservation initiatives (e.g., public expenditure switching), leakage to areas outside project boundaries, or simply the fact that projects are too small and too few to have any detectable macro-level impact. Indeed, Brazil's success in reducing deforestation was largely due to national-level policies.

16.3 Why was progress less than expected?

How can we explain the lack of progress described in the previous section? We summarise and discuss four hypotheses put forward in the debate, using a medical metaphor.

16.3.1 'REDD+ is the wrong medicine'

The hypothesis that REDD+, either as envisioned or as practised, is the wrong solution comes in at least four versions:

(i) REDD+ relies too much on RBP. Some claim that *REDD+ was (and still is) flawed in its reliance on results-based payment (RBP)*. The argument put forward by, among others, Fletcher *et al.* (2016) is that REDD+ is a market-based instrument, the design of which is fundamentally flawed. Angelsen *et al.* (2017) have contested that this argument itself is flawed: REDD+ as practised cannot be labelled a market-based instrument, and this critique seems to address REDD+ as initially envisioned, not as currently practised. It therefore cannot explain the lack of results. However, one could argue that the REDD+ concept initially relied too much on RBP, and that it could have been more successful if other components such as unsolved tenure issues and drivers had been better addressed early in REDD+ design.

(ii) REDD+ relies too little on RBP. In direct contrast with the previous hypothesis is the proposition that *REDD+ as truly results-based payment has never been tested, which is why REDD+ has not delivered the envisioned results*. In reality, most current REDD+ projects are hybrid interventions with limited application of conditional payments; often modified versions of pre-REDD+ integrated

conservation and development projects. But this hypothesis, just as the previous one, is hard to test, as we do not know how REDD+ would have developed, nor how effective it would have been, in the alternative scenario of truly results-based payment. Chapter 10 suggests that we have too little evidence to conclude on the effectiveness of conditional payments vis-a-vis other types of interventions. Yet literature on PES points to the challenges of designing genuinely conditional initiatives that are both effective at reducing forest carbon emissions and strongly pro-poor (Chapter 11).

(iii) REDD+ has become projects, not national policy reforms. Still others argue that the continuous *implementation of REDD+ through projects, without moving on to the alleged national policy focus, has caused REDD+ to underperform*. This explanation holds some truth, but is also overly simplistic. The Bali Action Plan (UNFCCC 2007), which defined and launched REDD+, proposed subnational 'demonstration activities', but the emphasis was on policy approaches and national-level action. Conservation and development NGOs were quick to tap into the new funding opportunities that REDD+ provided, while national policy reforms faced resistance from powerful actors that profited from continued forest conversion and exploitation. National policies can be very effective (Assunção *et al.* 2012, on the case of Brazil). Chapter 12 highlights how subnational jurisdictional approaches show more promise, as they operate at higher scales, in departure from the 'project-ification' of REDD+. Yet in some cases, local projects can serve as a proof of concept, or a nudge to broader action.

(iv) REDD+ has not granted tenure rights to indigenous peoples and local communities. Another important hypothesis is that *securing the land and forest tenure rights of indigenous peoples and local communities is the best way to protect forests, and that not enough progress has been made on these efforts under REDD+*. Community management of forests has been shown to reduce deforestation rates in Bolivia, Brazil and Colombia (Stevens *et al.* 2014; Blackman and Veit 2018). A recent study looking at 52 tropical and subtropical countries found that 22% (218 GtC) of the forest carbon in these countries was stewarded by indigenous peoples and local communities, but that a third of this area lacks formal recognition of their tenure rights (RRI 2018b). Meanwhile, other studies have found that community titling alone will not be enough to protect forests (Robinson *et al.* 2014). A recent meta-analysis found no consistent association between more secure land tenure (land ownership, legal title, or duration of occupancy) and either higher or lower deforestation (Busch and Ferretti-Gallon 2017). Indeed, while climate mitigation actions might overlap with local priorities, communities have no particular incentive to include global climate effects in their decision-making. The extent to which securing tenure alone would have worked is therefore hard to assess. While it may in some cases exclude large commercial users, it is likely that additional incentives or regulation might be needed in forests under significant pressure.

