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#### United Nations Forum on Forests Thirteenth session 7–11 May 2018 Items 3 (a), (b), (d), 6 and 8 of the provisional agenda\*

Implementation of the United Nations strategic plan for forests 2017–2030: policy dialogue on the thematic and operational priorities, priority actions and resource needs for the period 2017–2018, taking into account the review cycle of the high-level political forum on sustainable development during the biennium and the theme of the International Day of Forests; voluntary announcement of voluntary national contributions; development of the communication and outreach strategy for the strategic plan

Emerging issues and challenges

Information on intersessional activities

# Implementation of the United Nations strategic plan for forests 2017–2030

# Note by the Secretariat\*\*

### Summary

The United Nations Forum on Forests, at its thirteenth session, will consider the implementation of the United Nations strategic plan for forests 2017–2030. The present note has been prepared to serve as the basis for discussions under item 3 (a), on policy dialogue on the thematic and operational priorities, priority actions and resource needs for the period 2017–2018, taking into account the review cycle of the high-level political forum on sustainable development during the biennium and the theme of the International Day of Forests; item 3 (b), on the voluntary announcement of voluntary national contributions; and item 3 (d), on the development of the communication and outreach strategy for the strategic plan, and for discussions under item 6 on emerging issues and challenges and item 8 on information on intersessional activities, of the provisional agenda.

\* E/CN.18/2018/1.

<sup>\*\*</sup> The present note was submitted after the deadline so as to include the most recent information.





# I. Introduction

1. In accordance with the quadrennial programme of work of the United Nations Forum on Forests for the period 2017–2020, the Forum at its thirteenth session will consider the implementation of the United Nations strategic plan for forests 2017– 2030 as a priority action. That includes policy dialogue on the thematic and operational priorities, priority actions and resource needs for the period 2017–2018, taking into account the review cycle of the high-level political forum on sustainable development during the biennium and the theme of the International Day of Forests; the voluntary announcement of voluntary national contributions; and the development of the communication and outreach strategy for the strategic plan.

2. The present note has been prepared to serve as the basis for discussions on the above-mentioned issues under item 3, sub-items (a), (b) and (d), of the provisional agenda of the thirteenth session of the Forum. The note also covers emerging issues and challenges under item 6 and information on intersessional activities under item 8 of the provisional agenda.

# II. Background

3. The United Nations strategic plan for forests 2017–2030 was adopted by the General Assembly in its resolution 71/285, and provides a global framework for sustainably managing all types of forests and trees outside forests, halting and reversing deforestation and forest degradation and increasing forest area. It contains six global forest goals and 26 targets to be achieved by 2030, as well as provisions for voluntary national contributions towards their attainment.

4. At its twelfth session, the Forum emphasized the importance of providing input to the high-level political forum in 2018 with regard to the Sustainable Development Goals to be reviewed. In that respect, the Forum requested its secretariat to prepare a report containing proposals on actions to accelerate progress in achieving Sustainable Development Goal 15 and its forest-related targets. The Forum also requested its secretariat to prepare, for the Forum's consideration at its thirteenth session, background analytical studies on the contribution of forests to the achievement of the other Sustainable Development Goals to be reviewed by the high-level political forum in 2018. The Forum also invited its members, member organizations of the Collaborative Partnership on Forests, United Nations system partners, regional and subregional organizations and processes, major groups and other stakeholders to provide inputs on the contribution of forests to the issues under consideration by the high-level political forum in 2018, and requested its secretariat to synthesize the inputs received and submit the synthesis as background information to the thirteenth session of the Forum.<sup>1</sup>

5. Also at its twelfth session, the Forum welcomed the initiative of the Collaborative Partnership on Forests to organize an international conference on halting deforestation and increasing forest area as a contribution to the Forum's deliberations at its thirteenth session and the Forum's input to the high-level political forum in 2018.<sup>2</sup> In addition, the Forum invited members of the Forum, the Collaborative Partnership on Forests and its member organizations, United Nations system partners, regional and subregional organizations and processes, major groups

<sup>&</sup>lt;sup>1</sup> See E/2017/42-E/CN.18/2017/8, resolution 12/1, paras. 22–25.

<sup>&</sup>lt;sup>2</sup> Ibid., para. 26.

and other stakeholders to undertake initiatives to highlight the significance of forests to the 2030 Agenda for Sustainable Development and to present the outcomes of those initiatives to its thirteenth session.<sup>3</sup>

6. In accordance with its resolution 12/1 on the outcome of the twelfth session of the United Nations Forum on Forests, the Forum, at its thirteenth session, will finalize its substantive input<sup>4</sup> to the high-level political forum in 2018, taking into account the inputs provided to the Forum.<sup>5</sup>

7. The Forum also encouraged members of the Forum to announce their initial voluntary national contributions to achieving one or more of the global forest goals and targets set out in the strategic plan at its thirteenth session and to communicate their announcements to the Forum secretariat.<sup>6</sup>

8. In accordance with its quadrennial programme of work, the Forum will consider, at its thirteenth session, the communication and outreach strategy for the strategic plan, and identify target audiences, key messages, methods, activities and criteria for success.

# III. Key contributions of forests to the 2018 theme of the high-level political forum on sustainable development

9. In 2018, the theme of the high-level political forum on sustainable development will be "Transformation towards sustainable and resilient societies". Sustainable Development Goals 6, 7, 11, 12 and 15 will be reviewed in depth, along with Goal 17, which is included every year.<sup>7</sup> In preparation for input from the Forum to the high-level political forum on sustainable development, several activities were carried out during the intersessional period between twelfth and thirteenth sessions of the Forum.

10. With regard to paragraph 24 of resolution 12/1, inputs were submitted by Canada, Romania, the United States of America, the European Union, the International Union of Forest Research Organizations, the United Nations Development Programme and the Committee on Forests and the Forest Industry of the Economic Commission for Europe (ECE).<sup>8</sup>

<sup>&</sup>lt;sup>3</sup> Ibid., para. 27.

<sup>&</sup>lt;sup>4</sup> In accordance with the guidance provided by the President of the Economic and Social Council in an internal communication, the inputs provided could be based on the following: (a) an assessment of the situation regarding the principle of "ensuring that no one is left behind" at the global level; (b) the identification of gaps, areas requiring urgent attention, risks and challenges; (c) valuable lessons learned on transformation towards sustainable and resilient societies; (d) emerging issues likely to affect building sustainable and resilient societies; (e) areas in which political guidance by the high-level political forum is required; and (f) policy recommendations on ways to accelerate progress in establishing sustainable and resilient societies.

