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COMMITTEE ON FORESTRY

TWENTY-FIFTH SESSION

5 - 9 October 2020

FORESTS: NATURE-BASED SOLUTIONS FOR CLIMATE CHANGE

Executive Summary

This document describes progress in efforts to reduce emissions from deforestation and forest degradation and investments made in land-based mitigation, including implementation of REDD+. It explores ways in which addressing deforestation and forest degradation can contribute to a multiple win-win in terms of climate, health risks and local economies, and suggests ways to consider possible interlinkages in addressing recovery from the economic downturn caused by the COVID-19 pandemic, climate change and deforestation.

Suggested action by the Committee on Forestry

The Committee may wish to invite countries to:

- Strengthen their efforts to unlock the vast mitigation potential of forests by reducing emissions through halting deforestation and forest degradation, as well as removing substantial amounts of carbon from the atmosphere through sustainable forest management, forest conservation and forest ecosystem restoration, by:

    i) increasing forest-related commitments in the nationally determined contributions (NDCs);
    ii) strengthening fire, pests, and disease management systems that enable to reduce risk, be prepared, act fast and safe, and recover;
    iii) accelerating implementation of national REDD+ strategies and action plans, to address drivers of deforestation;
    iv) deploying actions that trigger transformational changes in their economies and societies and a move to low-carbon economies, in particular, by ensuring that long-term stimulus packages to recover from the COVID-19 pandemic lead to sustainable decarbonization, multi-dimensional resilience and other co-benefits.

The Committee may wish request FAO to:

- Support countries to address drivers of deforestation and drivers of the expansion of agricultural land as part of the nature-based solutions to climate change, to enhance their NDCs;

- Strengthen its collaboration with the private sector and facilitate dialogue aimed at mobilizing climate finance and enhancing the role of private sector in efforts to address drivers of deforestation and forest degradation while contributing to job creation, livelihood resilience and poverty reduction;
- Increase understanding of impacts that deforestation and forest degradation may have in increasing the risk of spread of zoonotic diseases, to help inform policy making for mutually beneficial recovery approaches;
- Assist Members upon request in emergency and after-outbreak situations and in establishing long-term prevention strategies for both fire, and pests and diseases management; and strengthen the respective regional networks and availability of information at national and global levels;
- Provide technical assistance and data to redesign and implement policies and actions to halt deforestation while building back better post COVID-19.

Queries on the substantive content of the document may be addressed to:

COFO-2020@fao.org

I. INTRODUCTION

1. Forests are recognized as a critical element of the climate solution, as highlighted in Article 5 of the Paris Agreement. Climate action needs to accelerate without delay, with enhanced commitments reflected in the revised Nationally Determined Contributions. Combatting climate change and recovering from COVID-19 pandemic should be addressed together, given that global warming and emerging infectious diseases are both a serious risk to global health (planet and people), economies and security.

2. In the context of climate change and prompted by the dialogue at the Climate Action Summit (September 2019) the United Nations Secretary-General has called for scaling up action on "Turning the Tide on Deforestation" and requested scaled up action to halt deforestation by the UN system as a whole. The Summit also built momentum for nature-based solutions and launched a 'Climate Manifesto'.

3. In light of the ongoing worldwide effects of COVID-19, holding an ambitious, inclusive COP26 of the UNFCCC in November 2020 was no longer possible. The Conference has been rescheduled to take place between 1 and 12 November 2021 in Glasgow. An ambitious roadmap for global climate action is being prepared and COP26 will also continue to negotiate unresolved issues from COP25 that was held in Madrid, Spain under the Chilean Presidency on 2-13 December 2019, including on carbon market mechanisms (Article 6 of the Paris Agreement) and the Review of the Warsaw International Mechanism for Loss and Damage. COP 25 featured a number of forest related events, notably the high-level UN Leadership Dialogue on Turning the Tide on Deforestation organized as a first follow-up dialogue for the call for joint UN action, with seven Heads of UN agencies (FAO, UN-DESA, UNDP, UNEP, UNFCCC, UNCCD and GEF) committed to the common goal of helping countries reduce deforestation and improve forest management (see also document COFO/2020/7.1).

