“Status, trends and future outlook on primary forests in Asia and the Pacific”

Revised version of the scoping note based on the feedbacks received during the inception workshop

The ‘Third Asia-Pacific Forest Sector Outlook Study’ (APFSOS III: FAO, 2019), launched in June 2019 at the Asia-Pacific Forestry Week in South Korea, highlighted that conservation of primary forests – i.e. forests largely unaffected by human activities (see definition in annex) -, and the sustainable management of other natural forests are urgently needed to safeguard biodiversity, ecosystem services and the quality and health of the physical environment in the Asia Pacific region.

Following up on the APFSOS III, FAO and CIFOR, lead center of the CGIAR research programme on Forests, Trees and Agroforestry (FTA), collaborate to develop a roadmap for primary forest conservation in the Asia-Pacific region. In particular, FAO and FTA will prepare and co-publish a technical paper on the status, trends and future outlook on primary forests in the Asia-Pacific region with maps and key recommendations (for policy and concrete actions) for their conservation. A policy brief will also be prepared for decision-makers, gathering the main findings and concrete recommendations emerging from this work.

The present note describes the scope of this publication and the methodology to be followed for its development.

Framing: scope and definitions

Multiple and very diverse definitions of forest and wooded areas are used around the world, reflecting both the diversity of forest ecosystems and the diversity of human perceptions and uses of forests. Most definitions of forests are based on land cover, usually combining criteria of canopy cover, tree height and minimum area, and on considerations of land use. The definition and criteria used determine which ecosystems can be considered as forest and impact strongly forest area (HLPE, 2017).

FAO global forest resources assessments (FRA) have contributed to harmonize at the global level the definitions and categorizations of forests allowing compared analysis across countries at regional or global level. In the FRA 2020, forest is defined as “land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ” (FAO, 2018). This definition excludes agricultural and urban tree stands.

The FRA 2020 (FAO, 2018) further distinguishes two main categories of forests defined as follows:

- Naturally regenerating forest (or natural forest): “forest predominantly composed of trees established through natural regeneration”;
- Planted forests: “forest predominantly composed of trees established through planting and/or deliberate seeding”.

Among natural forests, primary forests are defined as “naturally regenerated forests of native tree species, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed” (FAO, 2018: See annex below for more details).

Primary forests and natural landscapes in the Asia-Pacific region are under increasing pressure from a range of threats including: climate change and natural disasters, population and economic growth, overexploitation and illegal exploitation of forests, conflicting land uses (e.g. infrastructure development and agricultural expansion), inconsistent policies across sectors and scales, weak governance, migration and conflicts. Despite an overall increase in the regional tree cover area since
2000 due to the establishment of plantations and restored areas in some countries such as China, the area of primary forests is still declining, along with the ecosystem services they provide (e.g. wood, food and medicines provision, biodiversity, water and soil protection, climate regulation and carbon sequestration, amenity and cultural values). Of the region’s 723 million hectares of forest, only 19 percent (140 million hectares) is primary, which is much lower than the global average (32 percent) (FAO, 2019). Primary forests degradation and fragmentation weaken the ecosystem resilience, i.e. its capacity to cope with external shocks. Reversing this trend must be a priority for all countries in the region now and in the next decade to ensure our survival, especially in the face of dangerous climate change. The COVID-19 crisis risk putting additional pressure on forests and their capacity to provide essential environmental services – the nature and dimension of these impacts still need to be understood.

**Purpose and content of the technical paper**

The purpose of this technical paper is to provide a broad picture of the status, current trends and future perspectives for primary forests in the Asia-Pacific region\(^1\).

Building on the FRA definition for primary forests, this paper will highlight the huge diversity of ecosystems that can be considered as primary forests in the Asia-Pacific region. It will recall the multiple ecosystem functions of primary forests and show the critical importance of their conservation for sustainable development in the region.

