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FSC: A TOOL TO IMPLEMENT THE SUSTAINABLE DEVELOPMENT GOALS

In September 2015, the United Nations (UN) adopted the **2030 Agenda for Sustainable Development**. This is intended to be a "plan of action for people, planet and prosperity" and "seeks to strengthen universal peace in larger freedom" (UN, 2015). It sets the priority to eradicate poverty in all its forms and dimensions, which is seen as an indispensable requirement for sustainable development.

Achim Steiner, the former Executive Director of the United Nations Environment Programme (UNEP), described its importance as follows: "The 2030 Agenda represents a paradigm shift to replace today's growth-based economic model with a new model that aims to achieve sustainable and equitable economies and societies worldwide and ensure greater public participation in decision-making ... It is an agenda that aims to address the root causes of unsustainable consumption and production patterns and transform them to sustainable lifestyles and livelihoods that benefit all. A well-cared-for environment is crucial for sustainability and the survival of mankind" (UNEP, 2016).

Governments and international institutions are expected to lead the implementation of the 2030 Agenda, but the engagement of all actors in all societies is also expected and necessary to make it a success. In the view of the UN members, 'partnership' is the fifth 'P' which – along with people, planet, prosperity, and peace – together summarize the scope of the Agenda.

At the core of this agenda are the Sustainable Development Goals (SDGs). These 17 Goals, with their 169 targets, cover the three dimensions of sustainable development – economic, social, and environmental – with a strong focus on quality of life, justice, and equality, as well as the sustainable consumption, production, and use of natural resources.

Halting deforestation and forest degradation and practising sustainable forest management are important for limiting climate change and its impacts, protecting biodiversity and freshwater supplies, providing raw materials for a 'low ecological footprint' economy, and protecting the livelihoods of hundreds of millions of people. The SDGs can be major drivers in efforts to halt deforestation and forest degradation worldwide, and to strengthen the positive contributions that forests play in the future of sustainable development. That



is why the Forest Stewardship Council (FSC) actively supported the formulation of the SDGs and the indicators that will help actors to focus their actions.

FSC is a partnership organization that brings together environmental, social, and economic interests (see Box 1), and FSC certification has become the world's leading scheme for promoting sustainable forest management, with a strong focus on mobilizing consumers through its chain of custody and labelling schemes. Started as a voluntary and market-driven tool, the FSC certification scheme is increasingly used by public authorities as part of their sustainable development agendas.

FSC certification can become a key tool in achieving a substantial part of the SDGs. Our most direct contribution will be to Target 15.2 (as explained in more detail later on), but the way we work, the practices followed by FSC-certified foresters, and the impacts we have on forest markets all make FSC an ally in achieving several of the SDGs. The rest of this document describes how FSC certification contributes to 14 of the Goals and 40 of the targets.

Box 1. FSC: a robust scheme that delivers sustainable development

FSC is an independent, nongovernmental membership organization that promotes the environmentally sound, socially beneficial, and economically prosperous management of the world's forests. FSC was initiated in 1990 and formalized in 1994 to help consumers and businesses identify products from well-managed forests. The entire organization comprises an international umbrella with more than 1,000 members (organizations and individuals) and, currently, 54 national offices and 8 regional and subregional representations.

FSC sets standards for forest management, which include legal, environmental, social, economic, and monitoring requirements. Foresters who comply with these requirements can become certified and use this status in their communications and trade. The granting of certificates and the regular verification of performance is carried out by independent certification bodies, which are overseen by a specialized organization, Assurance Services International.

To ensure that wood harvested in FSC-certified forests ends up in FSC-labelled products in a reliable manner, FSC has developed standards and procedures for companies active in the supply chain. The labelling of products as FSC certified is allowed only when all supplying companies in such a chain are FSC certified. As FSC recognizes the environmental advantage of recycled inputs, it has also developed a special standard for users to provide evidence of a product's recycled origins.

