

EIGHTH REGIONAL MEETING OF
PACIFIC HEADS OF AGRICULTURE AND FORESTRY SERVICES (PHOAFS)

(Nadi, Fiji 09 March 2023)

Paper reference	Session 5
Title	Information on the completion of Pacific Forest Sector Outlook Study 2023
Action	For kind information

The objective of this paper is to:

- i) Inform about the completion of Pacific Forest Sector Outlook Study 2023 Report and seek endorsement of report and its recommendations from the Pacific Heads of Agriculture and Forestry.

Summary

This report was prepared as collaborative effort involving the 14 FAO Pacific member countries collectively referred to as the Pacific Small Island Developing States (SIDS) – Fiji, Papua New Guinea, Solomon Islands and Vanuatu (Melanesia); the Federated States of Micronesia, Kiribati, the Marshall Islands, Nauru and Palau (Micronesia); and the Cook Islands, Niue, Samoa, Tonga and Tuvalu (Polynesia). Out of these 14 countries, Kiribati, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu are members of Asia-Pacific Forestry Commission.

FAO prepared the study at the request of the Pacific Ministers of Agriculture and Forestry at a meeting held in Samoa in 2019. It analyses the outlook for forests and trees in the Pacific SIDS, including through future scenarios to indicate potential pathways of change and the options available for accomplishing the Sustainable Development Goals (SDGs). The study integrates information from country outlook papers, thematic studies and a wide range of published and unpublished information.

Considerable effort has been made to tap into the broad wealth of knowledge on the subregion, including by drawing on many previously undertaken studies and assessments. The report highlighted several important points and summary of them are presented below. The summary of recommendations for improvement are also presented in next section of this information paper.

- Although the subregion emits just 0.08 percent of global GHG emissions, Pacific SIDS are at the forefront of the negative impacts of climate change. Climate change has emerged as a super driver affecting all aspects of life, including land use.
- Population growth, urbanization and a “youth bulge” are key demographic drivers of forest change. Responses to the key change drivers revolve largely around three interrelated areas: (1) governance; (2) innovation, especially the development and application of improved technologies; and (3) investment in improved resource management.
- Income growth in the Pacific SIDS has been relatively low in the last two decades, suggesting that the strategy in some countries of drawing down natural capital to boost economic development, has not been fully effective. Low revenues have affected the ability of

governments to invest in sustainable resource management.

- Understanding the future scenarios to guide policy and planning is restricted by the multiple uncertainties and data limitations. A range of forestry and land use interventions are required to help countries adapt to climate change negative impacts.
- The Pacific SIDS produced about 14 million m³ of roundwood in 2020, of which 57 percent was industrial and the remainder mainly wood fuel.
- Industrial roundwood production more than doubled between 2000 and 2020, due mainly to production in Papua New Guinea and Solomon Islands.
- Countries focusing on primary production for global markets by drawing down their natural capital may soon face resource exhaustion.
- The small size of domestic markets, the high cost of processing and the absence of conducive policy environments constrain investment in wood processing.
- Watershed protection is a crucial function of forests in the Pacific SIDS. The “Ridge to Reef” programme offers a holistic framework for the involvement of all stakeholders.

Background

1. The Pacific SIDS have a land area of 51.7 million ha on about 3 400 islands of varying size. Differences in origin, size and elevation have created highly diverse biophysical conditions.
2. The total area under forests is estimated at 40.3 million ha. Melanesia accounts for 98.8 percent of the land area and 99.2 percent of all forests in the Pacific SIDS. Remoteness, fragmented distribution and small size are characteristic of most countries in the subregion, limiting the ability to take advantage of economies of scale.
3. The Pacific SIDS are among the world’s most forested countries as a percentage of land area, with more than three-quarters (78 percent) of the land area under forests. The average forest area per capita among the 14 countries is 3.56 ha, which is nearly seven times the global average. There is considerable variation between countries, however.
4. Data on forest area and condition are poor in the Pacific SIDS. Nevertheless, it appears that deforestation is relatively low, at 0.06 percent in 2010–2020. The large-scale expansion of oil palm and mining has led to significant forest reductions in some of the larger countries. Land use is relatively stable in most Micronesian and Polynesian countries and the scope for major changes in use is limited. Commercial logging is a major contributor to forest degradation; it has created large tracts of secondary forests and adversely affected the composition, structure and functions of natural forests and undermined long-term wood production.
5. Although the region has a long history of reforestation and afforestation, the pace of expansion of planted forests has been slow. Only Fiji has developed a large planted-forest estate, mainly of pine and mahogany. Nevertheless, plantation expansion has stagnated in recent years in Fiji, due largely to tenure uncertainties. Land tenure also appears to be a constraint on plantation development in Papua New Guinea and Solomon Islands, despite favourable growing conditions.
6. Agroforestry has a long history in the Pacific SIDS, with multiple forms adapted to differing biophysical and socio-economic contexts. Trees outside forests (mainly in agroforestry) have become the most important source of wood for most of the smaller Pacific SIDS. Several tree

