



CONCEPT NOTE | Panel Discussions

UNFF 18 panel on private sector drivers and contributions: Regenerative Agriculture for the Global Forest Goals: Essential Support from the Private Sector

Item 3 (c) Thematic priorities for 2023-2024 biennium in support of the implementation of the UN Strategic Plan on Forests (iii) Contribution of major groups and other relevant stakeholders

9 May 2023, 4:30 to 6:00 pm, CR4, UNHQ, New York

I. Background

Target 6.5 of Global Forest Goal (GFG) 6¹ aims to strengthen the input and involvement of major groups and other relevant stakeholders in implementing the United Nations Strategic Plan for Forests 2017–2030 (UNSPF) 2 and in the work of the United Nations Forum on Forests (UNFF), including intersessional work. The private sector is an important stakeholder and, as per the UNSPF, “(...) private business activity, investment, and innovation are major drivers of productivity, inclusive economic growth and job creation (...)”. UNFF has been calling for more active participation of the private sector in the implementation of the UNSPF and the achievement of the GFGs; this dynamic of increased cooperation is fully in line with the spirit of the 17th Sustainable Development Goal, dedicated to partnerships. In this context, private sector partners of the United Nations Forum on Forests (UNFF) were invited by the UNFF 18 Bureau to take the initiative to prepare and organize a panel during the 18th session of the Forum.

The UNSPF states that “Forests provide essential ecosystem services, such as timber, food, fuel, fodder, non-wood products and shelter, as well as contribute to soil and water conservation and clean air”; Global Forest Goal (GFG)², therein contained and one of the Forum 18th Session’s thematic priorities³, includes agroforestry as one of the indicative thematic areas for action.

By helping to transform conventional agriculture, a source of massive deforestation, into sustainable agriculture, agroforestry reduces the pressure on forests. It thus indirectly contributes to their protection, which is the second thematic priority of UNFF18, inspired by GFG3. The third thematic priority of UNFF18 is partly based on GFG4, which is notably dedicated to financing global forest issues. The latter aims to increase financing development from all sources, including the private sector, and carbon finance holds considerable promise⁴, notably through the development of mechanisms to remunerate foresters and farmers via carbon farming.

¹ Enhance cooperation, coordination, coherence and synergies on forest-related issues at all levels, including within the United Nations system and across member organizations of the Collaborative Partnership on Forests, as well as across sectors and relevant stakeholders.

² A/RES/71/285 and E/RES/2017/4

³ GFG2- Enhancing forest-based economic, social and environmental benefits; GFG 3- Increase significantly the area of protected forests worldwide and other areas of sustainably managed forests, as well as the proportion of forest products from sustainably managed forests; GFG 4- mobilizing financial resources and strengthening scientific and technical cooperation; GFG 5- promoting governance frameworks to advance implementation; GFG 6- enhancing cooperation, coordination and coherence for sustainable forest management.

⁴ Whereas the global voluntary carbon market was US\$2 billion in 2021, it should be \$50 billion in 2030.

In its final report⁵, the 26th Session of FAO's Committee on Forestry "(...) acknowledged the multiple linkages between the agriculture and forestry sectors and underscored the need to achieve better synergies through them inter-sectorial approaches, for more sustainable agrifood systems".

While the global food system may cause a significant amount of greenhouse gas emissions and deforestation, transforming it, particularly through regenerative agriculture, is both urgent and fundamental to preserving the climate, and, therefore, forests, according to the latest Emission Gap Report⁶. Regenerative agriculture could help restore, thanks to trees, part of the 2 billion hectares of degraded land and promote significant economic and social development, particularly for the benefit of small local farms. In Africa, regenerative agriculture alone could generate more than \$15 billion in annual gross value added by 2030 and up to \$70 billion by 2040⁷. By helping to limit deforestation and restore wooded landscapes, regenerative agriculture also promotes the maintenance of healthy forests necessary for the promising development of the wood-based circular bioeconomy.

