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### Integrated land use planning, a center piece for a successful forest and landscape restoration planning and implementation in Vanuatu

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## Abstract

Vanuatu has fragile ecosystems, which relies on the health of its forests. If forests are not protected or restored, the land becomes degraded, which results in a loss of soil fertility and increases in sediment loads in rivers and streams affecting drinking water supplies, inland and coastal fisheries and coastal tourism, all of which have a negative effect on the wellbeing of its citizens.

Vanuatu started to work on a national Forest and Landscape Restoration Strategy (FLRS) after launching the Decade of Reforestation in March 2016. The idea had been circulated and discussed within government circles and non-government organizations where it received unanimous support. Between 2016 and 2018, three stakeholder consultations were conducted on Efate, Malekula and Santo to gather inputs from stakeholders. The results from these consultations were then incorporated into the first version of the strategy delivered in 2019.

The first FLRS draft mostly revolved around tree planting, which was ambitious but did not put enough focus on the landscape part of forest and landscape restoration (FLR) and on the need to integrate restoration in long-term land use planning and livelihoods enhancement plans. FLR has to be part of, and trigger, integrated land use planning. Plans should be developed with all the stakeholders involved in the landscape agreeing on a common vision. These plans should focus on addressing the drivers of degradation and deforestation and on restoring lands for the benefits of people.

With this in mind, the FLRS was revised in 2020. The implementation of this strategy relies in stakeholders' ownership of the integrated plan and its implementation. Making all the stakeholders responsible for the sustainable management of the land is paving the way to success.

*Keywords: Deforestation and forest degradation, Adaptive and integrated management, Landscape management, Sustainable forest management.*

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## Introduction, scope and main objectives

Vanuatu has fragile ecosystems that rely on the health of its forests. Forests provide a range of goods and services and have been the source of life for the people of Vanuatu for many generations. According to the 2010 Forest Resources Assessment, the forest cover of Vanuatu extended over 75 percent of the territory (FAO 2010). Exploitation of forest resources, combined with a high rate of population growth and the need for food production, has placed tremendous pressures on Vanuatu's natural forests. This has affected the quality of the services they provide, such as food security, water quality, climate change mitigation and adaptation, building materials, medicines, and many others. Vanuatu's forests have also been severely affected by natural disasters, particularly

by increasingly frequent tropical cyclones, which have significantly reduced the quality of forest cover in some places.

Preliminary estimates state show that 12 percent of forests (131 743 hectares) degraded between 2008 and 2018. The total area with declining productivity (high and medium) is 328 190 hectares including over 300 000 hectares of forests. According to Vanuatu's National Forest Policy (2013-2023), there is a gross imbalance between forest utilization and reforestation/afforestation. As the population of Vanuatu increases, wood consumption will also increase. Currently, Vanuatu is a net importer of wood and other forest products.

Conscious of the forest degradation issue and its disastrous consequence on people's livelihoods, Vanuatu started to work on a national Forest and Landscape Restoration Strategy (FLRS) after launching the Decade of Reforestation in March 2016. The idea had been circulated and discussed within government circles and non-government organizations where it received unanimous support. Between 2016 and 2018, three stakeholder consultations were conducted on Efate, Malekula and Santo to gather inputs from stakeholders. The results from these consultations were then incorporated into the first version of the strategy delivered in 2019. This ten-year reforestation plan sought to guide Vanuatu to achieve its National Forest Policy objectives, especially to increase the forest area of planted forests and develop agro-forestry, while at the same time mitigating the impacts of climate change.

In 2020, the Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity, through its Direction for Forests, called on FAO's technical support to finalize the strategy ensuring that it was fully reflecting the forest and landscape restoration (FLR) principles and could be implemented and funded in the long term.

The first FLRS draft mostly revolved around tree planting, which was ambitious but did not put enough focus on the landscape part of FLR and on the need to integrate restoration in long-term land use planning and livelihoods enhancement plans. The purpose of this article is to present how integrated land use planning has been put into the heart of the revised FLRS for Vanuatu together with elements that facilitate its implementation, such as improved stakeholder coordination full fledge budget, financing strategy, livelihood enhancement plan, etc.

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## Methodology/approach

It is important to remember that the Global Partnership on Forest and Landscape Restoration (GPFLR) puts multi-stakeholder engagement and long-term integrated land use planning at the centre of FLR. Indeed, it defines FLR as "an active process that brings people together to identify, negotiate and implement practices that restore an agreed optimal balance of the ecological, social and economic benefits of forests and trees within a broader pattern of land uses" (GPFLR 2013a). GPFLR elaborates further: "Forest and landscape restoration turns barren or degraded areas of land into healthy, fertile, working landscapes where local communities, ecosystems and other stakeholders can cohabit, sustainably" (GPFLR 2013b). The GPFLR defines landscape as "the ideal unit for planning and decision making, as it allows for the integration of various sector plans and programmes into one single spatial context and for a better understanding of trade-offs, options and scenarios around proposed decisions and desired outcomes." (GPFLR 2013b).