<sup>&</sup>lt;sup>5</sup> See E/2017/42-E/CN.18/2017/8, resolution 12/1, para. 28.

<sup>&</sup>lt;sup>6</sup> Ibid., para. 16.

<sup>&</sup>lt;sup>7</sup> Sustainable Development Goal 6: Ensure availability and sustainable management of water and sanitation for all; Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all; Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable; Goal 12: Ensure sustainable consumption and production patterns; Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss; Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development.

<sup>&</sup>lt;sup>8</sup> See www.un.org/esa/forests/forum/current-session/index.html.

11. In response to paragraph 23 of resolution 12/1, the Forum secretariat also commissioned four background analytical studies<sup>9</sup> on the contribution of forests to the achievement of the Sustainable Development Goals under review by the high-level political forum on sustainable development in 2018, in consultation with the Bureau of the thirteenth session of the Forum. The studies include: (a) forest ecosystem services; (b) forests and water; (c) forests and energy; and (d) the sustainable consumption and production of forest products.

12. Member organizations of the Collaborative Partnership on Forests organized an international conference entitled "Working across sectors to halt deforestation and increase forest area: from aspiration to action", in Rome, from 20 to 22 February 2018, in response to resolution 12/1.<sup>10</sup>

13. The General Assembly, in its resolution 67/200, proclaimed 21 March of each year the International Day of Forests in order to celebrate and raise awareness of the importance of all types of forests and of trees outside forests. In 2017, the proposed theme was "forests and energy", which served to highlight the interlinkages between Sustainable Development Goals 7 and 15. In 2018, the proposed theme is "forests and cities" to highlight the interlinkages between Goals 11 and 15.

## A. Summary of the submitted inputs

14. Inputs from countries and organizations highlighted the vital role of forests as a key renewable resource for improving quality of life and providing multiple benefits to environment, society and the economy. Forests cover 30 per cent of the Earth's land area and harbour reservoirs of social, economic and environmental benefits that sustain human well-being and help build the resilience of communities and individuals. While forests play a determinant role in many facets of socioeconomic lives globally, their wide-ranging benefits are particularly critical for the subsistence and livelihood of the rural poor in developing countries.

15. The inputs also stressed the benefits and functions of forest ecosystem services in tackling global challenges such as loss of biodiversity, land degradation and climate change, highlighted the essential roles of forests in supplying water and energy to support the needs of present and future generations and promoted responsible consumption and production patterns.

### B. Main findings of background analytical studies

#### Forest ecosystem services

16. Forests provide essential ecosystem services, such as timber, food, fuel, fodder, non-wood products and shelter, in addition to contributing to soil and water conservation and clean air. When sustainably managed, all types of forests are healthy, productive, resilient and renewable ecosystems, providing essential goods and services to people worldwide.

17. Forests are home to an estimated 80 per cent of all terrestrial species.<sup>11</sup> Forests contribute substantially to climate change mitigation and adaptation and to conserving biodiversity. Forests prevent land degradation and desertification, and

<sup>&</sup>lt;sup>9</sup> See www.un.org/esa/forests/forum/current-session/index.html.

<sup>&</sup>lt;sup>10</sup> See www.cpfweb.org/93859/en/.

<sup>&</sup>lt;sup>11</sup> See Economic and Social Council resolution 2017/4, annex I, para. 6.

reduce the risk of floods, landslides and avalanches, droughts, dust storms and sandstorms and other natural disasters. In many regions, forests also have important cultural and spiritual value.

18. Forests conserve trophic interactions among plants, microbes, vertebrates and invertebrates, retain water and control soil erosion, thereby supporting biogeochemical processes for living systems and the environment.<sup>12</sup> The various combinations of extensive forest ecosystems, including grasslands, wetlands, rivers and lakes, operate together to generate services, and tend to be enhanced or impeded by interactions among the ecosystems.

19. Forests also serve as a storehouse of genetic materials for the development of medicines, providing components for three quarters of the top-ranking global prescription medications. There is further potential to be tapped as less than 1 per cent of the world's 80,000 tree species have been studied for potential use in medicine.<sup>13</sup>

20. While the benefits of forest products, particularly timber and other wood products, are generally well recognized and monetized, many other forest services and benefits tend to be largely unrecognized, thereby exacerbating declines in the quantity and quality of those undervalued services. For rural and forest-dwelling households, it is estimated that ecosystem services and non-marketed goods account for between 47 per cent and 89 per cent of the total source of their livelihood.<sup>14</sup>

21. Among forest ecosystem services, water storage and purification, carbon storage, biodiversity and cultural services are often undervalued or unvalued, resulting in policies that favour market-priced agricultural and timber products.<sup>15</sup> Consequently, forest owners tend to receive little or no financial incentive to sustainably manage their forests.

22. Available data and analysis suggest that the value of benefits provided by ecosystems could far exceed the size of global economy.<sup>16,17</sup> The economic value of global ecosystem services was estimated at \$124.8 trillion in 2011, of which the economic value of forests globally was estimated at \$16.2 trillion,<sup>18</sup> compared with the estimated global gross domestic product of \$73.2 trillion in the same year.<sup>19</sup>

23. A wide variety of market- and non-market-based policies and other measures can influence how forest ecosystem services are managed, including liability laws,

<sup>&</sup>lt;sup>12</sup> Ian Thompson and others, "Forest biodiversity and the delivery of ecosystem goods and services: translating science into policy", *BioScience*, vol. 61, No. 12 (December 2011).

<sup>&</sup>lt;sup>13</sup> Michael Jenkins, "Untapped potential: forest ecosystem services for achieving SDG15", background analytical study on forest ecosystem services prepared for the thirteenth session of the United Nations Forum on Forests (2017).

<sup>&</sup>lt;sup>14</sup> The Economics of Ecosystems and Biodiversity, Mainstreaming the Economics of Nature — A Synthesis of the Approach, Conclusions and Recommendations of TEEB (Malta, Progress Press, 2010). Available from www.teebweb.org/our-publications/teeb-study-reports/synthesis-report/.

<sup>&</sup>lt;sup>15</sup> Mark Everard, *Ecosystem Services: Key Issues* (London and New York, Routledge, 2017).

<sup>&</sup>lt;sup>16</sup> The Economics of Ecosystems and Biodiversity, *Mainstreaming the Economics of Nature*.

<sup>&</sup>lt;sup>17</sup> Leon Braat and Rudolf de Groot, "The ecosystem services agenda: bridging the worlds of natural science and economics, conservation and development, and public and private policy", *Ecosystem Services*, vol. 1, No. 1 (December 2012).