Building on the detailed results of the last FRA2020, and on complementary sources as appropriate, the paper will then describe the status and trends of primary forests in the region in terms of deforestation, fragmentation and forest degradation. This description will be illustrated as appropriate by graphs and maps showing the spatial distribution and the evolution of primary forests since 1990 in the region. The study will also identify and map "hotspots", i.e. priorities, for primary forest conservation based on a list of criteria including for instance: size, richness and uniqueness of the ecosystem, importance of ecosystem services, level of threats. The study will discuss in particular the appropriate size threshold that should be considered to define an intact forest.

The paper will consider the remaining primary forests within broader landscapes, analyzing the dynamics at stake in surrounding areas (whether other natural forests, planted forests, agricultural land, mining or industrial site, infrastructure or human settlement) that directly or indirectly impact forest status and trends. It will illustrate the increasing pressures on primary forests, due to a range of drivers/stressors including: climate change, population growth, migrations and conflicts, globalization and economic growth, urbanization and infrastructure development, agriculture and planted forest expansion, illegal logging and illegal trade of forest products.

Besides, the paper will draw a broad picture of primary forest governance in the region, describing the various governance tools, instruments and mechanisms implemented at different scales – from international and regional agreements to national rules and instruments and local arrangements –. The paper will discuss the institutional changes required to achieve various objectives associated with primary forest conservation, including: the accurate monitoring of primary forest values; the sustainable funding of forest conservation; the importance of education and capacity building; the effective enforcement of existing laws and rules. It will cover critical governance issues such as land tenure security, access to forest and natural resources, and equitable participation of indigenous peoples and local communities in decision-making processes. It will assess the actual implementation

\(^1\) The geographical scope of the roadmaps covers the countries of the FAO region of Asia and the Pacific (see: [http://www.fao.org/asiapacific/countries/en/](http://www.fao.org/asiapacific/countries/en/)). However, it excludes France and the United States of America (USA) mainland, situated outside the region. The Russian Federation, although covering 29 percent of Asia, is also excluded because issues related to Russian forests are usually discussed within the European Forestry Commission.
of existing laws and regulations, inform on existing good practices and successful national legislations, and suggest innovative governance mechanisms and regulatory frameworks.

The paper will finally suggest key recommendations (policy and concrete actions) for primary forest conservation.

**Method of work: process and provisional timeline**

This co-publication will build upon recent FAO publications, in particular the abovementioned regional outlook (FAO, 2019) and the latest FAO Global forest resources assessment (FAO, 2020), as well as on preparatory reviews of the existing scientific literature. It will mobilize FAO and FTA experience, expertise and knowledge.

This co-publication will be developed through a participative process, launched with an online inception workshop co-organized by FAO and FTA on July 30th, 2020, involving key regional stakeholders and technical experts from governments and intergovernmental organizations, from the private sector and civil society organizations, as well as from academia and research institutions.

Technical inputs, including information on best practices for primary forest conservation will be gathered through interviews with key stakeholders (face to face and/or online) and through an online consultation.

Technical online workshops will be organized as appropriate at critical steps of the process of development of the roadmap. A validation workshop will be organized at the end of the process to discuss and validate the main findings and key recommendations of these papers. This workshop could be organized back-to-back to the XV World Forestry Congress, to be held on 24-28 May 2021 in Seoul, to gain visibility. The final draft of the technical paper will be submitted in parallel to an independent scientific peer-review. The objective is to publish the technical paper and the corresponding policy brief by end November 2021.

**Annex – FRA 2020 definition of primary forest (FAO, 2018)**

“Naturally regenerated forest of native tree species, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed”.

**Explanatory notes**

1. Includes both pristine and managed forests that meet the definition.
2. Includes forests where indigenous peoples engage in traditional forest stewardship activities that meet the definition.
3. Includes forest with visible signs of abiotic damages (such as storm, snow, drought, fire) and biotic damages (such as insects, pests and diseases).
4. Excludes forests where hunting, poaching, trapping or gathering have caused significant native species loss or disturbance to ecological processes.
5. Some key characteristics of primary forests are:
   - they show natural forest dynamics, such as natural tree species composition, occurrence of dead wood, natural age structure and natural regeneration processes;
   - the area is large enough to maintain its natural ecological processes;
   - there has been no known significant human intervention or the last significant human intervention was long enough ago to have allowed the natural species composition and processes to have become re-established.

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Initial list of references