4. The Intergovernmental Panel on Climate Change (IPCC) 2019 Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems states that we have a narrow window of opportunity to shift to a

development path consistent with limiting climate change within tolerable boundaries[1]. The Paris Agreement commits countries to hold the increase in the global average temperature to well below 2ºC above pre-industrial levels. As part of the responses, a broad range of nature-based solutions can provide up to a third of cost-effective climate mitigation needed between now and 2030 to stabilize warming to below 2ºC[2]. Among them, reducing deforestation and forest degradation represents one of the most effective and robust options for climate change mitigation[3].

5. Despite signs of increase in recent years, investments in land-based mitigation, including implementation of REDD+ remain a small share of climate finance, estimated at around 2 percent[4]. The limited mobilization of finance from public and private sources has resulted in stifled REDD+ results. The establishment of a US$500 million REDD+ results-based payments Pilot Programme within the Green Climate Fund (GCF) has played an instrumental role in supporting REDD+ implementation. It has allocated almost US$230 million to reward four countries. The GCF Board will review the Pilot Programme in the coming months and will decide whether and how to continue the Programme.

6. FAO, as accredited entity, is supporting countries in receiving result based payments from the GCF. A US$63 million project was approved for Chile in November 2019 and further proposals are presented for GCF approval in 2020. The 165th Session of the FAO Council "encouraged FAO to continue to support Members in their efforts to protect, restore and sustainably manage forests including through reducing and reversing deforestation and access funding from platforms such as the Green Climate Fund".

7. To address the climate financing gap, it will be critical to mobilize private finance. To date, factors such as risks, lack of experience, capacity and lack of enabling policies have limited the scale of private finance for REDD+ and related investments. A number of initiatives and processes are undergoing aimed at increasing private finance, including those related to carbon markets, like Article 6 of the Paris Agreement and the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), as well as those related to shifting investments towards low carbon alternatives along entire supply chains impacting land use and deforestation. However, much more coordinated efforts, including the targeted use of public funding to reduce private finance risks, are required to scale up investments in long-term and sustainable landscape-scale activities.

8. The Global Forest Resources Assessment (FRA) 2020 shows that, while deforestation (i.e. conversion of forest to other land use) has slowed down from 16 million ha per year in the 1990's, to 12 million ha per year between 2010 and 2015, and 10 million ha per year in the past five years, the rate of deforestation remains alarmingly high. Most of that loss occurred in Africa and Latin America. Current rates are lower than in the previous decades at global level, but they continue to raise in Africa. Agricultural expansion continues to be the main driver of deforestation and forest fragmentation and the associated loss of forest biodiversity. Large-scale commercial agriculture accounts for 40 percent of tropical deforestation and local subsistence agriculture for an additional 33 percent. According to IPCC, this loss of forest and peatland degradation contributes about 13 percent of total human-caused CO^2 emissions.

9. The COVID-19 pandemic has generated a range of additional risks that may result in significant increase of deforestation. These risks include:

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[1] IPCC, 2019, Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse gas fluxes in Terrestrial Ecosystems. Chapter 1.
[2] Griscom B.W. et al. 2017. Natural climate solutions. Proceedings of the National Academy of Sciences Oct 2017, 114 (44) 11645-11650; DOI: 10.1073/pnas.1710465114.
[3] Goldstein, A., Turner, W.R., Spawn, S.A. et al. Protecting irrecoverable carbon in Earth's ecosystems. Nat. Clim. Chang. 10, 287–295 (2020). https://doi-org.pbidi.unam.mx:2443/10.1038/s41558-020-0738-8.
[4] See table A.2 of the Climate Policy Initiative's. Global Landscape of Climate Finance 2019.

i) Weakened law enforcement, increased illegal activities in forests and concerns on deregulation and relaxation of environmental laws;
ii) Migration due to lockdowns, which causes loss of jobs and increased pressure on forests to provide for livelihood;
iii) Disruptions in markets and supply chains.