<sup>&</sup>lt;sup>18</sup> Robert Constanza and others, "Changes in the global value of ecosystem services", *Global Environmental Change*, vol. 26 (May 2014).

<sup>&</sup>lt;sup>19</sup> World Bank, World Development Indicator Database. Available from https://data.worldbank.org/ indicator/NY.GDP.MKTP.CD.

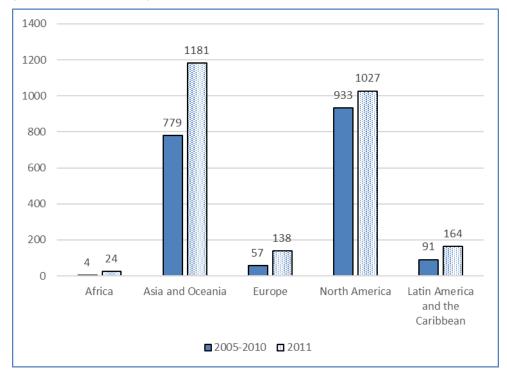
regulatory policies and standards, tenure and property rights, certification schemes and economic incentive mechanisms.<sup>20</sup>

24. Among incentive mechanisms, payments for ecosystem services schemes have gained popularity in recent years as a policy instrument to promote the sustainable management of forests and other natural resources. A growing number of countries have taken significant steps to develop and implement payments for ecosystem services schemes, resulting in an increasing number and amount of such payments.

25. The global income from forestry payments for ecosystem services schemes continues to increase and is estimated to be more than \$2.5 billion in 2011, providing payments to 218 million people between 2005 and 2011,<sup>21</sup> as shown in figure I.

#### Figure I

# Average annual income of forestry payments for ecosystem services by region, 2005–2011



(Billions of United States dollars)

Source: Data adapted from the Food and Agriculture Organization of the United Nations (FAO), State of the World's Forests 2014. Enhancing the Socioeconomic Benefits from Forests (Rome, 2014).

26. In addition to forestry payments for ecosystem service schemes, the recognition of the critical role of forests in addressing climate change mitigation and adaptation has also led to the ongoing development of the mechanism on reducing emissions from deforestation and forest degradation and the role of conservation, sustainable

<sup>&</sup>lt;sup>20</sup> Timm Kroeger and Frank Casey, "An assessment of market-based approaches to providing ecosystem services on agricultural lands", *Ecological Economics*, vol. 64, No. 2 (December 2007).

<sup>&</sup>lt;sup>21</sup> Food and Agriculture Organization of the United Nations (FAO), State of the World's Forests 2014. Enhancing the Socioeconomic Benefits from Forests (Rome, 2014).

management of forests and enhancement of forest carbon stocks in developing countries (REDD-plus) to generate additional revenues.

#### Forests and water

27. Forests play a critical role in providing clean water. Forested catchments, including watersheds and wetlands, provide three quarters of all fresh water used for household, agricultural, industrial and ecological needs.

28. Forests regulate and sustain the amount and quality of water, as well as surface and groundwater flows, through the hydrological cycle. By acting as natural water filters and pumps, forests maintain high water quality, particularly at the source of intake, by minimizing soil erosion in various water bodies, filtering water pollutants and recharging groundwater.<sup>22</sup> Forests also reduce the potential cost of treating water by excluding other land uses and activities in the watershed that can cause water pollution.<sup>23</sup>

29. Approximately one third of the world's largest cities, including Abidjan, Côte d'Ivoire; Jakarta; Madrid; Mumbai, India; and Rio de Janeiro, Brazil, rely on forested areas for a significant portion of their drinking water.<sup>24</sup> As the global population continues to grow, particularly in urban areas, safeguarding the water-providing capacity of forests has become more urgent to meet demands for water.

30. In many regions, both the availability and quality of water are increasingly under stress, owing mainly to overuse, misuse and pollution resulting from the compounding effects of growing populations, rising per capita incomes and expanding cities. Consequently, approximately 80 per cent of the world's population is exposed to high levels of water insecurity.<sup>25</sup>

31. Recent findings illustrate the significant role of forests in forming microclimates and affecting precipitation patterns.<sup>26</sup> Forests affect, to a critical degree, the quantity of water circulating in watersheds through evapotranspiration, thereby facilitating the convergence of atmospheric moisture and humidity, which contributes to cloud formation and resultant rainfall.<sup>27</sup>

32. Climate change plays a key role in interactions between forests and water. The impacts of climate change have resulted in the erratic and uncertain supply of water and the increased occurrence of natural disasters and catastrophes, such as landslides, avalanches, floods and droughts, that can disrupt the source and supply of fresh water.

33. In that regard, forests play a crucial role in reducing risks and building resilience against natural disasters, as sustainably managed forests prevent and help regulate climate and reduce soil degradation and erosion, salinization and land degradation and desertification.

<sup>&</sup>lt;sup>22</sup> FAO, Forests and Water: International Momentum and Action (Rome, 2013).

<sup>&</sup>lt;sup>23</sup> Travis Warziniack and others, "Effect of forest cover on water treatment costs", *Water Economics and Policy*, vol. 3, No. 4 (2017).

<sup>&</sup>lt;sup>24</sup> FAO, "Forests and water", Unasylva, vol. 58, No. 229 (2007).

<sup>&</sup>lt;sup>25</sup> Charles Vörösmarty and others, "Global threats to human water security and river biodiversity", *Nature*, vol. 467 (2010).

<sup>&</sup>lt;sup>26</sup> David Ellison, "From Myth 2 Concept and beyond", background analytical study on forests and water prepared for the thirteenth session of the United Nations Forum on Forests (2017).

<sup>&</sup>lt;sup>27</sup> The Economics of Ecosystems and Biodiversity, *Ecological and Economic Foundations*, Pushpam Kumar, ed. (London and Washington, D.C., Earthscan Routledge, 2010).

34. In watershed ecosystems, forests function as prime regulators within the water, energy and carbon cycles, as they provide the foundations for the distribution of water resources, the cooling of terrestrial surfaces through the capture and redistribution of the sun's energy and the absorption and storage of carbon dioxide through photosynthesis.<sup>28</sup>

35. While the expansion of forests may not necessarily result in an immediate increase in water yield, but rather could cause an initial drop, a growing body of evidence highlights the positive impacts of afforestation, reforestation and forest restoration on the quantity of water in local streams and surface water systems, indicating long-term positive impacts on water yields through soil infiltration capacity and groundwater levels.<sup>29</sup>

#### Forests and energy

36. More than 2.5 billion people, approximately one third of the world's population, rely on the traditional use of biomass from forests for their daily energy needs, particularly cooking and heating.<sup>30</sup>

37. Forest biomass, including fuelwood, charcoal, agricultural residue and animal dung, is the oldest source of energy known to humans and continues to constitute an important energy source.