In this regard, the private sector has a major role to play, especially in financing regenerative agriculture, while to date, it provides only 14% of the \$133 billion dedicated annually to Nature based Solutions⁸. The private sector will also have to contribute significantly to the transformation of value chains. In this respect, the Action Plan⁹ announced in early November 2022 by 12 global agribusiness giants is a strong signal: they call for a tripling of the rate of expansion of regenerative agriculture, which they believe should be deployed on at least 40% of the world's cultivated land by 2030 to contribute to global environmental goals.

It is therefore proposed that a panel on regenerative agriculture, conceptualized by the Business and Industry Major Group, take place during the 18th Session of the UN Forum on Forests. Regenerative agriculture contributes to the promotion and implementation of sustainable forest management throughout the world, to the achievement of the Global Forest Goals and, specifically regarding UNFF 18, is well within the context of the Session's thematic priorities.

II. Regenerative Agriculture's Role In Achieving The Global Forest Goals

i. Conventional agriculture seriously damages forests, climate, and biodiversity

Conventional agriculture seriously damages forests, climate, and biodiversity. The conversion of natural ecosystems, such as forests, for agricultural production or grazing, is the major driver of habitat loss over the past 50 years¹⁰. The amount of land occupied by agriculture has increased about 5.5 times since 1600 and continues to increase. Currently, crops and livestock occupy about 50% of the world's habitable land¹¹. And according to the IUCN, agriculture threatens 86% of the 28,000 species threatened with extinction¹². As a sign of the expansion of agriculture at the expense of forests, in only 20 years, from 1980 to 2000, 42 million hectares of tropical forest in Latin America were lost to cattle ranching, while 6 million hectares disappeared to palm oil plantations in Southeast Asia¹³. In terms of climate impact, emissions from the food system

⁵ [Report of the 26th Session of the Committee on Forestry - FO:COFO/2022/REP \(fao.org\)](#)

⁶ UNEP (2022). Emissions Gap Report 2022: The Closing Window — Climate crisis calls for rapid transformation of societies.

⁷ Africa Regenerative Agriculture Study Group (2021). Regenerative Agriculture: An opportunity for businesses and society to restore degraded land in Africa.

⁸ UNEP (2021). State of Finance for Nature 2021

⁹ [agribusiness-task-force-white-paper.pdf \(storyblok.com\)](#)

¹⁰ IPBES (2019), Summary for policymakers of the global assessment report on biodiversity and ecosystem services

¹¹ Chatham House, Food system impacts on biodiversity loss. Three levers for food system transformation in support of nature, Research Paper, February 2021

¹² Ritchie, H. and Roser, M. (2019), 'Environmental impacts of food and agriculture', Our World in Data, September 2019, <https://ourworldindata.org/environmental-impacts-of-food#environmental-impacts-of-food-and-agriculture>

¹³ IPBES (2019), Summary for policymakers of the global assessment report on biodiversity and ecosystem services

amounted to 34% of global greenhouse gas emissions in 2015, with the largest contribution coming from agriculture and land use and land use change activities (71%)¹⁴.

ii. **Regenerative agriculture: virtuous practices in which trees participate**

While there is no consensus definition to date, regenerative agriculture (RA) describes farming and grazing practices that, among other benefits, absorb CO₂ by replenishing soil organic matter and restoring biodiversity to degraded soils, thereby improving the water cycle and helping to combat climate change¹⁵. By restoring nutrients and life to the soil rather than simply extracting them by depleting the land, this form of agriculture generates financial, ecological, and social benefits in a regenerative way. Several practices incorporating trees fall under the umbrella of regenerative agriculture: agroforestry, silvopasture, and Farmer Managed Natural Regeneration (FMNR).

iii. **Achieving the Global Forest Goals with regenerative agriculture**

The six Global Forest Goals include ending deforestation, protecting and restoring forest landscapes, and ensuring people's well-being and socio-economic development through forests, their ecosystem services, and their products.

While deforestation slowed globally last year, much more needs to be done. Thus, a gradual replacement of conventional agriculture by regenerative agriculture worldwide could help reduce deforestation. This is especially necessary given that the world may need 60% more food by 2050 if current population and consumption trends continue¹⁶ and that emissions from the food system are expected to increase by 60-90% between 2010 and 2050 in the absence of specific measures¹⁷.

