



Food and Agriculture
Organization of the
United Nations

Strengthening coherence between forestry and social protection for sustainable agrifood systems transformation

Framework for
analysis and action





Food and Agriculture
Organization of the
United Nations

Strengthening coherence between forestry and social protection for sustainable agrifood systems transformation

Framework for
analysis and action

Required citation:

FAO. 2023. *Strengthening coherence between forestry and social protection for sustainable agrifood systems transformation – Framework for analysis and action*. Rome. <https://doi.org/10.4060/cc8648en>

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

ISBN 978-92-5-138374-2

© FAO, 2023



Some rights reserved. This work is made available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo/legalcode>).

Under the terms of this licence, this work may be copied, redistributed and adapted for non-commercial purposes, provided that the work is appropriately cited. In any use of this work, there should be no suggestion that FAO endorses any specific organization, products or services. The use of the FAO logo is not permitted. If the work is adapted, then it must be licensed under the same or equivalent Creative Commons licence. If a translation of this work is created, it must include the following disclaimer along with the required citation: "This translation was not created by the Food and Agriculture Organization of the United Nations (FAO). FAO is not responsible for the content or accuracy of this translation. The original [Language] edition shall be the authoritative edition."

Disputes arising under the licence that cannot be settled amicably will be resolved by mediation and arbitration as described in Article 8 of the licence except as otherwise provided herein. The applicable mediation rules will be the mediation rules of the World Intellectual Property Organization <http://www.wipo.int/amc/en/mediation/rules> and any arbitration will be conducted in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL).

Third-party materials. Users wishing to reuse material from this work that is attributed to a third party, such as tables, figures or images, are responsible for determining whether permission is needed for that reuse and for obtaining permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

Sales, rights and licensing. FAO information products are available on the FAO website (www.fao.org/publications) and can be purchased through publications-sales@fao.org. Requests for commercial use should be submitted via: www.fao.org/contact-us/licence-request. Queries regarding rights and licensing should be submitted to: copyright@fao.org.

Cover photograph: ©FAO/José Diaz

"A typical family farming landscape in highlands of Guatemala: which includes livestock, crops, trees and wood products".

Contents

Acknowledgements	v
Abbreviations.....	vi
Executive summary	vii
Introduction.....	1
Objectives	3
Target group and scope	4
Methodological approach.....	4
Structure of the Framework	5
Key concepts and definitions	5
<i>Forest-dependent people</i>	5
<i>Social protection</i>	8
<i>Forestry policies and policy instruments</i>	9
<i>Policy coherence</i>	12
1. Poverty, vulnerabilities and social protection needs of forest-dependent people.....	15
1.1 Poverty of forest-dependent people.....	15
1.2 Vulnerability and marginalization of forest-dependent people	16
<i>Economic risks</i>	17
<i>Environmental and health risks</i>	18
<i>Social and demographic risks</i>	18
<i>Gender-related risks</i>	19
<i>Political and policy vulnerabilities</i>	20
1.3 Social protection needs for forest-dependent people	20
2. Why is coherence needed between forestry and social protection?	25
2.1 Harnessing synergies in vulnerability reduction, income generation and sustainable forestry for forest-dependent people	25
<i>Vulnerability reduction</i>	25
<i>Enhancing economic inclusion</i>	28
<i>Sustainable forestry</i>	31
2.2 Compensating for unintended outcomes	33
2.3 Improving harmonization, efficiency and effectiveness	36
3. Strengthening the enabling environment for promoting coherence.....	39
3.1 Political will	39
3.2 Policy arrangements	41
3.3 Institutional and human capacities.....	43
3.4 Financial resources	44

4. Opportunities to strengthen coherence through programming	47
4.1 Programmatic approaches to strengthen coherence.....	47
<i>Free-standing programmes.....</i>	<i>47</i>
<i>Joint programmes.....</i>	<i>55</i>
<i>Aligned programmes.....</i>	<i>56</i>
<i>Key issues to consider in programme-level coherence.....</i>	<i>59</i>
4.2 Design and operational arrangements that can support coherence	60
<i>Efficient and harmonized targeting.....</i>	<i>60</i>
<i>Building on programme infrastructure.....</i>	<i>61</i>
<i>Approaches of forest producer organizations and rural community-based organizations in supporting social protection programmes</i>	<i>64</i>
<i>Overcoming barriers to forest-dependent people's access to social protection</i>	<i>67</i>
<i>Shared or harmonized monitoring and evaluation frameworks</i>	<i>69</i>
5. Conclusions and way forward.....	71
<i>Strengthen the evidence base on the impact on forest-dependent people</i>	<i>71</i>
<i>Expand coverage of national social protection programmes and enhance their inclusivity.....</i>	<i>71</i>
<i>Leverage opportunities at policy, programme and operational levels to promote coherence ...</i>	<i>72</i>
<i>Leverage the complementary role of forest producer organizations and other community-based organizations</i>	<i>73</i>
<i>Take advantage of pathways in global agendas.....</i>	<i>73</i>
References	77

Boxes

1. Indigenous and Tribal Peoples	7
2. Access barriers to social protection among forest-dependent people.....	22
3. The Plantation Establishment and Livelihood Improvement Scheme in Kenya	28
4. Interventions adopted in promoting inclusive forest value chains in Fujian province of China	30
5. Social exclusion experienced by Indigenous Peoples in social protection programmes in the Amazon region	36
6. A public works scheme promoting social protection and sustainable forestry in Mauritania	49
7. Environmental conditional cash transfers and pro-poor payments for environmental services, in Brazil and Ecuador.....	50
8. Conversion of Cropland to Forests Programme in China.....	51
9. China's targeted poverty reduction strategy and instruments used for forestry ecological poverty alleviation.....	53
10. Merging of a public works scheme with environmental objectives and a forestry programme in India	55
11. Large-scale social protection programmes in the Amazon region.....	57
12. Main characteristics of strengthening programme-level coherence.....	60
13. Chile's integrated social information system	62
14. The role of forestry and farm producer organizations in increasing access to formal social protection programmes in Ghana and Kenya	66

Tables

1. Rural poor living in or around tropical forests and savannahs in developing regions	16
2. Summary of the impacts of social protection and forestry programmes on protecting and promoting the livelihoods of forest-dependent households.....	32

Acknowledgements

The publication was prepared by Nyasha Tirivayi, Davina Osei, Dorcas Mbuvi, Rumbidzai Ndoro and Alexander Hunns of the United Nations University – Maastricht Economic and Social Research Institute on Innovation and Technology (UNU-MERIT), and Qiang Ma, Forestry Officer responsible for social protection and employment of the Forestry Division (NFO) and Greta Campora, Social Protection Specialist of the Inclusive Rural Transformation and Gender Equality Division (ESP) of the Food and Agriculture Organization of the United Nations (FAO).