38. The global production of wood fuel, including fuelwood and charcoal, has steadily increased since the 1960s (see figure II). In many parts of the world, firewood for cooking and heating continues to remain the most significant use of wood. It is estimated that approximately 50 per cent of the wood extracted from forests worldwide is used to produce energy as fuelwood and charcoal.<sup>31</sup>

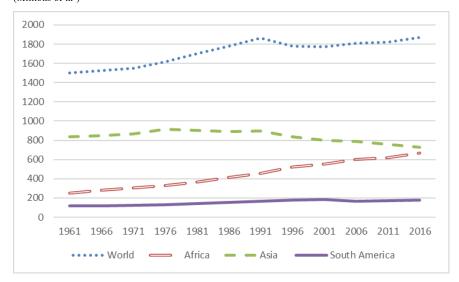
<sup>&</sup>lt;sup>28</sup> Jan Pokorný and others, "Solar energy dissipation and temperature control by water and plants", *International Journal of Water*, vol. 5, No. 4 (January 2010).

<sup>&</sup>lt;sup>29</sup> Solange Filoso and others, "Impacts of forest restoration on water yield: a systematic review", *PLoS ONE*, vol. 12, No. 8 (August 2017).

<sup>&</sup>lt;sup>30</sup> International Energy Agency, *World Energy Outlook 2017* (Paris, 2017).

<sup>&</sup>lt;sup>31</sup> FAO, The Charcoal Transition: Greening the Charcoal Value Chain to Mitigate Climate Change and Improve Local Livelihoods (Rome, 2017).





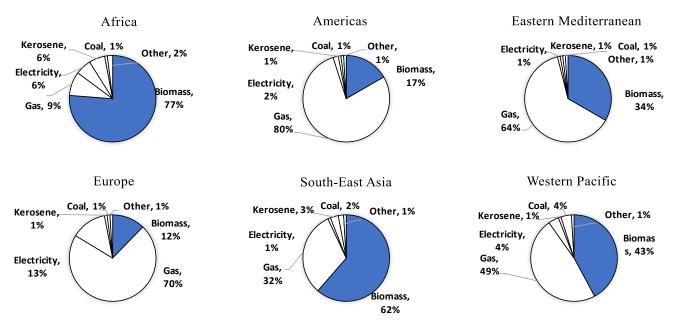
Source: Data adapted from FAOSTAT. Available from www.fao.org/faostat/en/#data/FO.

39. Nearly 90 per cent of all fuelwood and charcoal are consumed in developing countries, and regions with the highest incidence of poverty, particularly in Africa and Asia, are the most dependent on forests for energy, as forests are often the only energy source available to the rural poor.<sup>32</sup> It is estimated that, in Africa and Asia, 77 per cent and 62 per cent, respectively, of the primary source of energy for cooking is derived from biomass, including wood, charcoal or agricultural waste and dung (see figure III).

40. While it is largely uncaptured in the official statistics due to its informal nature, the wood-based biomass energy sector contributes significantly to national economies in a number of developing countries. For example, the production of charcoal employs more than 40 million people worldwide, constituting a key economic sector, particularly in sub-Saharan Africa.<sup>33</sup>

<sup>&</sup>lt;sup>32</sup> Bjorn Larsen, "Air pollution assessment paper: benefits and costs of the air pollution targets for the post-2015 development agenda", working paper prepared for the Copenhagen Consensus Center, December 2014. Available from www.copenhagenconsensus.com/publication/post-2015consensus-air-pollution-assessment-larsen.

<sup>&</sup>lt;sup>33</sup> FAO, The Charcoal Transition.



# Figure III Primary reliance on cooking fuel by fuel type and region, 2016

Source: Data adapted from the World Health Organization, Burning Opportunity: Clean Household Energy for Health, Sustainable Development, and Wellbeing of Women and Children (Geneva, 2016).

41. The use of wood energy provides avenues of opportunities to address the impacts of the collection of forest biomass energy on gender and health. The burning of biomass in traditional stoves in open fires in the home causes incomplete combustion and produces large quantities of pollutants, such as carbon monoxide and other particulate matter, as well as volatile organic compounds. The resultant household air pollution is linked to 4.3 million premature deaths per year, more than 60 per cent of them women and children.<sup>34</sup>

42. Driven by economic choices and cultural norms, women and girls in developing countries, particularly in rural areas, generally bear the household responsibilities of harvesting, bundling, transporting, chopping, storing and burning fuelwoods for use in the home, which exposes them to injury and disease risks and costs them time that could otherwise be spent on income generation and education. A recent survey by the World Health Organization (WHO) showed that women and children in sub-Saharan Africa, relying on polluting cookstoves, spend more than 15 hours a week collecting fuel and/or water.<sup>35</sup>

43. The use of improved and efficient biomass-burning stoves would provide affordable and transitional solutions to address the main causes of energy-related household air pollution in many parts of the world, thereby reducing the disproportionate burden on vulnerable populations. If cleaner stoves and fuels were used, the number of hours spent on collection of fuelwoods could be reduced significantly.<sup>36</sup>

<sup>&</sup>lt;sup>34</sup> World Health Organization (WHO), Burning Opportunity: Clean Household Energy for Health, Sustainable Development, and Wellbeing of Women and Children (Geneva, 2016).

<sup>35</sup> Ibid.

<sup>&</sup>lt;sup>36</sup> Ibid.

44. The improved and efficient use of biomass could also contribute to reducing outdoor air pollution. It is estimated that 12 per cent of global ambient fine particulate matter pollution is attributable to household air pollution from cooking, which causes 0.5 million of the 3.9 million premature deaths attributed to outdoor air pollution each year.<sup>37</sup>

45. A growing body of evidence suggests a linkage between the use of biomass energy and climate change. An estimated 1.0 to 2.4 gigatons of equivalent carbon dioxide of annual greenhouse gas emissions are attributed to the production and use of fuelwood and charcoal, equivalent to 2 to 7 per cent of global anthropogenic greenhouse gas emissions.<sup>38</sup>

46. Bioenergy, including traditional and modern uses of forest biomass, has become a significant contributor to the global energy supply, providing approximately 9 per cent of the global primary energy supply and accounting for approximately 80 per cent of the energy derived from renewable sources.<sup>39,40</sup> Among various types of bioenergy, biofuels have been increasingly supported in many developing and developed countries to enhance energy security, generate rural employment and mitigate greenhouse gas emissions.