In 2015, the revised Principles and Criteria for Forest Stewardship were complemented with a set of **International Generic Indicators** (IGIs) to give more specific guidance to national FSC standard-setting processes. From 2016 onwards, these IGIs are being converted into national FSC forest stewardship standards (for more details, see Karmann et al., 2016).

The governance of FSC is based on a three-chamber model, guaranteeing balanced, multi-stakeholder decision-making across environmental, social, and economic interests. At the national level, the same governance model is applied to FSC national organizations and standard development groups.

In May 2019, some 200 million hectares of forest were certified to FSC standards (16 per cent of the world's production forests) in 84 countries, through more than 1,600 certificates engaging some 165,000 forest owners and managers, and some 60,000 companies were covered by more than 37,000 chain of custody certificates in 123 countries.

Goal 15. Life on land

In the 2030 Agenda, the governments of the world "recognize that social and economic development depends on the sustainable management of our planet's natural resources" (UN, 2015). In support of this, Goal 15 focuses on the conservation, restoration, and sustainable use of terrestrial ecosystems – such as forests, wetlands, drylands, and mountains – by 2020 or 2030.

Under this, the FSC contribution is mostly directed towards Target 15.2: "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." Since 2017, assessment of progress towards the global indicator for Target 15.2 – progress towards sustainable forest management – has included reporting on forest certification, led by the Food and Agriculture Organization of the United Nations (FAO).

FSC was founded to promote sustainable forest management globally and its certification scheme is now being applied in around 200 million hectares, covering one sixth of the world's production of industrial roundwood. Its standards have been developed and reviewed through balanced, multi-stakeholder decision-making processes, with the active involvement of world-leading environmental organizations (including WWF and Greenpeace), and representatives of workers' groups and Indigenous Peoples, as well as researchers, foresters, and forest industries.

The FSC forest management standards place strict requirements on forest managers to prevent deforestation, avoid forest degradation, and maintain biodiversity and ecosystem functions. Only those forest managers that meet these standards are granted FSC certificates, and this certification remains in place for only as long as they are met.

Applying the principles of FSC in forest restoration and afforestation projects can direct them towards the creation of multifunctional forests, with benefits beyond the borders of the project; certification can also add to the economic prospects of such projects. In conclusion, forest certification schemes – such as those put forward by FSC – are valid indicators for Target 15.2 that can be applied worldwide, and which are transparent and verifiable.

The role of FSC goes beyond Target 15.2, however, and is relevant to most other targets under Goal 15. For example, FSC certification plays a role in the conservation and restoration of forest ecosystems (Target 15.1). A study from the Maya Biosphere Reserve in Guatemala (Hodgdon et al., 2015) confirmed that FSC-certified areas do much better in this respect than legally protected sites in the same national park.

FSC certification, or relevant stipulations derived from its Principles and Criteria, can also be used for the afforestation of degraded lands and soils (Target 15.3), mountain ecosystems (Target 15.4), and natural habitats (Target 15.5). FSC-certified forest managers must prevent the "poaching and trafficking of protected species of flora and fauna" (Target 15.7)¹ as well as avoid (or at least minimize) the use of alien species (Target 15.8). Moreover, FSC certification focuses not only on better policing of forest management units, but also on prevention of degradation by offering better livelihood opportunities for communities neighbouring or affected by certified forests (Target 15.C).

Goal 1. No poverty

The FSC contribution to the fight against poverty is modest but relevant. In some cases, smallholders and community foresters can gain additional income and security by applying for FSC certification. Some poverty-reducing benefits are directly laid down in the FSC requirements; others depend more on the market and whether customers of foresters are prepared, or able, to pay extra for products and/or agree to fair, long-term contracts.

The organization's contributions to poverty reduction are often more substantial in situations where people live in certified forests. FSC rules require the payment of reasonable, 'living wages', 2 training, the protection of forest

¹ See also FSC and Trade of Endangered Species (FSC, 2019b).

