## Editorial—REDD+ in Cambodia: how local communities can benefit from forest conservation

YEANG Donal<sup>1,\*</sup>, Harri WASHINGTON<sup>1</sup>, KEN Sereyrotha<sup>1</sup>, Paris CHOUP<sup>2</sup>, Jeffrey SILVERMAN<sup>1</sup>, TENG Rithiny<sup>1</sup> & Simon MAHOOD<sup>1,3</sup>

<sup>1</sup> Wildlife Conservation Society, No. 21, Street 21, Tonle Bassac, Phnom Penh, 12000, Cambodia.

<sup>2</sup> National Council for Sustainable Development, No. 48, Samdach Preah Sihanouk Boulevard, Phnom Penh, 12301, Cambodia.

- <sup>3</sup> Research Institute for Environment and Livelihoods, Charles Darwin University, Ellengowan Drive, Casuarina NT 0810, Australia.
- \* Corresponding author. Email dyeang@wcs.org

REDD+ is an international initiative for reducing emissions from deforestation and forest degradation, coupled with conservation and sustainable management of forests and enhancement of forest carbon stocks. Key aspects of the initiative include safeguarding local livelihoods, alleviating poverty and improving tenure security for rural people in developing countries (Lawlor *et al.*, 2013). REDD+ also has the potential to deliver enormous benefits for biodiversity conservation because forests in the developing world provide a diverse set of habitats for plants and animals and are widely threatened by ongoing forest clearance and degradation (Gardner *et al.*, 2012).

REDD+ is one of the most developed mechanisms for payments for ecosystem services in Cambodia and can address the urgent national need for sustainable sources of finance for protected area management (Simpson & Souter, 2017). Cambodia has already completed its REDD+ readiness stage, including implementation of several REDD+ demonstration projects. In May 2017, the Royal Government of Cambodia endorsed Cambodia's national REDD+ strategy for 2017–2026. The strategy focuses on improving management and monitoring of forest resources and forest land use, strengthening implementation of sustainable forest management, mainstreaming approaches to reducing deforestation, building capacity and engaging stakeholders.

Cambodian REDD+ demonstration projects have contributed to development of the national REDD+ strategy and will continue to foster improvements to national and project-based approaches. The following projects have been approved by the Royal Government of Cambodia: Oddar Meanchey Community Forestry REDD+ project, Keo Seima Wildlife Sanctuary REDD+ project (previously known as the Seima Protection Forest REDD+ project), Prey Lang REDD+ project, Tumring REDD+ project (in collaboration with the government of the Republic of Korea), and the Southern Cardamoms REDD+ project. All of these operate in the voluntary carbon market, and most are independently accredited using the Verified Carbon Standard (VCS; now known as Verra) and the Climate, Community and Biodiversity Alliance (CCBA) standards. The Prey Lang project is being designed and implemented under the Joint Crediting Mechanism in collaboration with the Japanese government.

One of Cambodia's first REDD+ projects, in Oddar Meanchey Province, has faced several challenges including land grabbing in community forests by outsiders, which drives deforestation in the project area. In 2008, border conflict with Thailand around the Preah Vihear temple complex resulted in the establishment of several military camps within the project area, which negatively affected project implementation due to security issues. Funding shortfalls and the proposal of a complex mechanism for REDD+ benefit-sharing has delayed the distribution of benefits to communities involved in the project, reducing incentives for cooperation. In addition, due to stakeholders' limited understanding of how the voluntary carbon market functions, particularly the need to actively pursue sales, the project raised unrealistic expectations of the amount of revenue that the local community would receive from carbon sales. Project partners, particularly technical partners such as Pact Cambodia and Terra Global Capital, and local NGOs, have withdrawn due to the lack of funding from donors and carbon sales available to support project activities. According to the VCS database (www.vcsprojectdatabase.org), 48,000 of the 597,210 carbon credits certified in the first verification (2008-2013) have been sold, although revenue from these sales has yet to be distributed to local communities. Much work is needed to restore confidence in this project.

The Cancun safeguards under the United Nations Framework Convention on Climate Change (UNFCCC) require individual countries to make provisions in social, ecological and political spheres to mitigate adverse effects of REDD+ and promote additional benefits. There is particular focus on measures to respect indigenous rights and ensure the "full and effective participation" of communities and equitable benefit sharing (Chapman et al., 2015). The CCBA standard requires local community participation, equitable benefit sharing and improved tenure rights for local and indigenous communities. Often, only the financial benefits of REDD+ are considered. However, a range of non-financial benefits can also accrue from REDD+, including security of land tenure rights, employment, improved wellbeing, promotion of traditional knowledge and cultures and biodiversity conservation (Lawlor et al., 2013). Benefit sharing can help build the legitimacy of and support for REDD+ projects (Lindjhem et al., 2011) and is therefore crucial for successful project implementation.

Another early demonstration project, the Keo Seima Wildlife Sanctuary (KSWS) REDD+ project, has the most developed strategy for sharing REDD+ benefits with local communities. This builds upon lessons learned from the Oddar Meanchey project and is adaptive, allowing improvements when additional insights from it or other projects become available. Benefit sharing in KSWS combines strengthened resource rights, alternative livelihood projects and additional bonus incentives for community development projects. The first two are important for long-term project sustainability, whereas additional bonus incentives encourage community engagement and show how local communities can benefit from REDD+ and forest conservation (Duchelle et al., 2017). In the future, some of the additional bonus incentives awarded in KSWS will be performance-based, with the aim of encouraging positive changes in behaviour.