47. While demands for biofuels are projected to rise sharply, driven by the growing need to meet energy demands, <sup>41,42</sup> the impacts of bioenergy production on forest ecosystems need to be carefully assessed, as much of biomass production for bioenergy is expected to be derived from forests and non-food agricultural crops, depending on the local availability of other energy sources, the availability of biomass feedstock and waste and the availability of land for planting.<sup>43,44</sup>

#### Sustainable consumption and production of forest products

48. Forests and trees outside forests provide food and nutritional, water and energy security to a broad range of forest-dependent populations globally. It is estimated that 1.0 to 1.7 billion people, including indigenous peoples, rural dwellers, smallholder farmers and formal and informal forest-based enterprise workers, depend on forests for their subsistence and livelihoods.<sup>45</sup>

49. Globally, the growing demand for forest products stems from continuous economic and population growth, as well as changing patterns of consumption and production driven by technological changes throughout the value chains of forest and

<sup>&</sup>lt;sup>37</sup> Ibid.

<sup>&</sup>lt;sup>38</sup> FAO, The Charcoal Transition.

<sup>&</sup>lt;sup>39</sup> Renewable Energy Policy Network for the 21st Century, *Renewables 2017 Global Status Report*, REN21 Secretariat (Paris, 2017).

<sup>&</sup>lt;sup>40</sup> International Energy Agency, World Energy Outlook 2017.

<sup>&</sup>lt;sup>41</sup> Hannes Böttcher, Stefan Frank and Petr Havlik, "Deliverable 3.4: biomass availability and supply analysis", working paper for the BIOMASS FUTURES project, March 2012. Available from www.biomassfutures.eu/public\_docs/final\_deliverables/ WP3/D3.4%20Biomass%20availability%20&%20supply.pdf.

<sup>&</sup>lt;sup>42</sup> Andrew Welfle, "Balancing growing global bioenergy resource demands: Brazil's biomass potential and the availability of resource for trade", *Biomass and Bioenergy*, vol. 105 (October 2017).

<sup>&</sup>lt;sup>43</sup> Elizabeth Cushion, Adrian Whiteman and Gerhard Dieterle, *Bioenergy Development: Issues and Impacts for Poverty and Natural Resource Management* (Washington, D.C., World Bank, 2010).

<sup>&</sup>lt;sup>44</sup> Virginia H. Dale and others, "Indicators for assessing socioeconomic sustainability of bioenergy systems: a short list of practical measures", *Ecological Indicators*, vol. 26 (March 2013).

<sup>&</sup>lt;sup>45</sup> High-level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, "Sustainable forestry for food security and nutrition", HPLE report, No. 11 (Rome, 2017).

agricultural commodities. The demand for vital forest products is expected to continue to grow in response to the continuously growing global economy and population, adding further pressures on forests and their resources.

50. Available data indicate that the demand for both wood and non-wood forest products will continue to increase. The global production of major wood products, including industrial roundwood, sawnwood, wood-based panels, pulp and paper, has grown steadily from 2011 to 2015, with the fastest growth recorded in Asia and North America.<sup>46</sup>

51. The production and consumption of fuelwood and charcoal has increased continuously since the 1960s, particularly in Africa (see figure II). While Asia has grown in importance as a producer and consumer of many forest products, Europe and North America have been driving the increasing demand for wood pellets for bioenergy production.<sup>47</sup>

52. While the drivers of deforestation are diverse, complex and region-specific, the expansion of large-scale export-oriented commercial agriculture has been identified as the main driver of deforestation, accounting for an estimated 70 to 80 per cent of deforestation worldwide.<sup>48,49</sup> At the subnational or national level, such production of agricultural commodities may contribute little to food production and consumption.<sup>50</sup>

53. Rising per capita income and urbanization are often associated with shifts in diet patterns towards animal products and processed foods, thereby encouraging the expansion of pastures into forested lands for the large-scale commercial production of agricultural commodities.<sup>51</sup> In addition, the demand for land has been growing as a result of large-scale production of bioenergy and biofuels in some regions, driven by concerns for the effects of climate change and energy security.<sup>52</sup>

54. As the demand for forest products continues to grow, forest resources need to be carefully assessed in terms of their capacity for provisioning, their regulating effect and their cultural and supportive services to ensure their sustainability. Both natural and planted forests have important roles, as changes in forest cover and types and in forest management have significant impacts on the capacity of forests to sustainably produce forest products.

55. In 2015, approximately 31 per cent of the world's forests was used for production, while 28 per cent was used for multiple functions.<sup>53</sup> Planted forests accounted for 7.3 per cent of the global forest cover<sup>54</sup> and play an increasingly

<sup>&</sup>lt;sup>46</sup> FAO, "2015 global forest products facts and figures", 2016. Available from www.fao.org/3/ai6669e.pdf.

<sup>&</sup>lt;sup>47</sup> Ibid.

<sup>&</sup>lt;sup>48</sup> Gabrielle Kissinger, Martin Herold and Veronique De Sy, "Drivers of deforestation and forest degradation: a synthesis report for REDD+ policymakers" (Vancouver, Lexeme Consulting, 2012).

<sup>&</sup>lt;sup>49</sup> Martin Persson, Sabine Henders and Thomas Kastner, "Trading forests: quantifying the contribution of global commodity markets to emissions from tropical deforestation", Working Paper, No. 384 (Washington, D.C., Center for Global Development, 2014).

<sup>&</sup>lt;sup>50</sup> FAO, State of the World's Forests 2016. Forests and Agriculture: Land-use Challenges and Opportunities (Rome, 2016).

<sup>&</sup>lt;sup>51</sup> Uma Lele and others, "Changing roles of forests and their cross-sectoral linkages in the course of economic development", background paper prepared for the United Nations Forum on Forests, Istanbul, Turkey, April 2013.

<sup>&</sup>lt;sup>52</sup> Persson, Henders and Kastner, "Trading forests".

<sup>&</sup>lt;sup>53</sup> FAO, Global Forest Resources Assessment 2015 (Rome, 2016).

<sup>54</sup> Ibid.

important role in balancing competing needs for forest goods and ecosystem services and contribute to alleviating the pressure on natural forests.

56. Sustainable forest management has an important role to play in the sustainable production of forest products. The recent groundswell of policies, initiatives and commitments to "forest-smart" sourcing and production of agricultural commodities provides an opportunity to facilitate the sustainable sourcing of forest and agricultural products and promote sustainable forest management.

