

MRV AND MONITORING

OUTCOME 1.

REDD+ COUNTRIES HAVE SYSTEMS AND CAPACITIES TO DEVELOP AND IMPLEMENT MRV AND MONITORING

ACHIEVEMENTS

Significant progress was recorded on MRV and NFMS in 2014. Work in this area – especially on FRLs/FREs – is projected to grow as demands for technical backstopping and targeted support continuously increased in 2014. Overall, 29 countries – including all 21 countries with completed, active or starting National Programmes – advanced in designing and building their NFMS, meaning that they have one or more of the three NFMS pillars (NFI, Satellite Land Monitoring System, and GHG Inventory) and that the necessary institutional arrangements are under different stages of development. In parallel, all Partner Countries have enhanced their capacities on different aspects of MRV, NFMS and RELs through increased country specific support, sub-regional, regional and South-South training and exchanges, free online software tools tailored to country needs, 18 forest monitoring-related guideline documents and numerous technical reports.

For example, in 2014 alone:

- Over 3,000 people (28 per cent women) benefited from over 100 (8,000 person-day) capacity building workshops,

In Focus

In 2014, special focus was given for supporting countries in the development and submission to the UNFCCC of their FREs/FRLs. Ecuador and Mexico submitted their RELs to UNFCCC by the end of 2014. The Republic of the Congo, PNG and Zambia have taken initial steps for submitting FREs to the UNFCCC for example, holding consultation with a wide group of stakeholders such as multiple government ministries, NGOs, academia and private sector. They have also developed roadmaps for making submissions to the UNFCCC, identifying follow-up activities and responsible technical working groups for the development of FREL/FRLs.

Knowledge on FREL/FRL and UNFCCC requirements on FREL/FRL development has increased for more than 100 technical staff from eight countries through five national workshops – DRC in September (20 participants-25 per cent women), Republic of the Congo in November (20 participants-20 per cent women), PNG in October (37 participants-35 per cent women), Viet Nam in December (15 participants-20 per cent women) and Zambia in April and July (over 40 participants), as well as through four sub-national workshops – Peru in April (69 participants-35 per cent women), Mexico in August, Viet Nam in December and Indonesia in August.

training sessions and events at country, regional and global level across all Partner Countries focused on different aspects and pillars of NFMS and reference levels. This represents a significant increase compared to previous years thanks to an increased budget allocation for 2014 for targeted support.

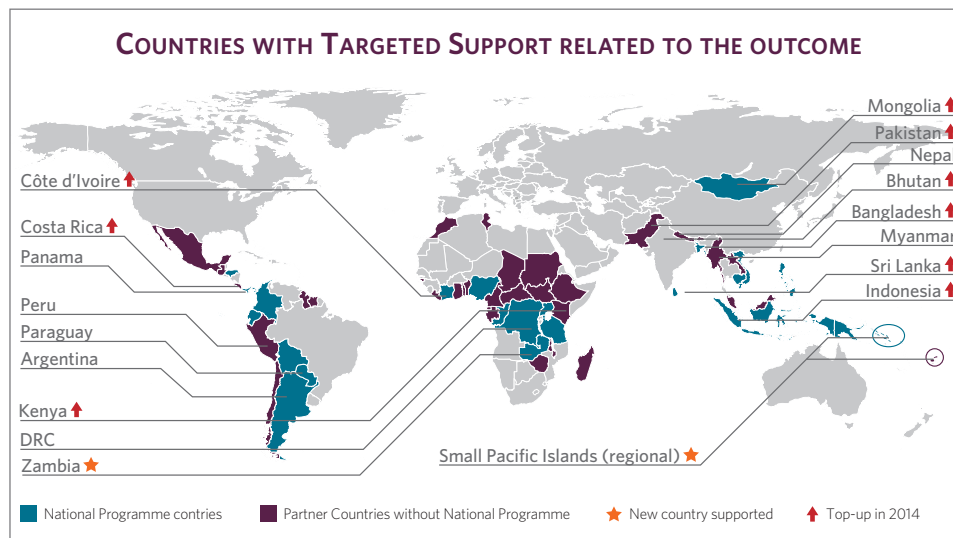
- The [GlobAllomeTree](#), a web-platform for tree allometric equations to support volume, biomass and carbon stock assessment, has been upgraded with new functionalities and now includes more than 9,500 equations in total,

covering all ecological zones worldwide. This number includes 3,700 additional allometric equations developed in Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka in 2014.

- One global database for wood density and two sub-regional databases (South Asia and South-East Asia and the Pacific) for tree allometric equations were made available. One country (Tanzania) database was created and ten country tree species lists were compiled (Bangladesh, Cambodia, Cameroon, Costa Rica, DRC, Nicaragua, Peru, Philippines, Tanzania and Zambia).

- A fully operational and upgraded web portal Satellite Land Monitoring System for REDD+ or [slms4redd.org](#) was launched to publish knowledge materials, tools and documents on various aspects of NFMS and MRV, as well as training materials on portal customization and guidance for estimating forest area using Landsat and Rapid-Eye data.