In order to transform the original strategy focusing on tree planting into a full FLRS that has integrated land use planning at its core, it has been important to first identify what should be the key elements of a strong FLRS and then adapt them to the local context for integration into the strategy.

In order to be complete, a solid FLRS based on integrated land use should include at least the following elements:

- a context clearly defining the need for restoration and the drivers of deforestation;
- a clear restoration target that is both ambitious and reachable;
- a strong plan outlining the expected impact, outcomes, outputs and activities;
- a detailed list of stakeholders defining their role in the implementation of the strategy, where at least all the actors (public, private and civic) having an impact on land and land use should be

- represented;
- a presentation of the coordination groups to ensure that all stakeholders are involved in the process from the national to the local level;
  - a clear budget;
  - a financing strategy highlighting the different public, private and civic sources of funding;
  - an outreach strategy;
  - a monitoring & evaluation system both at local and national level;
  - an outline of the multiple benefits from the FLRS: carbon benefits, Biodiversity benefits (both marine and terrestrial) international commitments (the targets set by the Bonn Challenge, the United Nations Decade on Ecosystem Restoration, etc.)

The FLRS should not be developed in isolation, but it should be defined with all the stakeholders involved in land use in the country or area. The development of the strategy itself is already part of the awareness raising and the mind-set change needed for a successful FLR.

The revision of the FLRS process lasted over 11 months – January to November 2020 – and implied two stakeholder workshops including each time over 30 representatives from the public, private and civic sector involved in land use in Vanuatu. It was led by experts of FAO’s Forest and Landscape Restoration Mechanism, who used the FLR best practices and other FLR strategies as reference.

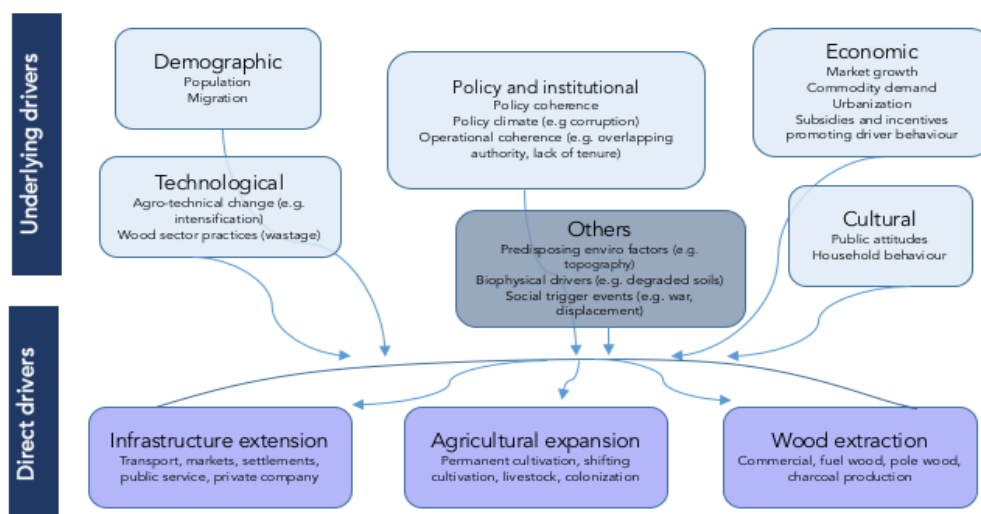
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## Results

The revised FLRS for Vanuatu was a co-development effort and was very well received by all stakeholders. It is more ambitious than the previous version in terms of targets and budget and shows a clear path for restoration in the country with concrete activities. This FLRS is based on multi-stakeholder consultation and local integrated land use planning exercises led at local level.

All the elements mentioned above were inserted in the new FLRS to make it a fully integrated strategy. Its key features are:

- 1) A definition of **Vanuatu’s context of forest degradation**, showing both that 12 percent of forests (131 743 hectares) degraded between 2008 and 2018 and the **drivers of deforestation** that the FLRS should tackle. At the time of the FLRS revision, the Vanuatu National REDD+ Strategy was being drafted and the team revising the FLRS was able to use their study of drivers for the FLRS as shown in Figure 1.