57. Over the past decade, several private sector companies and associations have initiated actions to promote the sustainable supply of forest and agricultural products, particularly through voluntary certification schemes and other improved supply chain management programmes for commodities that put forests at risk, including initiatives that focus on producers of four major forest-risk commodities: palm oil; soy; timber, pulp and paper; and beef.<sup>55</sup>

58. The effective implementation of sustainable supply chain management initiatives entails the active engagement of stakeholders ranging from producers, processors and traders to manufactures and retailers, with the support of the financial sector and national and subnational governments, as well as civil society.

### C. International conference of the Collaborative Partnership on Forests

59. The outcome of the international conference organized by the Collaborative Partnership on Forests, entitled "Working across sectors to halt deforestation and increase forest area: from aspiration to action",<sup>56</sup> provided a set of actions to achieve Sustainable Development Goal 15, target 2,<sup>57</sup> and global forest goal 1, target 1,<sup>58</sup> as input to the Forum at its thirteenth session and, through the Forum, to the 2018 meeting of the high-level political forum on sustainable development. The main points for action identified at the conference were:

(a) Maintaining sufficient, productive, diverse and healthy forests is crucial for achieving the Sustainable Development Goals and the climate and biodiversity targets;

(b) Halting deforestation and increasing forest area (Sustainable Development Goal 15, target 2, and global forest goal 1, target 1) can only be achieved through political will, individual motivation and concerted collective action across sectors, stakeholders and institutions and at all levels, supported by enabling policy and governance frameworks;

(c) Awareness and knowledge about the drivers of deforestation and the multiple functions of forests and trees and capacities for sustainable forest management, including protection, restoration, afforestation and reforestation, need

<sup>&</sup>lt;sup>55</sup> Till Neeff and Thaís Linhares-Juvenal, "Zero deforestation initiatives and their impacts on commodity supply chains", discussion paper prepared for the fifty-seventh session of the FAO Advisory Committee on Sustainable Forest-based Industries, Rome, June 2017.

<sup>&</sup>lt;sup>56</sup> At the time of writing, the conference organizers were finalizing a set of overarching conference messages. The outcome report will be posted on www.cpfweb.org/93859/en/.

<sup>&</sup>lt;sup>57</sup> By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.

<sup>&</sup>lt;sup>58</sup> Forest area is increased by 3 per cent worldwide by 2030.

to be enhanced to strengthen their contribution to the Sustainable Development Goals, including goals on inclusive gender and youth participation;

(d) Halting deforestation should become a corporate responsibility of agribusiness, supported by international trade instruments favouring deforestation-free commodities and by consumer education, while small producers need business incubation support and better access to services, finance and markets;

(e) Scaling up finance and investment for sustainable land use and forests requires positive incentives, improved legality, public-private partnerships, innovative financing instruments and investment mechanisms and de-risking private sector investment;

(f) Country experiences of good practices and technologies that create winwin situations for productive and sustainable land use are available both in forestry and agriculture, but they urgently need wider dissemination and scaling up to accelerate progress towards achieving Sustainable Development Goal 15;

(g) Land-use competition between forests and agriculture can be solved by taking a landscape approach that integrates forests, trees and agricultural activities and intensifies them to increase resilience and maximize long-term benefits to society;

(h) There is an urgent need to promote sustainable, inclusive and diversified forest products value chains that increase the value of forests, make efficient use of renewable resources and contribute to sustainable production and consumption;

(i) Agricultural productivity and resilience, food security, biodiversity and the incomes of small farmers can be increased through diversified agricultural production systems that integrate trees, crops and livestock in the landscape, including agroforestry and silvopastoral systems;

(j) The value of forest ecosystem services, which underpin the stability of livelihoods, should include productivity and environmental values and should be captured through simple and direct systems of payments for ecosystem services;

(k) Expanded research and science-policy/society interactions are required to provide practical pathways that support the development of evidence-based policies and implementation frameworks for achieving Sustainable Development Goal 15 and global forest goal 1.

# IV. Voluntary national contributions and their voluntary announcement

60. In accordance with paragraph 30 of the United Nations strategic plan for forests 2017–2030,<sup>59</sup> members of the United Nations Forum on Forests may, on a voluntary basis, determine their contributions towards achieving the global forest goals and targets, taking into account their national circumstances, policies, priorities, capacities, levels of development and forest conditions.

61. Members may include in their voluntary national contributions, as appropriate, national actions and targets related to other international forest-related commitments and goals, such as the 2030 Agenda for Sustainable Development and the Sustainable Development Goals, the Aichi Biodiversity Targets and actions to address climate

<sup>&</sup>lt;sup>59</sup> See Economic and Social Council resolution 2017/4, annex I.

change under the Paris Agreement under the United Nations Framework Convention on Climate Change.

62. In accordance with paragraph 32 of the strategic plan, members may, on a voluntary basis, communicate their progress on the implementation of the voluntary national contributions to the Forum at regular intervals as part of their voluntary reporting on the implementation of the strategic plan and the United Nations forest instrument to avoid any additional reporting burden.

63. At the time of writing, four member States, Ecuador, Ghana, Guatemala and Liberia, had communicated their intent to announce their voluntary national contributions at the thirteenth session of the Forum.

# V. Development of the communication and outreach strategy of the United Nations strategic plan for forests 2017–2030

64. In September 2017, the Forum secretariat held an expert meeting in collaboration with the ECE/FAO Team of Specialists on Forest Communication — Forest Communicators' Network at Headquarters, on 6 and 7 September 2017, to gather lessons learned from successful communication and outreach strategies related to forests. The draft strategy contained in the annex to the present note was prepared by the Forum secretariat on the basis of input gathered through that meeting. In accordance with its quadrennial programme of work, the Forum will consider the draft strategy at its thirteenth session.

# VI. Matters for consideration by the United Nations Forum on Forests

### A. Proposals on actions to accelerate progress in achieving Sustainable Development Goal 15 and its forest-related targets

65. Healthy forests are vital to achieving sustainable development. There is a growing body of evidence from recent studies on how ecosystem services and functions inherent to forests offer solutions to the transformation required to achieve sustainable and resilient societies. As part of larger landscapes and biomes, forests play critical roles in hydrologic and energy cycles, while regulating the rising temperatures and diminishing rainfalls.

66. Sustainably managed forests provide a broad range of wood and non-wood forest products essential for human livelihood, quality of life and economic prosperity, and offer unique opportunities to promote sustainable natural resource use through their production and consumption cycles.

67. With the world's population projected to reach 9.8 billion by  $2050^{60}$  and the proportion of the urban population projected to reach 60 per cent in 2030,<sup>61</sup> the global demand for and consumption of forest products and services is expected to accelerate

<sup>&</sup>lt;sup>60</sup> United Nations, Department of Economic and Social Affairs, Population Division, World Population Prospects: The 2017 Revision — Key Findings and Advance Tables, Working Paper, No. ESA/P/WP/248 (New York, 2017).