16.3.2 'The dosage is too small'

The second hypothesis is that *REDD+ funding (the 'dosage') has been too small for impact*. International results-based payments were never implemented at the scale initially envisioned, of about USD 10–15 billion per year (Stern 2007); with current disbursements at only 7–25% of this (Section 16.2), REDD+ simply was unable to make a difference. In addition to this, current REDD+ funding is also dwarfed by the subsidies for key forest-risk commodities (beef and soy in Brazil, palm oil and timber in Indonesia) which, for these four commodities combined, amount to USD 40 billion per year (McFarland *et al.* 2015, 43). Such subsidies significantly foster private investment in activities that drive deforestation.

Lack of predictable long-term funding has led many local REDD+ initiatives to shy away from making conditional payments; they were afraid to raise expectations to levels they could not eventually fulfil (Sunderlin *et al.* 2015). Limited prospects for large-scale results-based funding may also have kept some actors from getting involved.

While we agree that much higher future investments in REDD+ are needed, there are also weaknesses in this argument. Significant amounts of pledged REDD+ funding are yet to be spent; unspent Norwegian support alone corresponded to NOK 10.5 billion (ca. USD 1.2 billion) by the end of 2016 (Development Today 2017). If such funding had been too easily available without institutions and capacities in place to ensure transparency and accountability, we could now be looking at a vast sea of inefficiencies and corruption. This could have buried REDD+ very quickly. Thus, while urgency is needed, careful, accountable and transparent spending is imperative.

16.3.3 'The disease has progressed too far'

Research suggests that *REDD+ has been blocked by powerful actors*. This links to the previous 'too small' hypothesis, but takes more of a fatalistic approach. The argument goes that REDD+ activities, often focused on smallholders and indigenous peoples, have ultimately failed to challenge the powerful actors behind deforestation and forest degradation. Essentially, this argument is about power imbalances. Powerful actors interested in maintaining the status quo, such as private companies driven by profits from natural resource overexploitation and state institutions promoting exploitation as a route to economic growth, have blocked reforms (Brockhaus and Di Gregorio 2014; Luttrell *et al.* 2014).

There is some sense in this perspective. The key idea of REDD+ as a global RBP system was to make forests more valuable as carbon sinks than as suppliers of agricultural land and unsustainably harvested timber. REDD+ was – and perhaps still is – an idea to buy out these interests. The amount of mobilised funding has not

permitted that, and maybe it never will. Using development aid – the main source of international funding for REDD+ – to buy out large commercial actors would never have been politically feasible in donor countries. If the loss of government revenue was fully compensated, however, perhaps this could have provided a sufficient incentive for national governments to change key policies, such as land concessions, agricultural subsidies and infrastructure investments.

16.3.4 'Recovery is possible, given more time'

The REDD+ verdict depends not only on perceptions and expectations, but also on time. The main conclusion from Section 16.2 – that there have been some positive intermediate outputs and outcomes but few significant impacts – *may* indicate that we will eventually see significant emissions reduction and other co-benefits. The many small steps of recovery taken together, one could argue, will eventually make a large impact in the future – we just have to be patient. Innovations take time to get a foothold, more than human short-sightedness and impatience (yet another behavioural flaw) will sometimes allow.

As for whether or not this moderately optimistic view of the future of REDD+ will play out, only time can tell. A more cynical response would be that words are cheap, while actions are costly. The progress made so far in terms of, for example, including REDD+ in NDCs and developing policy strategy documents, does not make much of a real difference on the ground, unless these policies are implemented effectively. Implementation is hindered by both local capacity and funding constraints, as well as powerful interests. The pessimist would thus expect many national governments – developed and developing alike – to end up 'thinking globally and acting verbally'.

16.4 How can REDD+ become more effective?

If we still accept the notion that REDD+ constitutes an adequate cure for deforestation and forest degradation, what needs to be done differently for it to achieve its goals?

16.4.1 Diversifying and coordinating the cure

Results-based payment with diversification. Monetary incentives and compensation are needed for REDD+ to be not only effective and efficient, but also equitable. RBP will likely continue to play a large role in REDD+, however REDD+ as an objective must be underpinned by broader efforts. At national and subnational levels, policy reforms that go beyond RBP are needed, including those that focus on land-use planning, tenure and agriculture. Instead of a one-size-fits-all approach, a programmatic approach to the complexity of land-use decision-making is needed to address the variety of drivers and problems.