10. Countries' resources and capacities, which were inadequate to halt deforestation and meet the climate goals even before the COVID-19 pandemic, are likely to be further restricted. This means that, in order to maintain and enhance climate commitments and submit ambitious NDCs, countries need to consider climate as part of the design of their policy responses to the COVID-19 stimulus packages and policies in a way that are transformative and lead to a paradigm shift away from unsustainable development patterns. This includes efforts to monitor and halt deforestation, mobilizing carbon investments, redirecting conventional investments into deforestation free production and consumption systems as well as strengthening resilience.

11. In addition to these increased pressures on forests by COVID-19, other pressures such as the increasing number and damage by fires and pests and diseases continue; exacerbated by climate change, they require global attention and strengthening of efforts to prevent them. Globally, fire affects approximately 370 million hectares of land every year. FAOSTAT estimates indicate 7600 ± 359 million tons per year of GHG emissions from fires, roughly 30 percent higher globally than previously published[5]. Drought, fuel accumulation, extreme weather events other impacts of climate change provide conditions for fire and exacerbate fire intensity.

12. Forests have been subject to severe outbreaks of insect pests and diseases causing economic damage and immeasurable impacts to the environment and socio-cultural values. Forest insect pests are estimated to damage some 35 million hectares of the world's forest annually[6]. Expanded international trade, coupled with climatic change impacts, increase the potential for movement of invasive species into new areas. Climate change is increasing the vulnerability of forests to pest outbreaks.

II. INTERLINKAGES BETWEEN COVID-19 PANDEMIC, CLIMATE CHANGE CRISIS AND DEFORESTATION

13. The Covid-19 pandemic has collided with the climate change emergency. These crises have some profound similarities. Pandemics and climate risk are similar in that they both represent physical global shocks, which then translate into an array of socioeconomics impacts. Understanding their interlinkages can assist in creating more synergic responses.

14. There are clear interlinkages between deforestation climate change and outbreaks of the pandemics. Forest conservation and sustainable forest management play a critical role to avert catastrophic climate change, mitigate the socio-economic consequences of the COVID-19 pandemic and reduce the risk of future outbreaks of disease. Conversely, deforestation and forest degradation exacerbate climate change and increase our vulnerability to disease. This makes investments and actions to halt and reverse forest loss a critical part of an integrated response to both climate change and COVID-19.

15. In relation to the risks of future infectious disease outbreaks, deforestation and landscape fragmentation have been identified as a process drivers that risk increasing contact rates between

[5] Paolo Prosperi, et al. 2020. New estimates of greenhouse gas emissions from biomass burning and peat fires using MODIS Collection 6 burned areas. Climatic Change https://doi.org/10.1007/s10584-020-02654-0.
[6] FAO (2010). Global Forest Resources Assessment 2010 – main report. FAO Forestry Paper No. 163. Rome. www.fao.org/docrep/013/i1757e/i1757e00.htm.

humans and animals that can facilitate transmission of zoonotic infections (see more in document COFO/2020/5).

16. Conversely, addressing deforestation and forest degradation can contribute to a multiple win-win in terms of climate, health risks and local economies. In the short term, the potential of forest-based economies to generate jobs can contribute to the post-pandemic recovery, while supporting food, climate and health security. Acting promptly to address deforestation, as part of the stimulus packages and responses is essential to prevent further future shocks on rural economies and livelihoods.

III. ADDRESSING FORESTS AND CLIMATE CHANGE IN POST PANDEMIC ECONOMIC RECOVERY

17. The ultimate effect of the pandemic on climate change and forests will depend on both the speed of the economic recovery and the type of recovery policies that countries deploy. Forest industries contribute an estimated US$450 billion to annual national incomes globally[7] and over US$250 billion per year to developing country economies[8]. The sector employs some 13.2 million people in the formal sector and an additional 41 million in the informal sector[9]. It is estimated that around 2.4 billion people receiving direct or indirect benefits from forests. Avoiding further deforestation could boost the global economy by at least US$4080 billion per year[10]. It has been estimated that a post-pandemic stimulus programme to protect and restore nature could generate up to 395 million jobs over the next ten years[11].