**Figure 1: Relationship between underlying and direct drivers of deforestation and forest degradation. Source: Adapted and modified from Geist and Lambin (2002)**

- 2) An **ambitious target**: considering the different types of restoration activities, an achievable target for the first ten years of the strategy is 25 000 hectares.

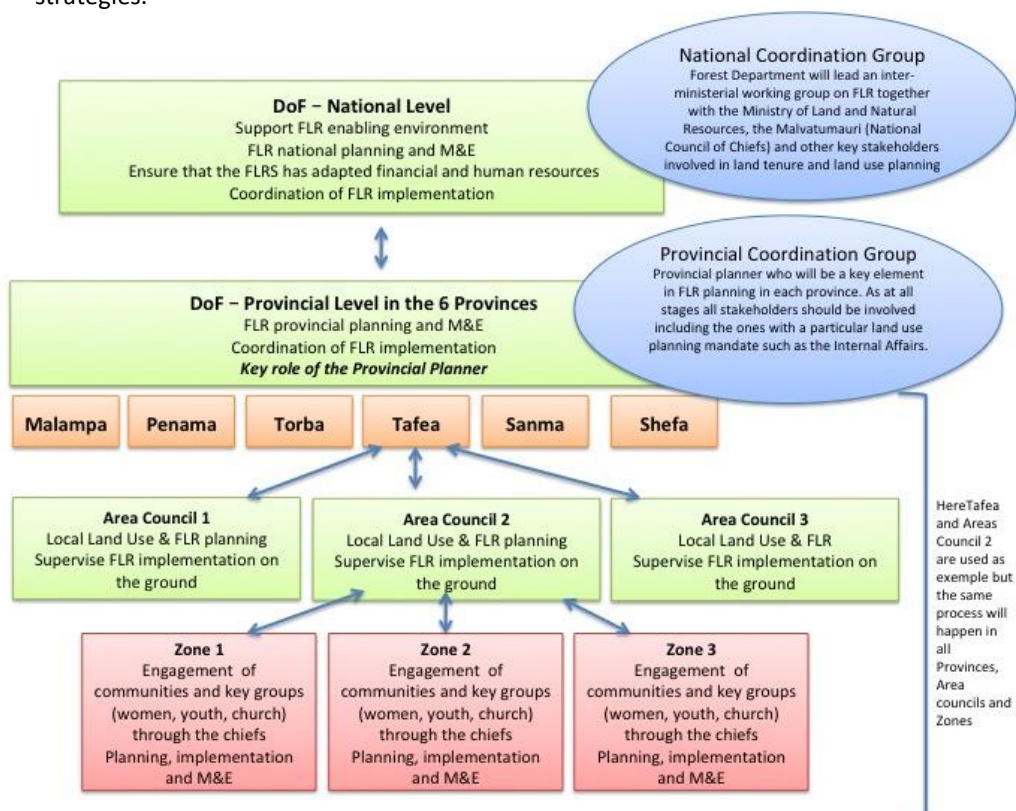
The FLRS will be implemented in all six provinces. It aims to establish the human and material capacity to support restoration over vast areas and an annual planting programme of 1 million trees when reaching full capacity.

- 3) A **strong plan** outlining the expected **impact, outcomes, outputs and activities**. The FLRS has six main outcomes further detailed in output and activities:
  - i. Strengthened enabling environment for FLR supporting integrated land use planning and implementation.
  - ii. Restored degraded land and forests through tree planting and sustainable forest management.
  - iii. Restored and increased protected areas in forested landscapes (including in water catchment reserves and riparian buffer zones) to protect soil and water values.
  - iv. Improved standard of living for rural communities and maximized socio-economic benefits from FLR.
  - v. Secured human and financial resources for scaling up FLR in Vanuatu.
  - vi. Measured and shared FLR results and lessons.

Most of the activities under the original plan were under the current pillar ii. All the other pillars are supporting pillar ii anchoring it into a landscape vision of integrated land management and supporting its sustainability through livelihood development, long-term financing and benefit monitoring. To ensure that the restoration activities are sustainable in the long term, **integrated land use plans will be developed at local level** with all the stakeholders involved in the landscape agreeing on a common vision. These plans will focus on addressing the drivers of degradation and deforestation and on restoring lands for the benefits of people. The **livelihood development** part is particularly important to ensure the reduction of drivers of deforestation and degradation by lowering the dependency on unsustainable use of forests and supporting activities linked to restored and healthy ecosystems.