^{2 &}quot;The remuneration received for a standard work week by a worker in a particular place sufficient to afford a decent standard of living for the worker and her or his family. Elements of a decent standard of living include food, water, housing, education, health care, transport, clothing, and other essential needs, including provision for unexpected events (Source: A Shared Approach to a Living

workers, and agreements with local populations that guarantee they share in the benefits of forest management. This can include the construction and running of schools and/or hospitals, which increase access to education and health care – two elements that contribute to poverty alleviation.³

More specifically, FSC contributes to Target 1.5: "By 2030 build the resilience of the poor and those in vulnerable situations, and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters." This is because FSC certification maintains or improves the resilience of forests and ensures cleaner, more stable water flows from certified forests. This is important to more than 2 billion people for whom the forests are an important part of their livelihood.

Goal 2. Zero hunger

It is well known that forests are key to protecting biodiversity and to mitigating the effects of climate change. However, their contribution to alleviating hunger and improving nutrition has been somewhat neglected. So, while Goal 2 focuses on agriculture, FSC can still contribute, in particular to Target 2.4 on sustainable food production systems and resilient agricultural practices.

A total of 821 million people are undernourished worldwide (United Nations Secretary-General, 2019) and malnutrition affects nearly every country on the planet. As population estimates for 2050 reach over 9 billion, issues of food security and nutrition now dominate many academic and policy debates. Despite impressive productivity increases, there is growing evidence that conventional agricultural strategies fall short of eliminating global hunger, as well as having long-term ecological consequences.

Forests can play an important role in complementing agricultural production to address Goal 2 of zero hunger. For example, forests and trees can be managed to provide better and more nutritionally balanced diets, greater control over food inputs (particularly during lean seasons and periods of vulnerability, and especially for marginalized groups), and deliver ecosystem services for crop production (Vira et al., 2015).

Goal 3. Healthy lives and well-being

Well-managed forests can support efforts to reduce the impact of pollution and secure forest functions and resources important to human health. On the ground, FSC supports forest workers' health by ensuring health and safety practices are in place. This includes the FSC pesticides restrictions policy (FSC, 2019a). FSC-certified companies must provide workers with job-specific training and supervision to ensure safety in both forestry and the upstream production chain. They must also have mechanisms for providing fair compensation to workers in the case of occupational diseases.

A study carried out in the Congo Basin showed significantly better provision in FSC concessions than in neighbouring concessions (Cerutti et al., 2014) of: safety equipment (100 per cent compared with 75 per cent), procedures to control and verify use of safety equipment (90 per cent cf. 25 per cent), and health and life insurance for all staff (100 per cent cf. 25 per cent).

Beyond that, the requirement to "contribute to maintaining or enhancing the social and economic wellbeing of local communities" (FSC Forest Stewardship Principle 4) has led to the provision of health (and education) facilities for people living on FSC-certified forest concessions. The same Congo Basin study again showed large differences: potable water availability (86 per cent cf. 67 per cent), individual home showers and toilet systems (100 per cent cf. 46 per cent), and local medical facilities (100 per cent cf. 38 per cent).

Thereby, FSC certification contributes in particular to SDG targets 3.3 (on diseases), 3.8 (access to health care and medicines), and 3.9 (on impacts of pesticides).

Wage. ISEAL Living Wage Group. November 2013)" (FSC, 2018a).

³ For examples of the social benefits of FSC certification, see Cerutti et al. (2014) and Krummenacher (2013).

Goal 4. Quality education

FSC forest management requirements contribute to the increase of educational opportunities for girls and boys, as well as adults, in situations where communities live inside FSC forest management units and official education is poor or absent (as part of the implementation of the Forest Stewardship Principle 4). The study on the Congo Basin shows that the "Education opportunities on addition to state-run services" in FSC-certified concessions is 78 per cent compared with 33 per cent in other concessions (Cerutti et al., 2014).

In this way, FSC contributes to Target 4.1 on education for all girls and boys.

Furthermore, training for forest workers is an integral part of the FSC system (FSC, 2018a).