Overall technical guidance was provided by Team Leaders of the Forestry Division (NFO), Thais Linhares-Juvenal and Gerardo Segura Warnholtz successively.

The technical review and constructive comments were provided throughout the drafting of this document by Natalia Winder Rossi, Alejandro Grinspun, Marco Knowles, Mari Kangasniemi, Omar Benammour, Qiushi Yue and Gala Dahlet from the Social Protection Team of ESP, and by Marco Boscolo, Madrid Arroyo, Pina Leticia and Safia Aggarwal from NFO. Special thanks go to Ewald Rametsteiner, FAO Forestry Deputy Director, for his revision and inputs.

Special thanks go to the valuable contributions of external experts from international organizations and from governments and non-governmental organizations who attended the technical meeting held in June 2019: Anna Bolin (International Institute for Environment and Development), Giuseppe Zampaglione (World Bank) and James Canonge (International Labour Organization) as well as Mafa Chipeta (Malawi), Hugo Rosa da Conceição (Germany), Paul Kijazi (United Republic of Tanzania), Charles Lwanga-Ntale (Uganda), Ssanyu R. Ntongo (Uganda), Anne Mbora (Kenya), Obiga Richard Ochieng (Kenya), Chen Xie (China) and Sheng Zhang (China).

The publication was edited by Barbara Ann Hall, and layout was provided by Flora Dicarolo.

Abbreviations

CBF	community-based forestry
CBO	community-based organization
CCAM	climate change adaptation and mitigation
CCFP	Conversion of Cropland to Forests Programme
CCT	conditional cash transfer
CENAREMA	Centre for Natural Resources Management
CIFOR	Center for International Forestry Research
CSO	civil society organization
FAO	Food and Agriculture Organization of the United Nations
FDP	forest-dependent people
FFF	Forest and Farm Facility
FFPO	forestry and farm producer organization
FLR	forest and landscape restoration
FPO	forest producer organization
GhaFFaP	Ghana Federation of Forest and Farm Producers
ICDP	integrated conservation and development project
ILO	International Labour Organization
IPCC	Intergovernmental Panel on Climate Change
M&E	monitoring and evaluation
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MIS	management information system
OSS	one-stop shop
PELIS	Plantation Establishment and Livelihood Improvement Scheme (Kenya)
PES	payment for environmental services
PFP	Private Forestry Programme
REDD+	reducing emissions from deforestation and forest degradation in developing countries
<i>RSH</i>	<i>Registro Social de Hogares</i> (Social Registry of Households, Chile)
SDG	Sustainable Development Goal
SFM	sustainable forest management
TASAF	Tanzanian Social Action Fund
UNEP	United Nations Environment Programme
UNU-MERIT	United Nations University – Maastricht Economic and Social Research Institute
WFP	World Food Programme

Executive summary

Approximately one-third of the world's population depend on forests for their livelihoods. Forest-dependent people (FDP) require social protection because they are often poor, geographically, politically and socially marginalized, and vulnerable to a variety of risks and shocks. FAO has estimated that, in 2022, 3.27 billion people lived within 1 km of a forest. Around 20 to 25 percent of the income of FDP in developing countries comes from forests. In addition, approximately 40 percent of the rural poor in developing regions live in or around forested areas. There is likely a strong correlation between forest proximity and extreme poverty, given that 80 percent of the extreme poor live in rural areas.

Beyond its human rights dimension, access to social protection throughout a person's life cycle is key to reducing vulnerability to shocks,¹ promoting and strengthening livelihoods, reducing poverty, and promoting social and economic inclusion. Forestry and social protection programmes and policies share similar objectives of reducing vulnerability of FDP, enhancing economic inclusion, and promoting sustainable development. Therefore, **coherence, should be sought to ensure complementarity in objectives and coverage.**

FAO aims to promote linkages between social protection and agriculture, food security, nutrition, natural resource management, decent rural employment and resilience building. **This publication presents a guiding framework to assist mainly governments, development organizations and civil society organizations (CSOs) in attaining coherence between social protection and forest policies to improve the well-being of FDP.** This approach is an integral part of the FAO Strategic Framework 2022–2031, which seeks to support the 2030 Agenda for Sustainable Development through a transformation towards more efficient, inclusive, resilient and sustainable agrifood systems. This will lead to improved production, nutrition and environment, hence a better life leaving no one behind. It builds on published evidence from all developing regions and case studies from China, Burkina Faso, Kenya, Uganda and the United Republic of Tanzania. This Framework is part of the FAO series "Strengthening Coherence between Agriculture and Social Protection: Framework for Analysis and Action". It was produced in parallel with a diagnostic tool, which includes interview guides for a methodological approach to assess coherence at the policy and programme level.

¹ 'Shocks' refer to social, economic, environmental and political shocks, which are random, unpredictable events that have a widespread impact.

■ Executive summary

The main objectives of the Framework are:

- to guide the provision of knowledge and evidence on the vulnerabilities of FDP and analyse gaps in the provision of social protection to FDP;
- to frame the rationale for promoting the coherence between forestry and social protection;
- to identify the enabling environment and options to coherently design and implement forestry and social protection at the programme and operational levels.

This Framework focuses on formal social protection programmes, since they have an explicit focus on the Sustainable Development Goals (SDGs). The three main types of formal, state-based social protection programmes are social insurance, social assistance and labour market protection.

In the Framework it is recognized that social protection and forestry policies are complementary so that they be used together synergistically to achieve objectives of poverty reduction, ending hunger, and sustainable management of natural resources. It clarifies the benefits of strengthening coherence between forestry and social protection policies. Forestry and social protection programmes, when implemented for FDP, are likely to have some overlapping objectives. Evidence and examples from the literature demonstrate that both forestry and social protection programmes can reduce vulnerabilities, enhance economic inclusion, and promote sustainable forest management. Regarding vulnerability reduction, there are examples of conditional cash transfers (CCTs) in the Plurinational State of Bolivia, payment for environmental services (PES) programme in Mexico, and community forest programmes in Burkina Faso, Nepal, Nicaragua and the Philippines, all of which improved income, livelihoods and food security. In Mexico, the CCTs reduced gender disparities in the education of indigenous children, while a PES programme in Nepal increased the participation of women, poor families, low-caste families and Indigenous Peoples in decision-making. Regarding economic inclusion, there are examples of CCTs in Brazil and Mexico, and a PES programme in Cambodia, which enhanced human development by increasing school enrolment and attendance rates. In China, inclusive forest value chains are promoted through various forest industry interventions, such as the funding of forest insurance, social insurance, skills training, ecological jobs for poor households, and services and insurance provided by enterprises and cooperatives. Regarding sustainable forestry, there is evidence of public works programmes in Ethiopia and India, which promoted forest conservation and behaviours, while PES programmes in Cambodia helped reduce soil erosion and increase carbon sequestration.