<sup>&</sup>lt;sup>61</sup> United Nations, Department of Economic and Social Affairs, Population Division, *The World's Cities in 2016: Data Booklet*, ST/ESA/SER.A/392 (New York, 2017).

and put further pressure on forests, posing imminent challenges that require urgent cross-sectoral action at all levels to sustainably manage forests, including through their conservation, restoration and expansion.

68. The Forum may wish to encourage member States to:

(a) Strengthen and catalyse the implementation of the United Nations strategic plan for forests 2017–2030 through its integration into national strategies for sustainable development as an integrated framework for national action and international cooperation to accelerate the progress towards the achievement of Sustainable Development Goal 15 and its targets and other forest-related Sustainable Development Goals;

(b) Strengthen the recognition and evaluation of the full range of forest ecosystem services and forest products through the implementation of the United Nations forest instrument, and improve capacities for data and information collection and analysis to better assess their contributions to sustainable and resilient societies;

(c) Enhance collaboration and exchange on experiences in market- and non-market-based instruments for ecosystem services, including payments for ecosystem services, to scale up best practices, including through North-South, South-South and triangular cooperation;

(d) Develop and implement protection, restoration, afforestation and reforestation policies and measures that promote an integrated landscape approach to forest and water management at the local, national and transboundary levels for household, agricultural, industrial and ecological purposes;

(e) Develop and implement policies and other measures that promote the sustainable and modern use of forest biomass energy and provide clean cooking facilities to reduce household air pollution and associated premature deaths;

(f) Develop and implement policies and other measures that promote sustainable value chains of forest products, including through public procurement policies, tariff reductions for sustainable products and joint efforts between producer and consumer countries;

(g) Promote sustainable value chains of forest products and agricultural commodities through cross-sectoral collaboration that brings together national and local governments, the private sector, including the financial sector, small-scale forest enterprises and owners and forest-dependent communities;

(h) Strengthen North-South, South-South and triangular cooperation for knowledge-sharing and capacity development on risk assessment, prevention and the monitoring and combating of forest-related natural hazards, in particular wildfires, forest pests and diseases.

69. The Forum may wish to invite the Collaborative Partnership on Forests and its member organizations to:

(a) Assist member States, upon request, in advancing the global forest goals and targets of the United Nations strategic plan for forests 2017–2030 in a way that enhances the integrated implementation of the 2030 Agenda for Sustainable Development;

(b) Assist member States, upon request, in developing strategies and capacities in data collection and analysis that integrate forest ecosystems and their services into their policies and other measures.

70. The Forum may wish to invite donors and regional and international organizations to:

(a) Provide financial resources, assist with the capacity development of and technology transfer to developing countries and countries with economies in transition to support their efforts to gather information and data on forest ecosystem services and their cross-sectoral benefits;

(b) Provide voluntary contributions to the Forum trust fund to support the implementation of the United Nations strategic plan for forests 2017–2030;

(c) Provide financial resources to the Collaborative Partnership on Forests and major groups and other stakeholders to strengthen their capacity to implement their workplans in support of implementation of the strategic plan;

(d) Promote the contributions of the regional and subregional organizations and processes to the implementation of the strategic plan, including through considering the possibility of aligning their contribution cycle with that of the voluntary national reporting of members of the Forum.

71. The Forum may wish to call upon major groups and other stakeholders, including the private sector and the financial sector, to:

(a) Promote the recognition, demonstration and capturing of the full values of forest ecosystems and their services in their decision-making, building on existing multi-stakeholder initiatives and methodologies, including the Natural Capital Protocol of the Natural Capital Coalition;

(b) Promote sustainable value chains of forest products and agricultural commodities through cross-sectoral collaboration in cooperation with national and local governments, civil society and forest-dependent communities, building on existing efforts on voluntary certification schemes, codes of conduct, consumer campaigns and other commitments and initiatives, including the Tropical Forest Alliance 2020 of the Consumer Goods Forum and the Carbon Disclosure Project and the New Generation Plantations project of the World Wide Fund for Nature;

(c) Contribute to data and information collection and analysis through independent research and studies on possible measures to further promote the integration of sustainable value chains of forest and agricultural products.

72. The Forum may wish to request the Forum secretariat to:

(a) Support coherent and collaborative evaluation, the maintenance of data and information and policy development on forest ecosystem services and products in collaboration with member organizations of the Collaborative Partnership on Forests;

(b) Strengthen its partnership with the private sector, non-governmental organizations and scientific, academic and philanthropic organizations in promoting the sustainable use of forests and their resources;

(c) Provide an input to the high-level political forum on sustainable development for 2019, including through providing policy research and analysis on the contributions of forests to empowering people and ensuring inclusiveness and equality, with a particular focus on linkages between forests and climate change, in collaboration with member organizations of the Collaborative Partnership on Forests, regional and international organizations, major groups and other stakeholders.

# **B.** Voluntary national contributions

73. The Forum may wish to request the secretariat, in consultation with members of the Forum and stakeholders, to develop an online repository for the voluntary national contributions, and report on the progress to the Forum at its fourteenth session.

# C. Communication and outreach strategy

74. The Forum may wish to consider adoption of the draft communication and outreach strategy for 2018–2020 as contained in the annex to the present note.

#### Annex

## Draft communication and outreach strategy for 2018-2020

# I. Background

1. As outlined in the United Nations strategic plan for forests 2017–2030, communication and outreach are essential components of the strategic plan.<sup>1</sup> The present strategy could assist in planning communication and outreach activities for all actors with roles and responsibilities in implementing the strategic plan.

# **II.** Communication objectives

# Raise awareness of forests and trees as being vital to life on earth and human well-being

2. Activities should aim at raising awareness, within and outside the forest sector, of the vital contribution of all types of forests and trees to life on Earth and human well-being.

#### Promote sustainable forest management

3. Communication efforts should highlight best practices and success stories on the implementation of the strategic plan and the United Nations forest instrument, and provide inspiration with regard to where additional action is needed. Implementing the strategic plan will undoubtedly require capacity development, including the mobilization of financing. Thus, an important component of this communication objective would be to disseminate capacity-building tools to promote the implementation of sustainable forest management.

#### Raise awareness of the United Nations strategic plan for forests 2017-2030

4. To implement the strategic plan and achieve its goals and targets, all actors with roles and responsibilities in implementing the plan need to be aware of what the goals and targets are, and how to engage and take action to achieve them.