Goal 5. Gender equality

FSC defines gender equality as women and men having "equal conditions for realizing their full human rights and for contributing to, and benefiting from, economic, social, cultural and political development" (FSC, 2018a). As such, FSC contributes to Goal 5 in several ways. Since the early versions of the FSC Principles and Criteria, FSC has required adherence with the International Labour Organization's (ILO) Core Conventions, including Convention 111 on discrimination (occupation and employment). In the latest version of the Principles and Criteria (FSC, 2015), Criterion 2 incorporates the promotion of "gender equality in employment practices, training opportunities, awarding of contracts, processes of engagement and management activities."

This requirement is further elaborated in several indicators that have to be applied in all national forest stewardship standards. These indicators focus on both promoting gender equality and preventing gender discrimination. They place special emphasis on job opportunities and equal treatment regarding training and health-and-safety programmes for work typically carried out by women. They include equal pay for the same types of work and safe payment methods. They guarantee maternity leave of at least six weeks after childbirth and opportunity for parental leave. They cover opportunities for equal engagement in meetings and decision-making processes and, finally, stipulate that "confidential and effective mechanisms exist for reporting and eliminating cases of sexual harassment and discrimination based on gender, marital status, parenthood or sexual orientation" (FSC, 2018a).

FSC requires organizations that are developing standards to investigate the legal situation related to gender equality and the gaps between that and what FSC requires. These developers then need to set requirements to bridge that gap, such as (additional) training, alternative payment and assignment methods, flexible working hours, paternity leave, child daycare. In this way, FSC will contribute to Target 5.5 on equality in decision-making, and Target 5.A on access to economic resources, ownership, etc.

Goal 6. Clean water and sanitation

FSC, with its ecosystem approach, contributes – within the scope of certified areas – to Target 6.4 on efficient and sustainable water use, Target 6.5 on integrated water resource management, and Target 6.6 on the protection of water-related ecosystems. Criterion 6.7 of the FSC Principles and Criteria in particular focuses on protecting and restoring "natural watercourses, water bodies, riparian zones and their connectivity." Foresters are obliged to "avoid negative impacts on water quality and quantity and mitigate and remedy those that occur."

Other criteria in FSC Principles 2, 5, 7, and 10 indirectly contribute to maintaining water quality in forests, through training forest workers in manoeuvring machines, waste management, and forest road construction, among others. In addition to these requirements – which are valid for all FSC certificate holders – FSC currently elaborates specific requirements for forest managers that use FSC certification as specific evidence for payments for ecosystem services, including watershed services. These will further contribute to Goal 6.

Goal 7. Affordable and clean energy

Wood is an important source of energy. Globally, 2.6 billion people depend on fuelwood, with a large proportion of those living in developing countries. At least 80 per cent of the population in Sub-Saharan Africa uses fuelwood for cooking and sterilizing water, and the lack of alternative energy sources, combined with urban population growth, is driving up the demand for fuelwood. For example, it is estimated that the use of charcoal in towns and cities in Sub-Saharan Africa rises by 3.3 per cent every year (Onyango, 2015).

Besides these traditional uses, the use of fuelwood in industry is increasing again, as it is an energy source that can reduce the climate impacts of energy production. FSC certification can be used to ensure that fuelwood is effective as an alternative to fossil fuels and avoids adverse impacts. FSC recognizes that carbon capture and storage is an important component of forest ecosystem services – one that is paradoxically both central to climate stability and threatened by increased demands for carbon-neutral bio-energy.

The new FSC Ecosystems Services Procedure (FSC, 2018b) can be used to measure and communicate the impacts of forest management on the carbon stock, as well as of the consequences of harvesting forest materials for bio-energy use.

This means that FSC certification is not only a reliable tool for promoting sustainable forest management, but also a step towards the sustainable production of bio-energy that will help to minimize greenhouse gas emissions. This contributes to Target 7.2, to increase the share of renewable energy by 2030.