These similar impacts present opportunities for building coherence in order to consolidate efforts, prevent duplication, and enhance the efficient use of scarce resources. **Coherence can harness synergies in vulnerability reduction (poverty reduction, risk coping, social inclusion), economic inclusion (promoting human capital development and participation**

■ Executive summary

of FDP in profitable and sustainable forest value chains) and sustainable forestry for FDP. Coherence initiatives can also compensate for any undesirable outcomes of separate forestry or social protection programmes.

This Framework identifies options for building coherence between forestry and social protection in three areas: (i) the enabling environment; (ii) programmatic approaches; and (iii) operational arrangements. Political will, policy arrangements, institutional and human capacities, and financial resources are the four important enabling factors for building and strengthening coherence. Political will is critical in leading efforts to build coherence. Partnerships and alliances between the government ministries responsible for social protection and forestry, ministries of finance, local government, CSOs, community-based organizations (CBOs), academic institutions and international organizations can boost support for the coherence agenda. Stakeholders can utilize evidence-based research to demonstrate the linkages between social protection and forest sectors. Leadership is vital for the establishment of strategic alliances and advocacy campaigns for building coherence. **State and non-state actors can leverage initiatives to promote synergies between social protection and forestry policies, and take advantage of pathways in global agendas, including regional commitments (e.g. by the African Union and the Association of Southeast Asian Nations) as well as climate change initiatives that present attractive opportunities for linking with social protection instruments to build resilience and promote forest conservation.** A number of local, regional and international initiatives support the building of coherence, including, for example: climate change funds, Reducing emissions from deforestation and forest degradation plus the sustainable management of forests, and the conservation and enhancement of forest carbon stocks (REDD+), payment for environmental services (PES), and integrated conservation and restoration projects. Cross-sectoral policy arrangements can provide the overall vision and guidance necessary to translate political commitments into coherent action. Strong institutional capacities and coordination (both horizontal and vertical) facilitate the alignment and harmonization of social protection and forestry policies. Financial resources are vital for promoting coordination and coherence between the two sectors. The means of leveraging the necessary finance include cross-sectoral investment plans, global financing schemes, pooling of funds and investment of local taxes.

At the programmatic level, coherent 'packages' of social protection and forestry interventions can be developed in three ways: free-standing programmes, joint programmes and aligned programmes. Free-standing social protection and forestry programmes can be designed to incorporate environmental and social protection objectives. Free-standing social protection programmes such as public works have been used to provide work for poor and vulnerable people in exchange for cash or food while promoting forest conservation. For example, the Productive Safety Net Programme in Ethiopia and a public works project in Mauritania included the planting of trees among the work activities. There are free-standing forestry programmes that have included poverty reduction objectives. In China, the Conversion of Cropland to Forest Programme is an example of a free-standing

■ Executive summary

forestry programme with social protection components as it provides food subsidies and cash transfers in return for the conversion of cropland to forests. In the case of overlap in objectives, targeting criteria, participants or geographic scope, it may be appropriate to integrate forestry and social protection programmes into one joint programme that can be implemented in forested areas. Joint programmes can be particularly useful when social protection interventions are needed to address gaps or shortcomings in forestry approaches. For example, a forestry programme that aims to enhance India's forest cover in line with national climate change goals (National Mission for Green India) was merged with the national public works programme (Mahatma Gandhi National Rural Employment Guarantee Scheme), resulting in a public works programme that includes afforestation work and a forestry programme that finances shortfalls in the public works programme. Aligning programmes usually involves coordinating and harmonizing different programmes that are delivered in a similar location, or similar programmes delivered in different locations. For example, two programmes were aligned: Bolsa Verde, which provided quarterly cash transfers for poverty alleviation in return for the maintenance of forest cover and other conservation activities, and Bolsa Família, which provided CCTs for poverty alleviation and human capital development. Both programmes shared a common monitoring and evaluation (M&E) framework, targeting and geographic scope.

Overall, coherence between social protection and forestry programmes can be achieved by developing multisectoral, coherent programmes that simultaneously address poverty reduction and forest conservation objectives, such as: public works programmes; CCTs; public social insurance schemes and cash plus programmes; multi-objective forestry programmes that include social protection objectives, such as pro-poor PES schemes; and joint or aligned programmes.

At the operational level, coherence is achieved through: harmonized and accurate targeting; unified registries and management information systems; overcoming barriers to FDP's access to social protection, and common M&E frameworks. **It is important to leverage the complementary role of forest producer organizations and other CBOs** that are well positioned to support formal social protection programmes, particularly through their local knowledge, their promotion of collective action and their activities in delivery and M&E. **It is also important to strengthen the evidence base on vulnerabilities and social protection needs of FDP and the impacts of social protection on FDP.**

Governments, CSOs and development partners can collaborate to strengthen coherence between forestry and social protection. This involves creating an enabling environment for the pursuit of coherence, and building coherence at the programme and operational levels. **Global agendas on the SDGs, including social protection, climate change and agrifood system transformation, offer opportunities for expanding social protection coverage and fostering coherence between the social protection and forestry policies and programmes.**

Introduction

The forest sector has complex social, economic and environmental development dimensions. Its multiple contributions to improving sustainable development and transforming agrifood systems² have been acknowledged by the Sustainable Development Goals (SDGs), the Paris Agreement³ and the 2021 United Nations Food Systems Summit.⁴ Indeed, the forest sector contributes with around 20 to 25 percent of the income of rural households in developing countries (Angelsen *et al.*, 2014; FAO, 2022a) while providing natural insurance in case of shocks such as climate change, as well as a means to accumulate assets and build a path out of poverty (Byron and Arnold, 1999; FAO and UNEP, 2020; Sunderlin *et al.*, 2008; Angelsen *et al.*, 2014). In essence, the forest sector is crucial for climate change adaptation and mitigation (CCAM)⁵ and biodiversity conservation, among other ecosystem services.