- Enhanced knowledge and experience-sharing on [NFMS methods](#) was achieved through four regional South-South exchange workshops. For [Africa](#), one took place in Livingston, Zambia, in October and was attended by 85



participants (24 per cent women) taking part from 20 countries. Two took place in the LAC region – one in San José, Costa Rica, in July on *GHG Inventories* attended by 56 participants (36 per cent women) from 14 countries and one in Panama City, Panama in September attended by 40 regional experts (40 per cent women) from 18 countries on satellite land monitoring systems. One took place in the Asia-Pacific region in Hanoi, Viet Nam, in October with over 60 experts (21 per cent women) attending from 18 countries – including all Asia-Pacific UN-REDD Programme Partner Countries – on forest monitoring with a particular focus on NFMS. These workshops resulted in increased capacity and contributed to enhanced coordination and promotion of synergies with other partners contributing to the workshops, especially the UNDP Low Emission Capacity Building project for Africa, the *Strengthening Project for REDD+ Preparation and South-South Cooperation* in Mexico for LAC and USAID, SilvaCarbon, and Lowering Emissions in Asia's Forests project in Asia.

- A prototype of a Pacific Islands regional web-portal on forest monitoring and inventories was developed. This will host all relevant nationally produced data as well as maps covering the region allowing for easier access to this data. Development of the product was complemented with capacity building for 200 technical staff from Pacific Island countries on forest monitoring and the development of NFMS. This work refers to the first regional-scale targeted support request that was approved for strengthening the technical capacity and collaboration among countries.
- Based on lessons learned from countries in FREL construction and consultation with experts, including Intergovernmental Panel on Climate Change experts, UNFCCC and UN-REDD staff, as well as modellers involved in FREL construction, a technical document "*Emerging approaches to Forest Reference Emission Levels and/or Forest Reference Levels for REDD+*" was produced and presented to over 100 people at the Thirteenth Policy Board meeting in November.



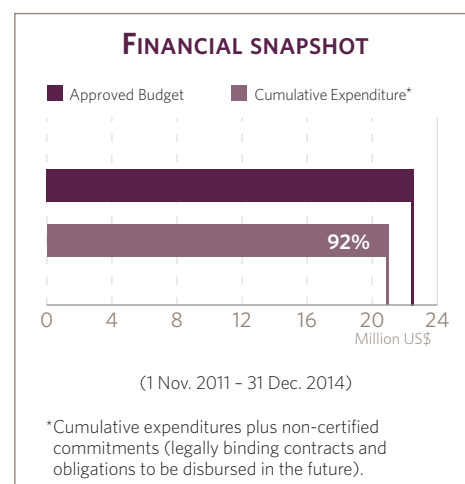
A forest ranger taking measurements of a tree at Megeni Kitasha in the Rombo District in Moshi, Tanzania. © FAO/Simon Maina

CHALLENGES

- National institutions for forest monitoring are incipient and under-resourced, and the technical capacity often varies across countries. Coordination among different government departments dealing with forest monitoring and GHG inventories is still a challenge for many countries. Frequent changes in government, a high turnover of government experts, trained personnel and focal points risks jeopardizing work and undoing progress made in the country.
- The proliferation of tools, methodologies, and initiatives supporting countries can potentially lead to inconsistent estimations and/or to duplication of efforts. The Programme therefore focuses also on supporting countries to enhance the coordination of multiple institutions and initiatives present in the country and the use of information gathered under the NFMS for multiple purposes beyond carbon estimates under REDD+.
- It is important to avoid setting up monitoring systems that are overly complex, costly and thus unsustainable. The Programme supports countries to establish systems that are sustainable, cost-effective, tailored to country circumstances and have variable capacities while also being suitable for improvements and multiple uses.

LESSONS LEARNED

- Country ownership is vital overall and in particular in the area of NFMS. Partner Countries are building their capacity progressively, and are doing so based on their existing institutions and systems



to an increasing extent, which will make NFMS more resilient and sustainable.

- It is essential that a well-informed process is in place for identifying and assessing existing data used for constructing FREL/FRLs and that the decisions on the approach are taken. This will ensure that the best stepwise paths are identified to achieve their foreseen REDD+ implementation.

LOOKING FORWARD

- Countries have a significant opportunity to build more sustainable NFMS that meet national needs and are integrated with a country's existing institutions or agencies. Most of the guidance is now completed under the UNFCCC through the Warsaw decisions on MRV, recognizing the need to respect and adapt to country circumstances.
- During 2015, it will be important for the Programme to further expand on the responsiveness to requests for additional support to countries in their plans to submit FREL/FRLs or to improve their estimates of GHGs derived from forests for their Biennial Update Reports or BURs.
- South-South knowledge exchanges are emerging as an appropriate way to transmit good practices and lessons learned. The Programme will aim to keep strengthening and facilitating South-South exchanges as a means to capitalize quickly and more efficiently on the experience acquired by more advanced countries.