Land restoration, better returns, and job creation

By integrating trees among its techniques, regenerative agriculture can also, through FLR methods such as agroforestry, contribute to the global goal of restoring a significant area of deforested and degraded landscapes. Furthermore, by improving agricultural yields, especially in drylands, RA can also contribute to enhancing the food security of local populations. In this regard, farmers implementing agroforestry practices in East Africa have seen their yields increase by 100% compared to non-regenerative practices, while in the Sahel, the adoption of FMNR has been associated with increased agricultural production of up to 170%. With the potential to create 5 million jobs, the development of RA in Africa could also increase per capita food consumption by 13%¹⁸.

Bioenergy production

Like agroforestry and FMNR, silvopastoralism also contributes to higher yields and improved farm profitability¹⁹. For example, compared to treeless pastures, silvopastoral systems can increase cattle production per hectare by up to 4 times²⁰ and result in higher quality forage production, reducing the need for supplements from external sources²¹. A study conducted over 10 years in three Latin American countries

¹⁴ M. Crippa et al., Food systems are responsible for a third of global anthropogenic GHG emissions, Nature Food, March 2021

¹⁵ Regenerative Agriculture International and The Carbon Underground, What is Regenerative Agriculture?, 2017

¹⁶ A 2030 Investment Vision for Natural Climate Solution, Recognising an Opportunity at Scale for Institutional Investors, January 2021

¹⁷ UNEP (2022). Emissions Gap Report 2022: The Closing Window — Climate crisis calls for rapid transformation of societies.

¹⁸ Africa Regenerative Agriculture Study Group (2021). Regenerative Agriculture: An opportunity for businesses and society to restore degraded land in Africa.

¹⁹ Murgueitio E., and al., (2015) Productividad en sistemas silvopastoriles intensivos en América Latina. In: Montagnini F, Somarriba E, Murgueitio E, Fassola H, Eibl B (Eds) Sistemas Agroforestales. Funciones productivas, socioeconómicas y ambientales. Serie Técnica Informe Técnico 402, CATIE, Turrialba, Fundación CIPAV, Cali, pp 59–101.

²⁰ Thornton PK, Herrero M (2010) Potential for reduced methane and carbon dioxide emissions from livestock and pasture management in the tropics. Proceedings of the National Academy of Science 107(47):19667–19672

²¹ Mojardino M, Revell D, Pannell DJ (2010) The potential contribution of forage shrubs to economic returns and environmental management in Australian dryland agricultural systems. Agricultural Systems 103:187–197

showed that forage production increased between 12 and 733% in 90% of the farms converted to silvopastoralism²². In the medium term, the cost of implementing silvopastoralism is more than compensated by increased farm income due to its higher productivity²³.

As a regenerative agricultural practice, agroforestry can also play a significant role in producing sustainable bioenergy²⁴. For example, as part of an integrated strategy, including improved stoves, agroforestry can provide fuelwood in a sustainable manner and thereby reduce wood harvesting pressure in sub-Saharan African forests²⁵. Agroforestry is assumed to contribute 70% of fuelwood production in Asia and 20% in Africa²⁶, a continent with significant energy potential. Indeed, it is estimated that 555 million hectares of African land are suitable for 15 short-rotation woody crops. If this area were planted in agroforestry with the species with the greatest potential in each location, these lands could provide 684 million tons of wood per year with a primary energy potential of about 13 exajoules²⁷.

Saving costs and increasing revenues

Through its environmentally sound practices, regenerative agriculture helps reduce farmers' expenses. For example, cost savings could reach US\$ 150 per hectare per year, corresponding to an annual saving of US\$ 17 billion in sub-Saharan Africa if regenerative practices were adopted on 50% of cultivated land²⁸. In addition to the savings generated, RA improves producers' income. In the Sahel, for example, FMNR can generate US\$130-150 in annual household income from the sale of tree products, such as firewood²⁹. And while 40% of the population of sub-Saharan Africa (up to 90% for rural populations in some countries) lives below the poverty line of US\$1.9 per day, RA could significantly increase the incomes of the poorest households³⁰.