Forests and trees serve as a safety net and increase resilience for forest-dependent people (FDP): wood and non-wood products and ecosystem services are a source of food, income and employment. Moreover, forests and trees provide fuelwood for energy and products used for housing and medical purposes, and also serve as natural insurance because they can be used as a coping mechanism during shocks and when households are asset-poor (Wunder *et al.*, 2014). However, due to human reliance on forests, there is a risk of deforestation and forest degradation. The heterogeneity of people's interactions with forests makes it difficult to characterize the scale of forest dependence. Estimates range from 300 million people living in forests (WWF, 2020) to more than 2.5 billion people benefiting from their regulatory and provisioning services (FAO and UNEP, 2020). According to a new study (Newton *et al.*, 2022; FAO, 2022a) that combined data on tree cover and human population density to map the spatial relationship between people and forests on a global scale, in 2019, 95 percent of rural people (4.17 billion) lived within 5 km of a forest and 75 percent (3.27 billion) lived within 1 km. There is likely a strong correlation between

² The agrifood system covers the food supply chain from farm to table, including when it is grown, fished, harvested, processed, packaged, transported, distributed, traded, bought, prepared, eaten and disposed of. It also encompasses non-food products that provide livelihoods as well as the activities, investments and choices that play a part in bringing these foods and agricultural products to households. FAO, 2021a.

³ FAO, n.d.a.

⁴ United Nations. The Food Systems Summit. 23 September 2021. New York. www.un.org/en/food-systems-summit

⁵ "Adaptation to climate change refers to the process of adjustment to actual or expected climate and its effects", while "climate change mitigation aims at stabilizing the greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system". FAO, n.d.b.

■ Introduction

forest proximity and extreme poverty, given that 80 percent of the extreme poor live in rural areas (FAO, 2022a; Newton *et al.*, 2022).

FDP are usually located in remote and disconnected rural areas characterized by low levels of market development and poor access to public goods⁶ and social services. FDP constantly deal with the consequences of market failure⁷ and are particularly exposed to risks and repeated shocks. A wide range of environmental, economic, health-related, demographic, social and political factors are key sources of vulnerability for these communities, which is exacerbated by ecological degradation and climate change. For instance, the livelihoods of FDP in some areas face challenges caused by high rates of deforestation and forest degradation, where women and other minorities are often discriminated against.

Although FDP are exposed to various risks and vulnerabilities, and are therefore significantly in need of social protection, coverage of social protection interventions is limited. Social protection policies and programmes can address some of the vulnerabilities and risks experienced by FDP and incentivize forest resource management. Governments are mainly responsible for the provision of social protection. Forest producer organizations or associations can also partner with governments to effectively target and deliver social protection programmes to FDP that combine forest conservation and poverty reduction goals. The potentially similar risk-reduction intentions of forestry and social protection policies support the rationale for building coherence and exploiting synergies to leverage complementarity in objectives and coverage.

Social protection has been recognized as a critical strategy for poverty reduction and inclusive growth (FAO, 2017a), and can effectively contribute to reducing the vulnerabilities and risks experienced by FDP and incentivize sustainable forest resource management. Beyond its human rights dimension, developing countries have increasingly adopted social protection as a strategy for mitigating poverty, food insecurity and vulnerability to shocks. The Sustainable Development Goals (SDGs) indicate the commitment of the international community to end poverty and hunger by 2030 while addressing the consequences of environmental degradation and climate change. Countries are called upon to expand coverage of nationally appropriate social protection systems to achieve substantial coverage of the poor and the vulnerable by 2030 (SDG Target 1.3).

When combined with agricultural sectors⁸ (crop, forestry, livestock, fisheries) and natural resources management, coherent social protection interventions can generate a broad range of positive impacts: increased economic growth; enhanced productivity of rural households that are also supported in diversifying their sources of income; food and nutrition security;

⁶ A public good has two key characteristics: it is non-excludable and non-rivalrous. Nonrivalrous means that consumption of a good or service by one party does not prohibit consumption of the same good or service by another party. A nonexcludable good is one where non-paying consumers cannot be prevented from accessing the good.

⁷ Market failure is a circumstance in which the allotment of goods and/or services are not adequate.

⁸ In the FAO Constitution, the term 'agriculture' and its derivatives include fisheries, marine products, forestry and primary forestry products.

■ Introduction

improved sustainable natural resources management; and resilience building (FAO, 2016a, 2017a). Social protection creates conditions for forestry asset building to reduce reliance on unsustainable use and management of forest resources, as well as to improve financial and market access. In combination with forestry policies and programmes, social protection can contribute to enhancing the role of forests as safety nets without jeopardizing their conservation and sustainable management. Hence, policy coherence⁹ across forestry, social protection, CCAM and biodiversity conservation can act as the critical lever to enable change at the scale required to reach the SDGs and make agrifood systems more efficient, inclusive, resilient and sustainable.

■ Objectives

FAO is committed to contributing to the global poverty reduction and social protection agenda through its Strategic Framework (2022–2031) (FAO, 2021b) and the associated 20 Prioritized Programme Areas (FAO, 2021c). FAO currently supports countries in their efforts to extend social protection to all (SDG Target 1.3), including through the establishment of nationally defined social protection floors that guarantee at least essential health care and basic income security. FAO promotes linkages between social protection and agriculture, fisheries, livestock, pastoralism and forestry in order to improve food security and nutrition, and to promote sustainable natural resource management, economic inclusion, resilience and CCAM (FAO, 2017a).

The fostering of linkages between social protection and forestry through coherent policies and programmes will contribute to three interrelated pathways involving forests and trees, which can support economic and environmental recovery: (i) halting deforestation and maintaining forests; (ii) restoring degraded lands and expanding agroforestry; and (iii) sustainably using forests and building green value chains (FAO, 2022a). The main objectives of this Framework are to:

- guide the provision of knowledge and evidence on vulnerabilities of FDP, and analyse existing gaps in the provision of social protection to FDP;
- frame the rationale for promoting the coherence between forestry and social protection;
- identify the enabling environment and options to coherently design and implement forestry and social protection at the programme and operational levels.

⁹ The concept of policy coherence will be explained in detail in the 'Key concepts' section.

■ Introduction

■ Target group and scope

The framework is intended for use by actors involved in the design and implementation of policies, programmes, interventions and advocacy activities in the forestry and social protection sectors. These mainly include:

- government staff involved in planning, designing and implementing forestry, social protection and finance policies and programmes (e.g. ministries of environment, social welfare and finance, parliamentary committees), or involved in supporting inter- and cross-sectoral collaboration and coordination (e.g. ministries of planning, national and decentralized steering committees, sectoral working groups, offices of the president);
- development partners that provide technical and financial assistance to government forestry and social protection policies and programmes;
- civil society organizations (CSOs), including non-state service providers and forest producer organizations (FPOs), and community-based organizations (CBOs) that provide services to FDP and advocate for their welfare.