- 4) A **detailed list of stakeholders** defining their role in the implementation of the strategy. The FLRS lists the following key groups and explains their specific roles in the strategy implementation through specific programs for: communities, youth, women, education community, churches, workers, chiefs, NGO.CBO, members of Parliament, vulnerable people, the private sector and provincial government.
- 5) A presentation of the **coordination groups in charge of developing integrated land use plans** to

ensure that all stakeholders are involved in the process from the national to the local level. The innovation of this strategy is to define integrated land use plans at national and local levels with all the different stakeholders around the table and to add a mapping element reflecting different strategies.



**Figure 2: Coordination at all levels is key for integrated landscape management and FLR**  
Source: Vanuatu's Forest & Landscape Restoration Strategy 2020-2030

- 6) A **detailed budget** totaling VUV 1 263 829 600 (USD 10 650 913) over ten years. This is particularly helpful when looking at investments.
- 7) A **financing strategy** highlighting the different public, private and civic sources of funding. This has already allowed Vanuatu to apply to 2 multi-million opportunities (including the Adaptation Fund) and be set on a path to implementation.
- 8) An **outreach/awareness raising** strategy, which is key for the implementation of FLR. Indeed, FLRS will involve a wide range of partners. In order to be able to reach out to each of them, targeted awareness raising campaigns will be developed with communication tools adapted to each target group.
- 9) A **Monitoring & Evaluation (M&E)** system both at local and national level to follow the progress of the restoration efforts over time. In some countries, poor M&E systems have led to misleading information and wasted restoration efforts. This system should be set up both at local and national level allowing for cross-checking. It has three main pillars following:
  - i. The implementation of the strategy itself
  - ii. The progress of the restoration efforts
  - iii. The impact of the restoration efforts
- 10) Related to the point above, an **outline of the multiple benefits** deriving from the FLRS: carbon benefits, Biodiversity benefits (both marine and terrestrial), international commitments (the targets

set by the Bonn Challenge, the United Nations Decade on Ecosystem Restoration, etc.). In order to motivate stakeholders to commit to FLR, it is important to outline its benefits. In Vanuatu, over 240 000 rural people will be the main beneficiaries of this strategy. People from urban areas will also benefit from the protection of the environment and the economic advantages that forests bring. The FLRS will contribute to the sequestration of over 11.5 MTcO<sub>2</sub>eq (excluding the benefits from mangroves). It will also allow Vanuatu to reach its ambitious biodiversity goals.

This strategy was endorsed by the Government of Vanuatu in December 2020. It is promoting multi-stakeholder engagement in the definition of integrated land use plans in order to be able to best define where and how the restoration activities would be the most relevant. When approved by all the stakeholders, this plan will allow for improved land governance and participate to both restoration and reduced deforestation promoting “Turning the tide”.

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## Discussion

This process aimed to shift from a strategy more focused on tree planting, and therefore to be mostly implemented solely by the Direction of Forest, to a much broader initiative involving a wide diversity of stakeholders at national and local levels and going beyond the traditional silos. By putting the development of multi-stakeholder integrated land use plans at the center of the work, it forces all the stakeholders to agree on a common vision for a landscape and commit to certain land uses for the different land parcels. Once the plan and the vision are approved by everybody, it offers a strong basis to start restoration and protection activities that are supported by livelihoods enhancement activities as well.

Until now restoration has too often been done in silos and its results are threatened by changing land uses depending on varying national and local priorities. Building strategies firmly anchored in local stakeholder vision is a strong advantage for sustainability.

Along the same lines, the revision of the FLRS allowed to align it more closely with the REDD+ Strategy that is currently being finalized in Vanuatu, which will avoid having two strategies and workplans working in parallel while they have similar objectives. For example, the FLRS M&E will be using and contributing to the system set up by the REDD+ Strategy to have a more comprehensive database.

It also integrates the use of innovative tools such as Collect Earth Open Foris to follow the restoration efforts on GIS maps or the EX-ACT methodology for carbon calculations.

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## Conclusions/ wider implications of findings

This revised FLRS including a shared vision of integrated land management and clear steps and budget is an important steppingstone for the upscaling of FLR in Vanuatu. Often strategies remain broad and are not followed by actions. Both the format, being more concrete, and the strong stakeholder involvement in the revision of the FLRS is allowing ideas to be easily shared with potential partners (technical and financial) and facilitate implementation.

Through the development of multi-stakeholder integrated land use plans, at the heart of the revised FLRS, Vanuatu is making sure that the land is managed in a sustainable manner, maximizing the use of different land management units (including forest and other restored land), as the best way to ensure that natural resources will be available in the long term. Multi-stakeholders integrated land management is key to ensuring a resilient future as it guarantees that the different land uses are not competing but working together towards a long-term vision.

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