Better coordination and country ownership. In moving towards jurisdictional approaches at subnational and national scales, there is a need for better policy

integration and coordination to address underlying deforestation drivers and ensure broad incentives. To date, however, those who deforest have often been more effective at coordinating their efforts to achieve their land- and resource-related goals, than those supporting REDD+ or other initiatives that combat deforestation and climate change (Ravikumar *et al*. 2018). Cross-sectoral coordination has worked best when a central government mandates collaboration, an effective overarching institution guides the process, and a master plan with buy-in from all sectors is provided (Chapters 6 and 7). REDD+ has created new platforms for cooperation, but fostering lasting change may require a new forests-for-development narrative and a broader coalition for change (Section 16.4.3).

Being at the table. As some indigenous leaders have aptly been heard to say, "if you are not at the table, you are likely to end up on the menu" (Roberto Borrero, International Indian Treaty Council, GLF Bonn 2017). The light that REDD+ has shone on well-known rights concerns has provided platforms and opportunities for the creation, in some cases, of legal norms to protect the rights of indigenous peoples. REDD+, however, has had greater positive impact on participatory rights than substantive ones (Jodoin 2017). Indeed, secure indigenous, traditional and rural community rights in many cases could be central to successful forest-based mitigation strategies.

16.4.2 Finding the right dose

International finance nudges … Current international REDD+ finance, made available through a few intrepid donors, is insufficient. Emerging market-based approaches for tropical forest offsets under regulated compliance markets could help close the gap between the funding available for REDD+ and what is needed to meet the Paris Agreement objectives (EDF and Forest Trends 2018). The proposed Tropical Forest Standard in California's Cap-and-Trade Program (Chapter 12), and the International Civil Aviation Organization (ICAO) market-based measure (Gonçalves 2017), which is under negotiation, are two such examples. Additionally, the potential of Internationally Transferred Mitigation Outcomes, in relation to Article 6 of the Paris Agreement, could provide an important future financing stream for REDD+ (Streck *et al*. 2017).

… but domestic incentives decide. A new perspective emerges from the fact that many forest-rich countries invested considerable domestic finance, or reallocated financial flows within the country, to incentivise forest conservation and restoration. In 2014, India created the first ecological fiscal transfer for forests, estimated at USD 6.9 to 12 billion annually (Busch and Mukherjee 2018; Chapter 4). There are also emerging opportunities in Colombia and Indonesia in terms of their respective carbon tax and green bonds programmes, and innovations in domestic rural finance, as seen with Brazil's low-carbon agricultural credit programme (Nepstad *et al*. 2013b). These examples do not necessarily put extra burdens on central governments' budgets; rather they change the economic incentives for state and private actors in a way that is compatible with green development strategies.

Bold policies are sorely needed. The notion of incremental, evolutionary change is appealing, in the sense that 'many small streams make a big river'. On the ground, REDD+ has evolved into many pragmatic, locally-adapted solutions that address the objective of reducing forest-based emissions in a dozen different ways. Yet our analyses have shown the limitations of 'small streams', at least when they remain very small. Bold forest conservation and restoration initiatives are sorely needed, such as those seen in Brazil, Costa Rica, Ethiopia, India and South Korea. Such initiatives have also been characterised by national political and intellectual ownership through a pro-forest narrative, a political will to act and carry through with decisions sometimes over decades, and the existence of coordinated multi-ministry efforts. Change has to come from both the top and the bottom; REDD+ needs massive roll-out in big jurisdictional programmes, but also needs the many grassroots approaches that are more adaptive, and hence sometimes, more effective. The main ingredient missing now is more national governments willing to take on bold policy reforms to integrate forests into national planning and to change fundamental economic incentives for land-use decisions.

16.4.3 Nurturing optimism by stressing positive side effects

A positive, exciting narrative on forests. New national narratives are needed about the positive role that forests can play in support of the UN Sustainable Development Goals, not primarily as reservoirs of agricultural land, but as providers of key products and services for economic development. Rather than dwelling on doomsday scenarios, a positive narrative of green/sustainable development can mobilise farmers and firms, voters and politicians (Nepstad 2018).

Recent science has equipped us with strong arguments to support such a narrative. Forests play a critical role in local livelihoods, providing a fifth of household income in forest-rich locations (Angelsen *et al*. 2014). Forests also support food security and contribute to improved nutrition for rural populations (Sunderland *et al*. 2013; HLPE 2017). Sustainably managed forests will provide key recyclable materials (timber, fibre and fuel) for a bio-based, circular green economy (Stern *et al*. 2018). Likewise, forests provide numerous environmental services, including water filtration, flood control, biodiversity conservation and agricultural pollination (TEEB 2010). Exciting new research points to the role of forest's as a bio-pump; precipitation is recycled by forests and transported through 'aerial rivers'. As Ellison *et al*. (2017) note: "Forests and trees must be recognized as prime regulators within the water, energy and carbon cycles". Without this water supply, whole breadbasket regions might fall into drought and depression.