Increases in income from regenerative agriculture can be observed in other regions of the world. In Colombia, for example, a study found that income from the sale of milk was 42% higher in silvopastoral systems than in conventional pastures³¹. In Europe, if an additional 20% of farmers adopted climate-smart agriculture by 2030, the European Union could improve farmers' livelihoods by 1.9 to 9.3 billion euros per year.

²² Chará J., Reyes E., Peri P., Otte J., Arce E., Schneider F. 2018. Silvopastoral Systems and their Contribution to Improved Resource Use and Sustainable Development Goals: Evidence from Latin America. FAO, CIPAV. Editorial CIPAV, Cali, 58p.

²³ Chará J. and al., (2017) Intensive silvopastoral systems: economics and contribution to climate change mitigation and public policies. In: Montagnini F (Ed) Integrating Landscapes: Agroforestry for Biodiversity Conservation and Food Sovereignty. Advances in Agroforestry 12. Springer, Dordrecht

²⁴ N. Sharma and al., Bioenergy from agroforestry can lead to improved food security, climate change, soil quality, and rural development, Food and Energy Security 2016; 5(3): 165–183.

²⁵ M. Liyama and al. 2014. The potential of agroforestry in the provision of sustainable woodfuel in sub-Saharan Africa. Curr. Opin. Environ. Sustain. 6:138–147

²⁶ N. Sharma and al., Bioenergy from agroforestry can lead to improved food security, climate change, soil quality, and rural development, Food and Energy Security 2016; 5(3): 165–183.

²⁷ RENA (2019), Sustainable harvest: Bioenergy potential from agroforestry and nitrogen-fixing wood crops in Africa, International Renewable Energy Agency, Abu Dhabi.

²⁸ Africa Regenerative Agriculture Study Group (2021). Regenerative Agriculture: An opportunity for businesses and society to restore degraded land in Africa.

²⁹ Chomba S., and al., (2020). Opportunities and Constraints for Using Farmer Managed Natural Regeneration for Land Restoration in Sub-Saharan Africa. Frontiers in Forests and Global Change, 3(November). <https://doi.org/10.3389/ffgc.2020.571679>

³⁰ Africa Regenerative Agriculture Study Group (2021). Regenerative Agriculture: An opportunity for businesses and society to restore degraded land in Africa.

³¹ Rivera J, Cuartas CA, Naranjo JF, Tafur O, Hurtado EA, Arenas FA, Chará J, Murgueitio E (2015) Efecto de la oferta y el consumo de *Tithonia diversifolia* en un sistema silvopastoril intensivo (SSPi), en la calidad y productividad de leche bovina en el piedemonte Amazónico colombiano. Livestock Research for Rural Development. Volume 27, Article #189. <http://www.lrrd.org/lrrd27/10/rive27189.html>

The significant potential of carbon finance

Regenerative agriculture contributes to increasing carbon storage in soils, as does silvopastoralism³². It is estimated that regenerative systems increase the organic carbon content of the soil by an average of 20%³³. This opens the way to new sources of income, via carbon finance, for farmers who use virtuous practices that include trees. Thus, mechanisms for remunerating producers are being developed, such as a pan-African program, launched in May 2022, which aims to mobilize 1.5 million small farmers to restore 1.9 million hectares of land through the deployment of agroforestry. The projects resulting from this program will be the subject of carbon credits, financed by the private sector, with nearly half of the revenue going back to the communities³⁴.

In the same spirit, the European Union is currently building the foundations of a future mechanism to remunerate carbon farming practices³⁵. Thus, European farmers practicing agroforestry could, in a few years, through this mechanism, be remunerated with carbon credits financed by the private sector. And while the value of the global voluntary carbon market was US\$2 billion in 2021³⁶, it should be \$50 billion in 2030³⁷. In this way, carbon finance can represent an important lever for the development of regenerative agriculture throughout the world and thus improve the living conditions of millions of people.

Sustainable forest management and circular economy

By helping to limit deforestation and restore wooded landscapes, regenerative agriculture promotes the maintenance of healthy forests necessary for developing a circular economy from wood. As a result of sustainable forest management, the circular economy from forest products is full of promise, as demand for wood is expected to increase by 8.8% per year by 2030 due to the needs of the construction sector³⁸. As an economic lung, the forest could generate the creation of 13 million jobs by 2030 in the world³⁹. In summary, regenerative agriculture, sustainable forest management, and circular economy are linked.