The Framework focuses on FDP in developing countries; specific lessons are drawn from the developing regions of Africa, Asia, and Latin America and the Caribbean.

This Framework is part of the FAO series “Strengthening Coherence between Agriculture and Social Protection: Framework for Analysis and Action”. It was produced in parallel with a diagnostic tool, which provides a methodological approach-including interview guides-to assess coherence at the policy and programme level.

■ Methodological approach

The Framework was prepared and adapted based on FAO’s relevant strategic frameworks, overall guidance, global literature reviews and country case studies that provide evidence, and various events, workshops and technical meetings for providing insights and comments:

- FAO’s new Strategic Framework 2022–2031 (FAO, 2021b);
- FAO’s ‘Social protection framework. Promoting rural development for all’ (FAO, 2017a);
- FAO’s ‘Strengthening coherence between agriculture and social protection to combat poverty and hunger in Africa. Framework for Analysis and Action’ (FAO, 2016a);
- FAO’s ‘State of the World’s Forests 2022 – Forest pathways for green recovery and building inclusive, resilient and sustainable economies’ (FAO, 2022a);
- global literature reviews on the impacts of forestry and social protection interventions on the vulnerability and livelihoods of FDP, and on the role of forest producer organizations in social protection (Tirivayi, 2017; Tirivayi *et al.*, 2018);
- country case studies (Chen, 2017; Xie, 2017; CENAREMA, 2017, 2020; Ssanyu, 2017; Lwanga-Ntale, 2018) and national workshops in Burkina Faso, China, Kenya, Uganda

■ Introduction

and the United Republic of Tanzania describing social protection measures and the livelihoods of FDP;

- the outcomes from a subregional workshop on social protection for FDP in East Africa, held in Dar es Salaam, United Republic of Tanzania, in November 2017;¹⁰
- the insights from side events on creating synergies between forestry and social protection held at the Twenty-third and Twenty-fourth Sessions of the FAO Committee on Forestry in Rome in July 2016 and July 2018;¹¹
- technical comments on and inputs to the draft document from an expert workshop held in 2019 at FAO headquarters in Rome,¹² and from FAO social protection and forestry experts.

■ Structure of the Framework

This Framework includes four major sections, as follows:

Section 1 lays the groundwork of the Framework by providing insights into the poverty, vulnerability and marginalization of FDP, their social protection needs and coverage, and the barriers in accessing social protection.

Section 2 discusses how greater coherence between forestry policies and social protection interventions can contribute to eradicate poverty and hunger, and promote sustainable forest management.

Section 3 identifies the enabling factors (e.g. political will, policy architecture, institutional and human capacities, and financial resources) for strengthening coherence between forestry and social protection policies.

Section 4 identifies programmatic options for greater coherence between forestry and social protection policies, including design, implementation and operational features that can facilitate synergies and help manage trade-offs.

■ Key concepts and definitions

Forest-dependent people

A universally accepted definition of the term ‘forest-dependent people’ (FDP) is yet to be established, although the inter-governmental processes have specified FDP as a globally relevant concept (FAO and UNEP, 2020). The term has typically been used to describe people

¹⁰ FAO, 2019b.

¹¹ FAO. Social Protection. www.fao.org/index.php?id=92463

¹² FAO, n.d.c.

■ Introduction

who derive benefits from forests. Forest-derived benefits include: extraction of timber and non-timber forest products and resources, and the provision of environmental services, for example, regulation of climate, water and carbon cycles, pollination, nitrification of soils, recreational and spiritual benefits (Newton *et al.*, 2016). Newton *et al.* define 'dependent' as "the strength of the connections between forests and human wellbeing" (*ibid.*), for example, when people's subsistence or commercial livelihoods are at least partly derived from forests. The extent of dependence can also be linked to the extent of reliance on forests for livelihoods and non-livelihood benefits, for example, the share of benefits from forests (e.g. income), the frequency of collection or purchase of a forest resource, and the degree to which livelihood benefits from the forest are irreplaceable, or for which there may be alternatives (*ibid.*).

FDP are characterized by their spatial relationship to forests and the type of benefits they derive from forests, as follows:

1. People who live within forests and for whom forests are the main land use and source of livelihood: these people rely on forests for their subsistence and main income, for example, herders in tropical dry forests, hunters, gatherers and farmers engaged in rotational fallowing in forests (Shepherd, 2012), and Indigenous Peoples who have lived in forests for generations. They have access to or use rights for forest resources, usually using these resources to sustain their livelihoods and/or income-generating activities.
2. People who live near forest: these people use forests for key inputs such as medicine, timber or fuelwood, or rely on forests for their livestock and food. Livelihood sources may include wage employment, forest products and income from small businesses (*ibid.*). Communities that fall in this category typically rely on agriculture as their main livelihood (e.g. rural farmers and landless households). They may have access to or use rights for forest resources. They also include people whose main livelihood

Indigenous Peoples from the Mam ethnic group in Guatemala



©FAO/José Díaz

■ Introduction

comes from labour supplied to forest-based commercial activities, for example, forest-based enterprise owners or workers.

Many of the studies cited in this Framework focus on indigenous and ethnic minority populations, based on the assumption that these are forest populations (Box 1).

Box 1. INDIGENOUS AND TRIBAL PEOPLES

Indigenous and Tribal Peoples are the bearers of a large part of the world's cultural diversity. They represent more than 476 million people around the globe, living in 90 countries and speaking more than 4 000 languages. Evidence clearly shows that they are among the poorest and most vulnerable, accounting for more than 19 percent of the world's extremely poor. In most of the remaining tropical forests globally, Indigenous and Tribal Peoples are the customary managers and protectors of the natural resources. Their ancestral techniques have enabled them to provide food and natural resources for their communities, allowing livelihoods to flourish for future generations. However, their livelihoods and knowledge require protection and promotion. Conflicts over land and resources have often driven them to remote and usually forested regions. For example, in India, 84 percent of scheduled tribes live in forested areas. In South America, indigenous territories represent 35 percent of the Amazon region. For this reason, the International Labour Organization (ILO) Indigenous and Tribal Peoples Convention 1989 (No. 169),¹³ while seeking to ensure the protection of Indigenous People's customs, cultures, institutions, environments, traditional knowledge, tenure rights and occupations, also seeks adequate provisions of health services and a progressive extension of social security.