Goal 8. Decent work and economic growth

The FSC system is a model in which the use of wood as an environmentally and socially sound resource actively contributes to sustainable economic development. In terms of resource efficiency (Target 8.4), FSC foresees that the use of wood will increase, replacing unsustainable materials such as concrete, steel, and oil. However, even sustainably managed forests cannot deliver limitless volumes of resources. Therefore, it is necessary to minimize waste in the production process, use forest resources efficiently, and re-use waste. All of these are supported by the FSC scheme. For example, FSC has created a special label for products made of 100 per cent recycled materials and accepts reclaimed materials as equivalent to wood from certified or controlled sources.

Furthermore, FSC supports the SDG targets on employment, decent work, and equal pay (Target 8.5); the eradication of forced labour and child labour (Target 8.7); and the protection of labour rights and ensuring safe and secure working environments (Target 8.8). FSC Principle 2 is dedicated to workers' rights and employment conditions, which includes specific criteria and indicators to ensure the application of the ILO Core Conventions, gender equality in the workplace, health and safety practices, 'living' wages, training, conflict resolution, engagement with workers, and damage avoidance and compensation.

Goal 12. Responsible consumption and production

FSC is a tool to promote sustainable consumption and production. On the production side, it requires management practices that maintain the resource base while harvesting forest materials and providing services. With its claims and labelling system, it offers an opportunity for manufacturers to source from sustainably managed forests. For consumers, it provides a choice in terms of sustainably produced materials for construction, wood panels, flooring, furniture, paper, and more. In this way, FSC contributes to Target 12.2 on sustainable management and efficient use of natural resources, Target 12.6 on company reporting on sustainable practices, and Target 12.8 on information and awareness.

In relation to Target 12.7 on sustainable public procurement, FSC appreciates that more and more public authorities require sustainable sourcing in their purchasing policies and recognize that FSC claims and labels provide evidence of this. This is quite common in Europe, North America, and Japan. FSC has also started a project to promote use of its certification in sustainable public procurement in Latin America, where it is also seeking to mobilize demand for local certified wood.

Public procurement can be an important driver for sustainable forest management if it gives clear signals to forest managers and manufacturers that certification will become and remain the preferred option. Public procurement is also one of the six elements of the 10-year framework of programmes on sustainable consumption and production patterns (addressing Target 12.1).

As mentioned, FSC promotes and rewards, through certificates, the re-use of wood materials; this contributes to Target 12.5 on waste reduction. Lastly, the presence of FSC in a number of developing countries, in the form of FSC national organizations and/or certificate holders, contributes to Target 12.A on capacity-building in developing countries for more sustainable patterns of consumption and production.

Goal 13. Climate action

Forests play an essential role in climate regulation. Together with oceans, forests are the key ecosystem that removes carbon dioxide (CO₂) from the atmosphere. Carbon is stored in both trees and forest soils, and the world's forests contain roughly as much carbon as the atmosphere. The Paris Agreement on climate change, agreed in December 2015, highlights the importance of forests in tackling climate change, and calls on all countries to conserve and enhance their carbon reservoirs and sinks in forests.

In terms of carbon in wood products, the FSC certification scheme for forest management, its chain of custody control standards, and its outreach to consumers through its labels, all contribute to mitigating climate change by promoting sustainable forest management, and by promoting the recycling of used wood materials. FSC gives special attention to protecting the function of forests as net removers of CO₂ from the atmosphere. FSC has also started to develop new tools that reward the preservation of valuable ecosystem services, including carbon storage, in responsibly managed forests.

In terms of forest soils, FSC only grants certificates to foresters that manage infrastructural development, transport activities, and silviculture so that water resources and soils are protected (Criterion 10.10); thus, contrary to many agricultural practices, FSC does not accept significant disturbances to forest soils. Application of the precautionary approach to control the erosion of vulnerable soils and slopes, and protect water catchments, is included in high conservation value 4 of FSC Principle 9, which covers critical ecosystem services. In this way, FSC contributes in particular to Target 13.1 on resilience.