While it represents an important socio-economic and environmental promise, RA alone is not a silver bullet that can transform the global food system and preserve forests. Indeed, its largescale development depends in particular on two other dynamics that also need to be extended on a global scale with, for instance, the increased protection of nature.

iv. Considerable funding needs

Clearly, funding for global forest goals remains almost insignificant to date. Indeed, less than 1% (\$2.3 billion) of the annual funds needed for, among other things, combating deforestation and forest restoration are actually mobilized to date. In other words, \$460 billion is actually needed each year between now and

³² Montagnini F, Ibrahim M, Murgueitio E (2013) Silvopastoral systems and climate change mitigation in Latin America. *Bois et Forêts des Tropiques* 316(2):3–16.

³³ Africa Regenerative Agriculture Study Group (2021). *Regenerative Agriculture: An opportunity for businesses and society to restore degraded land in Africa*.

³⁴ Reuters, Regenerative agriculture seen as answer to averting Africa's growing food crisis, November 7, 2022, <https://www.reuters.com/business/sustainable-business/regenerative-agriculture-seen-answer-averting-africas-growing-foodcrisis-2022-11-07/>

³⁵ European Commission, Sustainable Carbon Cycles, Communication from the commission to the European parliament and the council, December 2021

³⁶ [Voluntary carbon market value tops US\\$2B - ClimateTrade](#)

³⁷ McKinsey, C. Blaufelder and al., A blueprint for scaling voluntary carbon markets to meet the climate challenge, January 29, 2021, <https://www.mckinsey.com/capabilities/sustainability/our-insights/a-blueprint-for-scaling-voluntary-carbon-markets-to-meet-the-climate-challenge>.

³⁸ WBCSD, Circular bioeconomy: The business opportunity contributing to a sustainable world, 2020.

³⁹ European Commission, Protecting and restoring the world's forests: stepping up EU action to halt deforestation and forest degradation, 2019.

2030. It is, therefore, necessary to rapidly multiply by 200 the current funding⁴⁰. The private sector will necessarily have to participate significantly in this effort.

More broadly, of the \$133 billion spent annually on Nature-based Solutions today, \$23 billion is dedicated to agriculture, including regenerative agriculture. In this regard, the private sector provides only 14% of the total annual funding, or \$18 billion, of which \$7 billion is dedicated to sustainable value chains that include forest and agricultural products. The amount of these investments must triple by 2030 and quadruple by 2050 to meet environmental challenges⁴¹.

In agriculture, developing productive and regenerative agriculture worldwide requires \$35-40 billion in annual investments by 2030. To finance and achieve this rapid transition at scale, The Food and Land Coalition has identified five priorities: 1) Redirecting agricultural subsidies to regenerative agriculture; 2) Using other public funding to encourage regenerative agriculture; 3) Sharing information through improved open-source networks and training; 4) Increasing R&D spending and innovation, and 5) Engaging businesses and investors.

Concretely, the Coalition advocates the following actions for governments and businesses: increase payments for ecosystem services (carbon/soil health and agrobiodiversity) and improve extension services (training and access to technologies, seeds, etc.). Other measures for businesses and investors are equally essential: shifting from commodity purchases to investment in sustainable supply chains; deploying innovative financing to reach currently underfunded parts of supply chains⁴².

v. The private sector has an important role to play

To achieve global forestry goals, including through regenerative agriculture, the private sector has a major role to play. RA contributes to decarbonizing a company's supply chain by reducing deforestation, improving nutrient management, and introducing carbon-sequestering agricultural and grazing practices⁴³. In this regard, only 25% of global food companies have so far announced a clear and ambitious plan to eliminate deforestation from their value chains. And of these, less than 20% are on track to meet their targets⁴⁴.