#### Amplify communications from the forest community

5. The strategic plan encourages the United Nations system, the Collaborative Partnership on Forests and its member organizations and other partners to enhance cooperation and synergies on communication and outreach to increase the impact of their messaging, and to consider joint events and products with national, regional, subregional and non-governmental organizations and processes.

# **III.** Target audiences

#### **Member States**

6. The actions and commitments of member States are decisive for the implementation of the strategic plan and the achievement of its goals and targets. National focal points to the United Nations Forum on Forests are a target audience,

<sup>&</sup>lt;sup>1</sup> See Economic and Social Council resolution 2017/4, annex I.

as they are ideally positioned to disseminate the strategic plan to other ministries, departments and local authorities involved in forests. Furthermore, the voluntary national contributions announced by member States can serve to raise awareness of the strategic plan, and of actions to achieve the global forest goals and targets.

# United Nations system, members of the Collaborative Partnership on Forests and international and regional organizations

7. The goals and targets of the strategic plan aim to galvanize action and enhance collaboration on forests within the United Nations system and among members of the Collaborative Partnership on Forests, as well as other forest-related international, regional and subregional organizations and processes. Those organizations are target audiences and should be encouraged to integrate those goals and targets into their forest-related plans and programmes, disseminate the strategic plan to their networks and promote greater recognition of forest contributions to the 2030 Agenda for Sustainable Development and the Sustainable Development Goals.

#### Major groups and other stakeholders

8. The strategic plan recognizes the importance of action by major groups and other stakeholders in raising awareness, fostering the exchange of information and disseminating the plan. In that regard, communication and outreach should encourage all stakeholders to promote their activities in the context of the national implementation of the strategic plan. At the same time, success stories and best practices from local communities can provide inspiring messages for action on the ground.

#### Influencers/opinion-makers/communication networks

9. Influencers, opinion-makers and communication networks can spread the word and identify communication gaps, niches and opportunities. Various networks of communicators already exist within the United Nations system and at the regional level that can be important target audiences, including the regional forestry networks of the Food and Agriculture Organization of the United Nations, the communicators group of the Collaborative Partnership on Forests and the United Nations Information Centres of the Department of Public Information.

#### The public

10. Communication efforts should promote public awareness and action towards the national achievement of the global forest goals and targets. It is important to note that public perceptions on forests tend to vary on the basis of national circumstances and factors such as gender, socioeconomic level and language.

# IV. Messages

11. Messages should support the overarching vision of the strategic plan, and promote awareness of the contribution of forests to the 2030 Agenda for Sustainable Development and the Sustainable Development Goals. Messages should create connections and communicate the idea that forests sustain the daily lives of people everywhere, including in urban environments. Messages should also raise awareness of threats that impact forests and the benefits of sustainably managing them.

12. The United Nations strategic plan for forests 2017–2030 contains many such messages including:

(a) An estimated 1.6 billion people, or 25 per cent of the global population, depend on forests for subsistence, livelihood, employment and income generation;

(b) Forests provide essential ecosystem services, such as timber, food, fuel, fodder, non-wood products and shelter, and contribute to soil and water conservation and clean air;

(c) When sustainably managed, all types of forests are healthy, productive, resilient and renewable ecosystems, providing essential goods and services to people worldwide.

# V. Methods and activities

13. During the quadrennial programme of work for the period 2017–2020, methods and activities could include the measures set out below.

#### Logo/branding

14. The Graphic Design Unit of the Department of Public Information has prepared a logo for the global forest goals that is based on branding of the 2030 Agenda for Sustainable Development. The logo forms the core visual for branding purposes, and should be consistently utilized in messaging and communication products at all levels.

#### **Events**

15. **Conferences and meetings**. Large environmental conferences have traditionally been the focus of forest communications; however, it is also important to target meetings that attract other relevant sectors, such as agriculture, energy and water. Given the mission of the strategic plan to highlight the contribution of forests to the 2030 Agenda for Sustainable Development, the annual meetings of the highlevel political forum on sustainable development are of importance in that regard.

16. **International days**. The International Day of Forests on 21 March provides a powerful platform for public outreach activities on forests. Other United Nations international days also provide an opportunity to highlight the multifaceted contributions of forests, including World Environment Day, International Mother Earth Day, World Day to Combat Desertification and Drought, World Water Day, World Wetlands Day and World Wildlife Day.

17. **International decades**. There are a number of international decades on topics relevant to forests that could provide opportunities for coordinated communication and outreach. They include the International Decade for Action, "Water for Sustainable Development", 2018–2028; the United Nations Decade of Sustainable Energy for All 2014–2024; and the United Nations Decade on Biodiversity.

#### Advocates/messengers

18. Engaging celebrities, opinion-makers and community leaders to lend their voices to mobilize support from the public can help amplify messages and make them relevant to contemporary culture.

#### Websites

19. In the digital age, websites provide the primary platform for information dissemination to global audiences. The website of the United Nations Forum on Forests could be redesigned and restructured to provide a central platform for targeted communications on the strategic plan for different audiences, in a manner consistent with United Nations website standards. Member States, the United Nations system, members of the Collaborative Partnership on Forests, regional organizations, major groups and other stakeholders would also be encouraged to create dedicated webpages on their organizational websites that showcase their actions to implement the strategic plan, including through translating the plan into local languages. The Forum website could then link to those national and organizational pages.

#### Social media

20. Social media offers a direct channel to share and exchange information with large audiences, in particular civil society networks and the public. The Forum secretariat provides a core set of social media messaging for the sessions of the Forum, in consultation with the Department of Economic and Social Affairs and the Department of Public Information, to be adapted and retransmitted by all actors. Member States, the United Nations system, members of the Collaborative Partnership on Forests and stakeholders would be encouraged to share their social media advisories to enable greater amplification of such campaigns.

# VI. Success criteria

21. Monitoring the impact of communication and outreach activities is critical for the long-term success and effectiveness of such activities. At the global level, voluntary national reporting to the Forum contains a wealth of information that can be used to track communication and outreach activities being conducted by member States in support of the implementation of the strategic plan. The information could also be useful to identify gaps and challenges where more work is needed. At the national level, opinion polls and surveys could provide baselines to measure changes in public knowledge, attitudes and practices. Different target audiences respond to different methods of communication, so repackaging communications in different ways, from multimedia campaigns to publications, as part of communications campaigns would make it possible to compare which types of content were most utilized.

22. Given the changing landscape of communication methods, it is suggested that the communication and outreach strategy be synchronized with the quadrennial programme of work of the Forum, and be reviewed and updated, as needed, in conjunction with that programme.