Sources:

Bradley, A. & Fortuna, S. 2021. Collective tenure rights for REDD+ implementation and sustainable development. Rome, FAO. <https://doi.org/10.4060/cb3521en>

Clay, J.W., Alcorn, J.B. & Butler, J.R. 2000. Indigenous peoples, forestry management and biodiversity conservation. Washington, DC, World Bank.

Dhir, R.K., Cattaneo, U., Cabrera Ormaza, M.V., Coronado, H. & Oelz, M. 2020. Implementing the ILO Indigenous and Tribal Peoples Convention No. 169: Towards an Inclusive, Sustainable and Just Future. ILO: Geneva, Switzerland. www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_735607.pdf

Mehta, A.K. & Shah, A. 2003. Chronic poverty in India: incidence, causes and policies. *World Development*, 31(3): 491–511.

Riveros, J.C., Hofstede, R., Granizo, T., Maretti, C.C. & Oliveira, D. 2014. Protected areas and indigenous territories of the Amazon – five decades of change (1960–2012). WWF Living Amazon Initiative report (internal draft).

¹³ Schwartz, 2019.

■ Introduction

Social protection

This Framework refers to the definition of social protection adopted by FAO (2017a) and promoted by the Social Protection Inter-Agency Coordination Board (SPIAC-B).¹⁴ Hence, social protection refers to the “set of policies and programmes that address economic, environmental and social vulnerabilities to food insecurity and poverty by protecting and promoting livelihoods” (FAO, 2017a). It is aimed at “preventing and protecting all people against poverty, vulnerability, and social exclusion, throughout their lifecycle, placing a particular emphasis on vulnerable groups” (Social Protection Inter-Agency Cooperation Board, n.d.) through three pillars:

- **Social assistance:** alleviating chronic or transient poverty through non-contributory programmes, which are publicly provided, for most vulnerable individuals or households with limited other means of adequate support that can be provided in-kind or in cash. This approach includes interventions such as conditional and unconditional cash transfers (CCTs), Cash+,¹⁵ school feeding programmes, food transfers, fee waivers and public works programmes.
- **Social insurance:** helping to mitigate risks associated with unforeseen events in the life cycle, such as poor health, old age, pregnancy (and post-natal care), unemployment, work injury and disability. Social insurance is derived from contributory schemes with partial funding coming from the state. This approach includes contributory interventions such as health insurance, pension, maternity benefits, unemployment benefits, work injury insurance and disability benefits.
- **Labour market protection:** creating employment and promoting livelihoods through economic opportunities, improved quality of employment and protecting current workers through improved working conditions, as well as training and skills development that target unemployed and underemployed rural workers.

In the absence of **formal state-led social responses**,¹⁶ either implemented by the State on its own or together with other non-governmental institutions, vulnerable populations frequently rely on informal arrangements for the provision of social protection (Calder and Tanhchareun, 2014). **Informal social protection** refers to informal insurance support obtained from social networks or groups that are ‘traditional’ or ‘indigenous’ (Devereux and Sabates-Wheeler, 2004). These networks may comprise extended family, kinship groups and

¹⁴ The Social Protection Inter-Agency Cooperation Board (SPIAC-B) is an inter-agency coordination mechanism composed of representatives of international organizations and bilateral institutions, which aims to enhance global coordination and advocacy on social protection issues, and to coordinate international cooperation in country demand-driven actions. FAO is one of the SPIAC-B active members.

¹⁵ FAO, 2017b.

¹⁶ Formal social protection programmes are state-based interventions (either alone or together with other non-governmental institutions) that address social and economic risks and human vulnerability within national borders.

■ Introduction

communities. Informal social protection is particularly prevalent as a positive coping strategy in sub-Saharan African, where formal social protection coverage is especially limited; as at 2020, 17.4 percent of the population were covered by at least one formal social protection benefit, in contrast with the global average of 46.9 percent (ILO, 2021). Hence, CSOs play a vital role in developing collective practices of risk management and mutual assistance for their members (Tirivayi, Nennen and Tesfaye, 2018).

Although it is recognized that informal social protection is widespread in developing countries, **this Framework focuses specifically on formal social protection programmes, which are rights-based with an explicit focus on the SDGs, and that generally provide more effective coverage for the intended beneficiaries.** While informal social protection and local support mechanisms can offer effective assistance to individuals or single households, for example, in facing life cycle shocks such as illness or death, they may fall short in supporting and protecting entire communities, especially in the face of covariate shocks (i.e. shocks affecting entire communities or large numbers of households) such as weather-related shock or economic downturn (OECD and ILO, 2019). Furthermore, these mechanisms may replicate socially exclusionary practices, limiting access for particular groups or including them on unequal conditions.

Many FPOs and other CBOs provide informal social protection and social services to their members, which include social insurance, informal risk sharing and mutual assistance. **More importantly, FPOs and rural CBOs are well positioned to support the design, implementation and monitoring of formal social protection programmes given their reach among FDP** (Tirivayi, Nennen and Tesfaye, 2018; Vinci, Djeddah and Hani, 2016).

Forestry policies and policy instruments

Forestry policies are generally defined as “negotiated agreements between governments and other stakeholders on a shared vision for the national forests and trees” (FAO, 2010). They set objectives for the sustainable management and use of forests and tree-based systems, and outline strategies to achieve them. This Framework will not list all existing forestry policies and policy instruments, but will focus only on some major relevant ones that concern three pathways: halting deforestation and maintaining forests; restoring degraded lands and expanding agroforestry; and sustainably using forests and building green value chains (FAO, 2022a):

- **Community-based forestry (CBF)** includes “initiatives, sciences, policies, institutions and processes that are intended to increase the role of local people in governing and managing forest resources” (RECOFTC, 2013). It also includes formalized customary and indigenous initiatives as well as government-led initiatives. CBF covers social, economic and conservation dimensions with a range of activities, such as decentralized and devolved forest management, smallholder forestry schemes, community-company partnerships, small-scale, forest-based enterprises, and indigenous management

■ Introduction

©FAO/Qiang Ma



Members of a women's cooperative are processing shea butter in Burkina Faso

of sacred sites of cultural importance. It also includes both collaborative regimes (e.g. forestry practised on land that has some form of formal communal tenure and requires collective action) and smallholder forestry on land that is generally privately owned (FAO, 2016b). Community or participatory forest management empowers FDP by giving them a leading role in implementing sustainable forest management (SFM) practices while allowing the traditional use of forest resources. In some areas, there are community-controlled forests where formal or informal property rights

■ Introduction

are given to local communities. Other community-based interventions include the establishment of small-scale forest producers or cooperatives that take the lead in using forests for commercial purposes in a sustainable manner. Smallholders, local communities and Indigenous Peoples manage at least 4.35 billion ha of forest and farm landscapes (FAO, 2022a).