Most food companies buy commodities on the spot market or through short-term contracts. This reduces incentives along the value chain to invest in preserving and enhancing natural capital, including forests. Yet there are good reasons for companies to make longer-term investments in farmers and landscapes that encourage the protection and regeneration of natural capital: it can enhance their security of supply, mitigate reputational risks, and provide greater certainty for farmers.

According to The Food and Land Use Coalition, procurement models that value natural capital include helping farmers meet regenerative procurement standards, investing in farmer training in strategically important production areas, and providing offtake guarantees to encourage regenerative production practices. These models remained in the minority in 2019, partly because too few mainstream investors ask companies about their approach to natural capital or demand specific action on regenerative sourcing strategies.

⁴⁰ Forest Declaration Assessment Partners. (2022). Forest Declaration Assessment: Are we on track for 2030? Executive summary. Climate Focus (coordinator and editor)

⁴¹ UNEP (2021). State of Finance for Nature 2021

⁴² The Food and Land Use Coalition, Growing Better: Ten Critical Transitions to Transform Food and Land Use, September 2019

⁴³ S. Olson, 3 Ways That Regenerative Agriculture Can Help Unlock Sustainable Impact, April 2022, <https://www.resonanceglobal.com/blog/3-ways-that-regenerative-agriculture-can-help-unlock-corporate-sustainability-impact>

⁴⁴ Forest Declaration Assessment Partners. (2022). Forest Declaration Assessment: Are we on track for 2030? Executive summary. Climate Focus (coordinator and editor)

In recent years, however, the movement for regenerative agriculture has been gaining momentum. As a sign of this evolution, 12 global agribusiness giants announced in November 2022 an Action Plan in which they call for a tripling of the rate of expansion of regenerative agriculture, which they believe should be deployed on at least 40% of the planet's cultivated land by 2030 to contribute to global environmental objectives⁴⁵. The investments required for the global development of RA would benefit the private sector: they would generate \$530 billion in business opportunities by 2050 and an economic gain of \$3035 billion by the same date⁴⁶.

III. Objectives and Modalities of the Panel

It is proposed that the panel, conceptualized with the private sector and with private sector participation, illustrate the action and the potential of regenerative agriculture through the business point of view; the panel can showcase how regenerative agriculture can contribute to the achievement of the Global Forest Goals. A moderator will present the panel, introduce panelists, and provide a brief concluding summary.

The panel aims to:

- Present the major issues linking regenerative agriculture and trees and forests;
- Contribute to the discussion on ways and means to achieve the Global Forest Goals, and the thematic priorities of UNFF 18;
- Showcase the role that the private sector plays in the achievement of the Global Forest Goals and the Sustainable Development Goals.

After the presentations, the floor will be open for questions/comments from the audience. There will be no pre-determined list of speakers for the interactive discussions and delegations wishing to speak should request the floor. Interventions should not exceed three minutes. In the event of a high number of requests for the floor, the Chair may further limit the duration of the interventions. The time limit will be strictly enforced. Interactive discussions are strongly encouraged. Interested delegations are requested to e-mail a copy of any prepared statement to estatements@un.org at least two hours before the meeting, including the title and date of the meeting, as well as the name and delegation of the speaker.

III. Composition of the Panel

Moderator: Ms. Catherine Grenier, President and CEO, Nature Conservancy Canada

Panelists:

- Ms. Morgan Gillespy, Executive Director of the Food and Land Use Coalition, World Resources Institute ([Interaction between Regenerative Agriculture and Forests](#)) *tbc*
- Mr. Alexander Gillett, CEO, HowGood ([Role and potential of the private sector in catalyzing Regenerative Agriculture](#))
- Ms. Michèle Zollinger, Global Sustainable Sourcing for Pulp and Paper & Climate Forest Lead at Nestlé ([Example of a company deploying Regenerative Agriculture in a temperate zone](#))
- Mr. Stéphane Hallaire, CEO, Reforest'Action ([Example of a regenerative project developer](#))

⁴⁵ The Sustainable Markets Initiative Agribusiness Task Force, Scaling regenerative farming: an action plan, November 2022

⁴⁶ The Food and Land Use Coalition, Growing Better: Ten Critical Transitions to Transform Food and Land Use, September 2019

IV. Panel coordination

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