18. The COVID-19 pandemic has brought unprecedented global socio-economic impacts, exacerbating and deepening pre-existing inequalities, and exposing vulnerabilities that are amplifying the impacts, but also triggered the need for a global massive response. A critical question is how to find a paradigm shift that ensures long-term stimulus packages lead to sustainable decarbonization, multi-dimensional resilience and other co-benefits.

19. As the risks to businesses associated with the loss of forest and nature, climate change and the pandemic become more apparent, and in view of the reduced public resources to reactivate the economy, it is also critical that the recovery policy packages also consider ways in which private sector can be better engaged. Some estimates suggest that industries that are highly dependent on nature generate 15 percent of global GDP, while moderately dependent industries generate 37

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[7] UN, 2013. Economic Contribution of Forests. Background paper. United Nations, Geneva. Available at: http://www. un.org/esa/forests/pdf/session_documents/unff10/ EcoContrForests.pdf.

[8] UN, 2013. Economic Contribution of Forests.

[9] FAO, 2014. State of the World's Forests: Enhancing the socioeconomic benefits from forests. Rome. http://www.fao.org/3/a-i3710e.pdf .

[10] GCEC, 2015. Seizing the Global Opportunity; The Economics of Ecosystems and Biodiversity (TEEB), 2010. Kumar, P. (ed.), The Economics of Ecosystems and Biodiversity Ecological and Economic Foundations; Costanza et al., 2014. Changes in the global value of ecosystem services. Global Environmental Change, 26, 152-158. DOI: 10.1016/j. gloenvcha.2014.04.002; UNEP, 2014. Building Natural Capital: How REDD+ Can Support a Green Economy. Report of the International Resource Panel. UNEP, Nairobi. Available at: http://www.unep.org/resourcepanel/Publications/ BuildingNaturalCapitalHowREDD/tabid/132320/ Default.aspx; These estimates have also been critiqued as oversimplifying in the context of spatial variability and nonlinearities in benefits. For a recent assessment of the value of forests, see, for example, Mullan, K., 2014. The Value of Forest Ecosystem Services to Developing Economies. CGD Climate and Forest Paper Series #6. Center for Global Development, Washington, DC. Available at: http://www. cgdev.org/sites/default/files/CGD_Climate_Forest_6_Value_ Forest_Ecosystems-Mullan.pdf.

[11] World Economic Forum, The Future of Nature and Business Policy Companion: Recommendations for policy-makers to reset towards a new nature economy, July 2020. http://www3.weforum.org/docs/WEF_NNER_II_The_Future_of_Business_and_Nature_Policy_Companion_2020.pdf

percent[12]. Recovery packages should provide incentives for private investments to move towards low-carbon sustainable options, contributing to innovations along their supply chains, and assisting in sustainable demand shifts. The emerging carbon markets can also provide additional incentives.

20. Considering the above, and when *building back better* post-pandemic societies and economies, consistent with 1.5°C mitigation pathways[13], countries could design national policy responses that channel adequate public and private financing to unlock the full potential of forests in rebuilding a post-pandemic world. This would include leveraging the potential of existing sources of forest and climate finance, including from the GCF and GEF, to unlock further investments. Countries could also consider utilizing all available levers to enable recovery through integrating climate and forest agendas in their financial stimulus packages, by, *inter alia*:

i) exploring options to unlock additional investments in ecosystem and social resiliency and economic recovery through existing forest and climate finance, including REDD+ result-based payments, including for indigenous peoples and forest dependent communities;
ii) modernizing forest governance as a response to the COVID-19 crisis by finding innovative solutions, including digital cooperation and uptake of digital technologies;
iii) use of forest data and information systems for decision making for better recovery that manages deforestation risks;
iv) addressing challenges that the COVID-19 pandemics and lockdown is posing to forest law enforcement and the fight against illegal activities and illegal deforestation and land grabbing, by strengthening national forest authorities to scale the use of digital technologies, enhance forest information sharing and supporting REDD+ implementation at scale;
v) integrating deforestation risks in existing land-based policy approaches, and incentives and market-based approaches, as part of a new paradigm.

[12] World Economic Forum, 2020, Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy.
[13] IPPC, UNEP.