16.4.4 Shortening the long road to recovery

Experimentation needs support. Forest loss is embedded in complex political and economic systems, characterised by a 'path dependence' that often results in slow changes (Brockhaus and Angelsen 2012). Yet despite the lack of financing and

the sluggishness of REDD+ to date, a lot of experimentation has happened and is continuing across the tropics. To further move REDD+ forward beyond debate to practical action, stakeholders could support both existing innovative experiments and encourage new ones. Likewise, if countries felt able to develop a moderate risk appetite and attempt policy experimentation, all actors could learn, adjust and scale up.

Be brave and assess impacts. Very few rigorous studies are available to assess the forest impacts of REDD+ interventions. This is surprising, given that this was the initial rationale of REDD+, and carbon or tree cover are relatively easy to measure compared with social impact assessment. Why? Chapter 10 points to a mix of financial, technical and political challenges, highlighting that "independent evaluations can be risky, as disappointing short-term evaluated impacts in a learning phase could jeopardise the future financing of REDD+ projects and programmes". Projects and policies are showcases for both practitioners and politicians, and concerns about perceived failure can prevent sound learning and the development of more effective interventions. It is vitally important that impact assessment is not an afterthought; for true learning to take place, it requires careful integration from the outset, with data collection and a plan for establishing a realistic counterfactual or baseline against which to measure true impacts.

16.5 Epilogue: REDD+'s next decade

Some take the birth year of REDD+ to be 2005 (at that time, just 'RED'), when the basic concept of compensated reductions was put on the UNFCCC agenda at COP11 in Montreal. Thus, REDD+ is now entering its 'teenage years', still full of potential but at risk of going in the wrong direction – or in too many directions. We look at three potential scenarios for the future of REDD+.

In one scenario, REDD+ matures and results-based payments are being broadly applied at jurisdictional scales. REDD+ becomes well integrated into national planning, and is successfully coordinated across sectors and levels of government. Local initiatives on tenure and indigenous rights are supported by national policy reforms. Public and private initiatives in agricultural supply chains support these efforts, and restoration of forest carbon starts reviving degraded landscapes.

In another scenario, the original idea of REDD+, emphasising economic incentives to bring about change, is fading away, becoming the latest in a long series of conservation fads (Redford *et al.* 2013). The risk is that 'REDD+ the objective' simultaneously loses ground on the climate agenda, driven by widespread fatigue among all stakeholders involved, who are concluding (too hastily) that deforestation and forest degradation were too hard to reverse. Or, these stakeholders turn their attention to the 'next new thing', an exciting fad that keeps them energised and hopeful for the next few years.

A third scenario sees REDD+ as an objective maintained, but with a different name and a revised approach. The incentive-driven theory of change is de-emphasised, but incentives maintain a space in the toolbox alongside other tools. A re-baptised and revamped REDD+ brings about change by embracing new actors and sectors, thus becoming a centrepiece of broader low-emission/green/sustainable development approaches.

We – all stakeholders involved in REDD+, including researchers such as us – will determine the future fate of REDD+. We have the collective power to choose in which direction REDD+ will go, or which combination of these scenarios ought to prevail.

The preferred REDD+ scenario may differ markedly among stakeholders, but perhaps we can still agree on a few things. First, regardless of how its name may evolve, the objective of REDD+ cannot be altered or diluted. Arguably, the world cannot stay below the 1.5°C or even 2°C targets without massive reductions in emissions from deforestation and forest degradation and increases in forest carbon stocks. Second, we should maintain a critical and open debate on the means to stay below that target. Critical, because investing heavily in ineffective initiatives would be fatal for our climate. Open, because the current debate often reflects ideologically biased positions, or particular vested stakeholder interests pursuing alternative agendas that cloud their judgment – and eventually prevent them from learning.

The balancing act, which we as editors have sought to strike in this book, has been that of providing a constructive critique: a critical, evidence-based analysis of REDD+ implementation so far, without losing sight of the urgent need to reduce forest-based emissions to prevent catastrophic climate change.

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