- **Forest and landscape restoration (FLR)** is a planned process to regain ecological functionality and enhance human well-being in deforested or degraded landscapes. The three aspects of the response hierarchy in the FLR approach are: “avoid degradation”, “reduce degradation” and “restore degraded land”. Of the 2.2 billion ha of degraded land identified as potentially available for restoration worldwide, 1.5 billion ha may be best suited for mosaic restoration, combining forests and trees with agriculture. FLR can provide large environmental benefits as well as economic benefits. For example, the restoration of 4 million ha of degraded land in the Sahara and the Sahel area has created more than 335,000 jobs (FAO, 2022a).
- **Forest producer organizations (FPOs) and community-based organizations (CBOs).** FPOs are a form of collective action and are defined as formal or informal associations of forest producers (FAO and AgriCord, 2016). Their members include individual forest producers, Indigenous People, smallholder families, rural communities, federations of local FPOs and/or federations of local cooperatives. CBOs include rural organizations, usually voluntary, non-state and non-commercial, that serve various needs within communities. These organizations have multiple roles and activities across the forest and non-forest sectors. Their forest-based activities can be classified into four main categories: the first category influences policy by strengthening tenure security and advocacy for an enabling environment; the second category provides marketing, production and economic services such as credit and financial services, collective production and value addition to realized economies of scale; the third category includes capacity building, networking and extension services, such as education and training; and the fourth category provides public goods for addressing deforestation and forest degradation, and implementing forest restoration (FAO and AgriCord, 2016; deMarsh *et al.*, 2014; FAO, 2022a).
- **Forest tenure reform** refers to “the right, whether defined in customary or statutory terms, that determines who can hold and use land (including forests and other landscapes) and resources, for how long, and under what conditions” (Corbera *et al.*, 2011). In forestry, tenure reforms in many countries are moving from dominant state ownership and management of forests to diverse tenure arrangements. Where states have weak management capacities, diverse tenure arrangements are deemed appropriate for ensuring SFM and improving livelihoods. Forest tenure reform is often linked with decentralization and devolution programmes (FAO, 2011b). Tenure reform continues to face challenges in many countries, such as: states adopting laws but not implementing them; retaining control of high-value

■ Introduction

forests and decentralizing low-value degraded forestland in need of restoration; the persistent marginalization of women's rights to resources; and differential livelihood impacts on ethnic minorities and other marginalized groups. There is evidence that smallholders with secure tenure tend to make longer-term investments in their lands and forests than those with no or short-term tenure security (FAO, 2022a).

- **Protected Area (PA)** is a “clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values”.¹⁷ Recent estimates have revealed that there are 726 million ha of forest in protected areas worldwide, and the area of forest in protected areas globally has increased by 191 million ha since 1990 (FAO, 2020b).
- **Payment for environmental services (PES)** refers to payments to natural resource managers, who are often landowners, on condition that they provide environmental services or forest conservation, biodiversity and ecosystem protection, which are generally implemented at the sub-national scale (Persson and Alpizar, 2013). This incentive is expected to result in continued or improved provision of ecosystem services, which in turn will benefit society as a whole (FAO, 2011a).
- **REDD+**. This is a framework that was created under the United Nations Framework Convention on Climate Change (UNFCCC) to guide and reward results from policies and actions that reduce emissions from deforestation and forest degradation, and encourage the sustainable management of forests, and the conservation and enhancement of forest carbon stocks in developing countries. This could be a key mechanism for halting deforestation and meeting climate goals (FAO, 2022a).

Policy coherence

In the last decades, there has been a growing international and national recognition of the need to promote policy coherence across sectors as a way to address various economic, social and environmental challenges in achieving sustainable development (FAO, 2016a; Cirillo, Györi and Soares, 2017). Following the definition provided by the Framework for Analysis and Action on strengthening coherence between social protection and agriculture (FAO, 2016a), policy coherence is defined as “**a systematic promotion of complementary and consistent policies and programmes across sectors, thereby creating synergies to combat poverty more effectively**”. Policy coherence is therefore an approach to harness complementarities between different sectors while avoiding and minimizing potential conflicts (ibid).

¹⁷ FAO. Protected Areas. www.fao.org/forestry/wildlife/67289/en

■ Introduction

Policy coherence is conceived as a means and a process towards reaching sustainable development, and is therefore a core aspect of the 2030 Agenda for Sustainable Development (Target 17.14: Enhance policy coherence for sustainable development). It is recognized as an important approach to ensure the equitable and sustainable transformation of agrifood systems, halt deforestation, and promote deforestation-free supply chains so as to alleviate poverty effectively (Shyamsundar *et al.*, 2020). As a result, it maximizes environmental benefits for people while minimizing negative impacts.

Policy coherence implies that the impacts of joint interventions may be larger than the sum of the impacts of the different single sectoral interventions (Cirillo, Györi and Soares, 2017). Furthermore, some unexpected negative impacts of individual sectoral policies can be minimized, eliminated or compensated for if social protection and forestry policies and programmes are implemented in synergy (see Section 2).

To create coherent programmes in social protection and forestry, it is imperative to consider the entire spectrum of policies and programme cycles. Coherence is viewed as a more effective and efficient approach for achieving multiple objectives for a select target population, here FDP. **Coherence is therefore not an end in itself, but an approach for improving the lives and livelihoods of FDP and conserving forests.** When there is coherence, complementarities between forestry and social protection can be harnessed, and potential conflicts between forestry and social protection objectives can be avoided or minimized (see sections 3 and 4).

1. Poverty, vulnerabilities and social protection needs of forest-dependent people

This section explains for whom the coherence between social protection and forestry policy should be built and enhanced. It describes the poverty, vulnerability and marginalization of FDP, and the coverage and access barriers of social protection for them.

1.1 Poverty of forest-dependent people

A growing body of literature indicates that FDP are likely to have high poverty rates, and in some cases, they are the poorest population within countries (e.g. Chomitz *et al.*, 2007; Sunderlin *et al.*, 2008; Bandyopadhyay, Shyamsundar and Baccini, 2011; PROFOR and World Bank, 2017; FAO, 2018a; FAO and UNEP, 2020; FAO, 2022a; Newton *et al.*, 2022). However, estimating poverty of FDP within countries is a challenge, because it is difficult to define and calculate numbers of FDP, and thus data are limited (FAO and UNEP, 2020).