Following the sale of the first certified credits from the KSWS REDD+ project, the first round of unconditional bonus incentives has been awarded to local communities. These have supported community development activities including construction of community meeting halls, road culverts, toilets, water pumps, and running water systems; school renovations; and development of community-based ecotourism. Based on preferences expressed by the community and previous research in the project area (Travers *et al.*, 2016), these benefits are shared at the community level rather than as payments to individual households. Challenges encountered during the first round of benefit sharing include a lack of capacity in communities for financial management of their development projects, and the difficulty in optimizing the trade-off between ensuring a high level of transparency and accountability of financial procedures and using processes that are simple enough for community representatives to follow effectively.

Implementation of REDD+ demonstration projects and completion of the REDD+ readiness process have provided invaluable insights to ensuring the long-term success of the initiative in Cambodia. Benefit sharing should play a central role in REDD+ projects, with a focus on delivering financial and non-financial benefits. These can jointly contribute to improving the livelihoods and welfare of local communities that rely on forest resources in project areas. This combined approach to REDD+ benefit sharing can improve community participation in projects and contribute to reducing deforestation (e.g., through participation in community-led patrols and deforestation monitoring). Non-financial benefits provide the bulk of available benefits and their importance to a successful REDD+ project should not be underestimated. Sharing of financial benefits is likely to become possible only at later stages in project implementation, once sales of verified carbon credits have been made.

It is important to ensure that there are adequate sources of funding available to support project costs, especially in the early stages, which are typically costintensive and precede the generation of revenue through sale of carbon credits. Securing funding for these early stages is particularly significant as key activities in this period should include creating a benefit sharing system and building community capacity to enable full participation in the project. Priority areas for capacity building include financial management, administration and conceptual understanding of REDD+. Capacity building is essential throughout a project's lifetime, and dedication of considerable time and effort to raising awareness and building capacity in local communities will further the benefits that can accrue to them as a result of REDD+.

Simple financial procedures and a transparent system for sharing conditional and unconditional incentives from a REDD+ project should be designed with community input. This is an important step in obtaining free, prior, and informed consent and serves to increase the likelihood that communities have realistic expectations of what their REDD+ project can achieve.

Effective implementation of REDD+ benefit sharing depends on specific political and social contexts (Fischer *et al.*, 2016). As such, the lessons learned from REDD+

projects in Cambodia will be critical for the development of procedures for REDD+ benefit sharing nationally. This is timely because Cambodia is now preparing for REDD+ results-based payments under the UNFCCC. Previously, the impact of pilot REDD+ projects on national decisionmaking has been limited by a lack of sharing information (Korhonen-Kurki et al., 2012). The national technical working group on REDD+ benefit sharing in Cambodia intends to foster an environment where experiences are readily exchanged to inform the future success of REDD+ in Cambodia. We encourage all those involved in REDD+ projects in Cambodia to continue to share their experiences, both positive and negative, with the working group to maximize the utility of lessons learned and increase the extent to which local communities can benefit from forest conservation.

## References

- Chapman, S., Wilder, M., Millar, I., Dibley, A., Yeang D., Heffernan, J., Sherchan, K., Maguire, R., Kago, C.W., Kamunde-Aquino, N., Kiguatha, L., Idun, Y.F.A., Doshi M., Engbring, G. & Dooley, E. (2015) A legal perspective of carbon rights and benefit sharing under REDD+: a conceptual framework and examples from Cambodia and Kenya. *Carbon and Climate Law Review*, 9, 143–155.
- Duchelle, A.E., de Sassi, C., Jagger, P., Cromberg, M., Larson, A.M., Sunderlin, W.D., Atmada, S.S., Resosudarmo, I.A.P. & Pratama, C.D. (2017) Balancing carrots and sticks in REDD+:

implications for social safeguards. Ecology and Society, 22, 2.

- Fischer, R., Hargita, Y. & Günter, S. (2016) Insights from the ground level? A content analysis review of multi-national REDD+ studies since 2010. *Forest Policy and Economics*, 66, 47–58.
- Gardner, T.A., Burgess, N.D., Aguilar-Amuchastegui, N., Barlow, J., Berenguer, E., Clements, T., Danielsen, F., Ferreira, J., Foden, W., Kapos, V., Khan, S.M., Lees, A.C., Parry, L., Roman-Cuesta, R.M., Schmitt, C.B., Strange, N., Theilade, I. & Vieira, I.C.G. (2012) A framework for integrating biodiversity concerns into national REDD+ programmes. *Biological Conservation*, **154**, 61–71.
- Korhonen-Kurki, K., Brockhaus, M., Duchelle, A.E., Atmadja, S. & Thuy P.T. (2012) Multiple levels and mutiple challenges for REDD+. In *Analysing REDD+: Challenges and Choices* (eds A. Angelsen, M. Brockhaus, W.D. Sunderlin & L.V. Verchot), pp. 91–110. CIFOR, Bogor, Indonesia.
- Lawlor, K., Madeira, E.M., Blockhus, J. & Ganz, D.J. (2013) Community participation and benefits in REDD+: a review of initial outcomes and lessons. *Forests*, 4, 296–318.
- Lindjhem, H., Aronsen, I., Bråten, & Gleinsvik, A. (2011) Experiences with Benefit Sharing: Issues and Options for REDD+. Pöyry Management Consulting (Norway) AS, Oslo and Stavanger, Norway.
- Simpson, V. & Souter, N.J. (2017) The future of payments for ecosystem services in Cambodia. *Cambodian Journal of Natural History*, 2017, 1–3.
- Travers, H., Clements, T. & Milner-Gulland, E.J. (2016) Predicting responses to conservation interventions through scenarios: a Cambodian case study. *Biological Conservation*, **204**, 403–410.