species are grown as integral components of agroforestry systems, of which coconut is the most ubiquitous.

7. This outlook study focuses on 14 countries in the Pacific, collectively referred to as the Pacific Small Island Developing States (SIDS) – Fiji, Papua New Guinea, Solomon Islands and Vanuatu (Melanesia); the Federated States of Micronesia, Kiribati, the Marshall Islands, Nauru and Palau (Micronesia); and the Cook Islands, Niue, Samoa, Tonga and Tuvalu (Polynesia).

Detail conclusions of the report:

Forest value chains: trends, potential and constraints

8. Forests provide diverse subsistence products in the Pacific SIDS, such as food, medicines, fuel, construction materials and cultural artifacts. They also provide essential services such as watershed protection, soil and biodiversity conservation, and spiritual and cultural services. Concerns about climate change have brought major shifts in the priorities of land and forest management, which is increasingly geared towards emissions reduction, carbon sequestration and environmental and socio-economic resilience.
9. Wood production is the starting point for several value chains, some local and others international. The Pacific SIDS produced about 14 million m³ of roundwood in 2020, of which 57 percent was industrial and the remainder mainly woodfuel. Industrial roundwood production more than doubled between 2000 and 2020, due mainly to production in Papua New Guinea and Solomon Islands.
10. Native-forest logging is an important source of government revenue and employment in Solomon Islands, but there are concerns about its sustainability and legality. Most natural-forest logs produced in the Pacific SIDS are exported. Sawnwood and woodchips – most of which are also exported – are the two most important value-added products.
11. Countries focusing on primary production for global markets by drawing down their natural capital may soon face resource exhaustion. Restocking through the development of planted forests is not taking place at a scale that could ensure the sustainability of wood production, although Fiji obtains most of its wood supply from its pine and mahogany plantations.
12. The small size of domestic markets, the high cost of processing and the absence of conducive policy environments constrain investment in wood processing. Exceptions include high-value products from mahogany plantations in Fiji, balsa in Papua New Guinea and teak in Solomon Islands. Most high-value wood products – especially paper and paperboard – consumed in Pacific SIDS are imported, and dependence on imports for these is likely to remain high.
13. Woodfuel is the most important source of energy for cooking and heating, although reliable data on production and consumption are unavailable. Recent efforts to move up the biomass energy value chain include wood-pellet production and power generation in dendrothermal plants. Forests and farms produce many non-wood forest products catering to diverse needs for food, construction materials, medicines and cultural products; some have significant international demand.
14. Watershed protection is a crucial function of forests in the Pacific SIDS. The “Ridge to Reef” programme offers a holistic framework for the involvement of all stakeholders. Many

challenges exist in the Pacific SIDS in monetizing forest-related carbon benefits through initiatives like REDD+ and the Green Climate Fund.