Goal 14. Life below water

Land-based activities contribute to the pollution of the seas and oceans. This includes chemicals and nutrients from pesticides and fertilizers.

While the main source of such pollution is agriculture, forestry contributes as well. FSC contributes to Target 14.1, on preventing and significantly reducing marine pollution, in its overall requirements for protection and restoration of natural watercourses, and in the prevention, mitigation, or remediation of negative impacts.

FSC-certified forests contribute to efficient and sustainable water use, integrated water resource management, and protection of water-related ecosystems. FSC requires the protection and restoration of "natural watercourses, water bodies, riparian zones and their connectivity" (FSC, 2015, 2018a). And foresters are obliged to "avoid negative impacts on water quality and quantity and mitigate and remedy those that occur" (FSC, 2015, 2018a). Furthermore, FSC has strict requirements for the minimization or avoidance of the use of fertilizers, pesticides, and biological control agents.

Goal 16. Peace, justice, and strong institutions

For FSC, the enforcement of relevant laws is the basis of sustainable forest management. It is reflected in FSC Principle 1 and elaborated in specific requirements regarding legal rights to harvest and harvesting activities, environmental and social requirements, and customary rights.

With regard to corruption and bribery, FSC requires forest managers to publicize a non-bribery commitment (neither paying nor receiving bribes) and, depending on the situation, take specific measures to ensure their non-involvement in corruption. In this way, FSC contributes in particular to Target 16.3 about the rule of law, and Target 16.5, to reduce corruption and bribery.

The FSC governance system and stakeholder engagement in political decision-making at international and national levels (including in the development of national standards and in preparation for certification decisions) has been repeatedly described in positive terms as contributing to improved societal governance and engagement of citizens in decision-making. An example is a study focussing on Russia, which concluded: "At the broadest level, one could argue that FSC transformed the residents of some timber communities from solely citizens of the Russian Federation to stakeholders engaged in a global process of forest governance under which they have new rights and opportunities for participation" (Henry and Tysiachiouk, 2013).

Another study concluded: "FSC, as one example of private rule-making in world politics, performs three additional functions that shape the contours of global governance: (1) facilitating a solution to complex multi-interest problems, (2) brokering knowledge and norms among a wide range of stakeholders, and (3) constituting a learning network in environmental governance" (Pattberg, 2005).

Through its free, prior, and informed consent (FPIC) requirements, FSC expects its certified entities to establish more inclusive and better governed institutions for negotiations between local populations and logging companies; better managed and more effective benefit-sharing mechanisms; and innovative ways of dealing with problems related to infringements of customary uses. An example of this can be seen in the swisspeace report (Krummenacher, 2013) about a forestry concession in the Congo Basin. These examples show that FSC contributes to Targets 16.6 and 16.7.

Goal 17. Partnerships for the Goals

FSC supports legal and commercially viable forest management practices that contribute to increasing national incomes through fees and taxes. FSC assists in the implementation of legislation in the United States of America, the European Union, and Australia that aims to close down markets for illegally harvested timber, an activity that often works against sustainable development.

FSC also assists in improving the image of tropical timber in Northern markets, where consumers are concerned about the negative environmental and social impacts of producing such timber.

In this way, FSC contributes to Target 17.1 on domestic resource mobilization, and Target 17.11 on increasing exports from developing countries.

Lastly, the way FSC is composed and works contributes in particular to Target 17.17 on the promotion of civil society partnerships (Karmann et al., 2016). This is particularly relevant to group certification, where smallholders work together under one forest stewardship certificate; this cooperation can range from an administrative connection to joint training and management activities, in some cases supported by a wood-processing company.

Conclusion

As demonstrated by these contributions to 14 Goals and 40 targets, FSC is clearly a significant instrument for achieving the SDGs. Indeed, FSC is a relevant partner for all who seek to take action – based on legal and customary rights, and the engagement of all interested parties – to support sustainable natural resources management and the achievement of social and economic objectives.

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