Drivers of forest change

15. Land use in the Pacific SIDS is shaped by drivers that operate locally, nationally, subregionally and globally. For most small-island economies, external factors tend to have overwhelming social, economic, environmental and political impacts.
16. Population growth, urbanization and a “youth bulge” are key demographic drivers. The population of the Pacific SIDS is expected to increase from 11.5 million people in 2020 to 13.6 million in 2030. Urbanization is likely to accelerate in some small-island countries, but most people in the larger countries will continue to live in rural areas. Both trends will exert pressure on lands and forests. The population of the Pacific SIDS is relatively young. Managing the subregion’s youth bulge will require significant efforts to generate employment, which could affect land use.
17. Income growth in the Pacific SIDS has been relatively low in the last two decades, suggesting that the strategy in some countries of drawing down natural capital to boost economic development has not been fully effective. Low revenues have affected the ability of governments to invest in sustainable resource management. Those Pacific SIDS with significant stocks of natural resources have been compelled to draw down their natural capital, and those countries with few natural resources depend to at least some extent on external support.
18. The disruptive impact of the COVID-19 pandemic on global value chains, including tourism and the trade of forest products, has severely affected Pacific SIDS economies and increased dependence on land as a source of livelihoods. The vulnerability of global supply chains is encouraging reshoring and vertical integration in import-dependent countries and businesses, which could have negative impacts on Pacific SIDS with significant wood product trade.
19. Although the subregion emits just 0.08 percent of global GHG emissions, Pacific SIDS are at the forefront of the negative impacts of climate change. Climate change has emerged as a superdriver affecting all aspects of life, including land use. In addition to the direct impacts of climate change, multiple indirect impacts are undermining the ability of the Pacific SIDS to invest in sustainable resource management.
20. The Pacific SIDS are becoming the focus of competing geopolitical interests. This might provide opportunities but is also fraught with challenges, especially if countries are caught in the crossfire of superpower rivalries.
21. Because of their vast economic exclusion zones, most small-island countries in the Pacific can be termed “large ocean states”, with immense potential for tapping marine resources and developing sustainable “blue” economies. This would reduce economic pressure on land and open up opportunities for synergies between the blue and green economies.

Adapting to change: governance, technology and investment

22. Responses to the key change drivers described above centre largely on three interrelated areas: (1) governance; (2) innovation, especially the development and application of improved technologies; and (3) investment in improved resource management.

23. Reforming customary tenure to make land available for uses such as wood production, plantation establishment, infrastructure and mining has been a focus of land policies, legislation and institutional change in the Pacific. Efforts at such reform, however, are often perceived as a ploy for appropriating resources from communities.
24. In line with their divergent histories, considerable differences exist among countries in their policy and institutional development on land tenure. In Papua New Guinea, for example, the identification, demarcation and registration of customary land continues to be problematic because of conflicting claims. In Fiji, compulsory registration has helped address many issues related to customary land tenure, although problems still exist because of unequal access to land.
25. Most countries are striving – through policies, legislation and institutional arrangements – to strike a balance between safeguarding customary ownership and enabling the use of land and forests to meet national development goals. Progress is varied, however, and customary landownership reform remains a key challenge.
26. Countries that have created better institutional arrangements have been able to arrest deforestation and develop more sustainable systems of land management. Care must be taken to ensure that customary owners are able to reap the benefits of reforms and that their rights are safeguarded.
27. The dominant development paradigm has focused largely on reforming land tenure to increase the availability of land for private investors, governments and others. Ineffective reforms combined with other governance deficiencies, however, have created favourable conditions for the unsustainable and illegal exploitation of resources in resource-rich countries.
28. Changes in laws and institutional arrangements tend to lag behind policy reform, and wide gaps exist between policy intentions and what is accomplished on the ground. With many players seeking to maximize short-term profits, illegality has emerged as a major challenge in the forest sector, especially industrial-scale wood production in natural forests.
29. Innovation is a key to the sustainable management of land and forests in the Pacific SIDS, but the wide adoption of new technologies is challenging in most countries in the subregion. Overall, domestic innovation capacity is limited, leading to excessive dependence on technologies developed elsewhere and on external financial and technical support.
30. Forest management in the Pacific SIDS requires a shift towards green investment. In view of limitations in mobilizing investments domestically, most Pacific SIDS are highly dependent on foreign direct investment and official development assistance. Both have challenges, especially in ensuring that they are effective, efficient and help build sustainable systems. New funding avenues are opening up, including for climate-change mitigation and adaptation, with the potential to overcome certain deficiencies in traditional approaches. Accessing these will require governance improvements, including increased transparency, efficiency, effectiveness and equity.

Forest futures: scenarios for the Pacific Small Island Developing States

31. Multiple uncertainties and data limitations mean that conventional forecasting approaches have severe limitations, especially in the long term. Therefore, long-term outlooks necessarily

involve scenario analysis to outline possible pathways of development. Scenario analysis provides an opportunity to assess various uncertainties and to articulate possible futures, considering the impacts of key drivers.

32. In the Pacific SIDS, major uncertainties stem from erratic economic performance – including due to disasters and global economic downturns – and a wide range of governance challenges. Here, three broad scenarios are identified: (1) “SDG world” (an aspirational scenario); (2) business as usual; and (3) “gloom and doom” (a disruptive scenario). Each scenario is applied to three groupings of Pacific SIDS: (1) Papua New Guinea; (2) the other Melanesian countries; and (3) Micronesia and Polynesia.
33. In the SDG-world scenario, concerted efforts to improve governance, and a more favourable global economic environment, enable more sustainable approaches to forests and forestry and the development of efficient and viable bioeconomies. The business-as-usual scenario involves a continuation of present trends, especially in governance and economic performance, with a mix of positive and negative developments. A decline in governance, and worsening economic conditions, give rise to the gloom-and-doom scenario.
34. Given the divergent situations among the three groupings of Pacific SIDS, the three scenarios evolve differently in each, with differing implications for resource use and what needs to be done to prevent a shift to the gloom-and-doom scenario and to build an SDG world.
35. These scenarios, developed based on the interplay of economic performance and governance, could constitute a starting point for discussion on the future of forestry and agroforestry in the Pacific SIDS. Scenario development needs to be undertaken as a collective exercise involving all stakeholders, but this was not possible here given difficulties stemming from the COVID-19 pandemic. The scenarios could be refined and improved in each country as part of strategic planning processes that enable all stakeholders to understand the status of their country and sector, where they are heading, and what is needed to shift towards enabling achievement of aspirational goals.

Recommendations: The way forward: priorities and strategies

36. The Pacific SIDS must navigate highly complex domestic and global environments characterized by enormous uncertainties. Existential threats stemming from climate change loom large, and people’s aspirations for a better life need to be met in the context of limited resources.
37. A range of forestry and other land-use interventions, such as the following, could help countries adapt to climate change and flourish:
 - Develop and operationalize adaptation plans for every major production system, including forestry.
 - Improve the long-term sustainability of wood production in natural forests, including by strengthening field-level capacity for monitoring compliance with rules and ensuring transparent, just and equitable systems for income-sharing.
 - Restore logged-over forests by developing appropriate institutional arrangements, building technical capacity through collaborative research and development, and creating a dedicated fund.
 - Encourage intra-Pacific trade to help meet domestic timber demand.
 - Carefully weigh the pros and cons of policies to promote downstream processing.

- Assess the scope for planted-forest development.
- Maximize the potential of agroforestry, including by supporting it with institutional arrangements such as tree-grower cooperatives and the adoption of information and communication technologies to increase access to knowledge and markets.
- Place more emphasis on high-value species and products, including non-wood forest products unique to the Pacific SIDS and products for which comparative advantages prevail.
- Maximize resilience by safeguarding ecosystem services, including through integrated approaches to land management.
- Take a long-term perspective on carbon and avoid overcommitting to selling carbon-related services while prices are low.
- Ensure institutional adaptability by adopting integrated frameworks and redirecting resources towards the people–resources interface.
- Develop hybrid institutional and governance models that combine the strengths of informal and formal systems.
- Strengthen strategic planning capacity, including by improving data and encouraging interdisciplinary research.
- Increase capacity in science and technology and the adoption of innovation, such as by developing a subregional forestry and agroforestry innovation centre to build on the existing wealth of indigenous knowledge.
- Build human capital for an SDG world, for example by creating a subregional Pacific human resources development centre to help develop the knowledge and practical skills required for forestry in coming decades.

The Pacific Heads of Agriculture and Forestry are invited to

38. Provide endorsement of the Pacific Forest Sector Outlook Study 2023 Report.