Of an estimated 820 million FDP in developing regions (FAO, 2018a, based on Chomitz *et al.*, 2007), the highest poverty rates are in Africa (56 percent) (Table 1). It is estimated that approximately 40 percent of the rural poor in these regions live in or around forested areas (FAO, 2018a). Although the percentage of FDP who are poor is the smallest in Latin America, they account for 82 percent of the rural poor population.

In addition to monetary poverty, FDP are also potentially at higher risk of suffering from other dimensions of poverty such as poor health, nutrition, education and housing, as well as social exclusion, gender inequalities, insecurity, powerlessness and injustice. Measuring these dimensions complements information on monetary poverty, providing insight into the various forms and degrees of deprivation and vulnerability of the extreme poor. The global Multidimensional Poverty Index (MPI) developed by the Oxford Poverty and Human Development Initiative (OPHI), for example, one of the most widely used measures, has ten indicators: nutrition, child mortality, years of schooling, school attendance, cooking fuel, improved sanitation, safe drinking water, electricity, flooring and assets (Diaz, 2003; Alkire, 2007; FAO, 2019a). Because these indicators are challenging to measure, evidence on the multiple dimensions of poverty for FDP is scant.

1. Poverty, vulnerabilities and social protection needs of forest-dependent people

Table 1. Rural poor living in or around tropical forests and savannahs in developing regions

Region	Forest population (million)	Forest population who are poor (%)	Poor forest population as a share of the rural poor (%)
Africa	284	56	50
Asia	451	19	27
Latin America and the Caribbean	85	9	82
Total	820	31	40

Note: 'Poor' is defined as living under USD 1.25 per day.

Source: FAO. 2018a. State of the World's Forests 2018 – Forest pathways to sustainable development. Rome.

Studies from various developing countries have identified several driving factors of multidimensional poverty among FDP. In India, the key factors are social identity, marginalization, forest dependence and physical isolation of scheduled tribes living in forested regions (Gioli *et al.*, 2019). In the Brazilian Amazon, the driving factors are poor infrastructure, limited access to markets, and limited health and educational services (Guedes *et al.*, 2014). In the Hindu Kush Himalayas, relevant factors include remoteness, poor accessibility to markets, high dependence on natural resources, socioeconomic inequities, conflicts, gender inequities and caste-based discrimination, and political and social marginalization (Shah, 2007). In Kenya, multidimensional poverty is driven by the marginalization of women through normative structures, weak female participation in community forest associations, poor land ownership rights, and poor access to resources and markets (CENAREMA, 2020).

1.2 Vulnerability and marginalization of forest-dependent people

The concept of vulnerability is generally defined as the function of the risks to which people may be exposed, the sensitivity of their particular livelihoods to those risks, and their ability or inability to adapt to, cope with, or recover from the impacts of external shocks (adaptive capacity) (IPCC, 2022). The concept of marginalization (or social exclusion) describes “a process where certain groups are systematically disadvantaged because they are discriminated against on the basis of their ethnicity, race, religion, sexual orientation, caste, gender, age, education, class, disability, HIV status, migrant status or where they live” (Atkinson, 1998). FDP are frequently marginalized and vulnerable to various types of risks or shocks throughout the life cycle. These shocks have the potential to reverse meaningful

■ 1. Poverty, vulnerabilities and social protection needs of forest-dependent people

development improvements and can trap communities in chronic poverty and deprivation. FDP are particularly exposed to the following five types of risks:

- Economic
- Environmental and health
- Social and demographic
- Gender-related
- Political and policy-related.

Economic risks

Because of the remoteness of FDP, their community forest enterprises and producer organizations often have poorly functioning markets (product, credit, inputs and insurance), poor infrastructure, and limited access to economic and productive resources such as agricultural land and farm inputs (Mehta and Shah, 2003). Due to remoteness from markets, income-earning opportunities are diminished and the transaction costs of marketing forest resources are increased. As a result, agriculture offers higher income than forest products, which may create an incentive for clearing forests (Chomitz *et al.*, 2007; Sunderlin *et al.*, 2008).

Limited coverage of formal insurance, credit and financial services, combined with low incomes and few income sources, increase the vulnerability of FDP to economic risks, shocks, food insecurity and poverty (World Bank, 2009). Moreover, coping mechanisms employed by FDP to cope with shocks (e.g. job loss, forced migration) may deplete future income-generating resources, perpetuating a cycle of poverty (Béné *et al.*, 2014; FAO, 2016c). A global study found that households that suffered an income shock increased their environmental dependence by a statistically significant amount (Wunder *et al.*, 2014). A 2017 study in Luocheng County in Guangxi Province of China found that most forest-dependent households lacked bank savings and were therefore vulnerable to shocks (Xie *et al.*, 2017). A 2017 study in Kenya noted that livestock can be an effective buffer against shocks, but forest-dependent households own only small plots of land and therefore have little livestock; as a result, 20 percent of forest-dependent households in dry forests experience food scarcity, consuming one meal or less a day, while 30 percent of forest-dependent households go without food (CENAREMA, 2017).

The wood industry presents other sources of vulnerability or economic risk for FDP and forest workers. Timber production requires high capital investments and skills, and poses legal barriers, including the need for logging quotations and logging rights (Sunderlin *et al.*, 2008), and it yields returns after a much longer time than non-wood forest products (NWFPs). It is therefore difficult for FDP to obtain revenues from wood products. A 2018 study in the Plurinational State of Bolivia noted that a key challenge for FDP is to balance the trade-offs between short-term revenue generation and long-term returns from forest and

■ 1. Poverty, vulnerabilities and social protection needs of forest-dependent people

agricultural productivity (FAO, 2018a). In addition, jobs in the forest sector are generally informal, involving physically demanding tasks (e.g. logging), dominated by harsh working conditions, with little government incentive to organize workers into workers' unions. Forest workers are subjected to intense physical workloads, dangerous chemicals, extreme weather conditions, and noise and vibrations. Injuries are often due to insufficient training, limited supervision, and inadequate tools and equipment. FAO recently estimated that, in 2017–2019, 70 percent of the total forest-sector-related employment in 56 countries was informal (FAO, 2022a). The high degree of informality in forest work translates into poor wages and job security, irregular income, and insufficient health and occupational safety protection.

Environmental and health risks

FDP are particularly vulnerable to environmental threats such as protracted dry seasons, erratic rainfall, higher temperatures, increased rates and intensities of pest attacks, and general changes in climate patterns (FAO *et al.*, 2016). Therefore, the acute and chronic effects of climate change pose a growing and serious threat to the health and sustainability of forests around the world, undermining important resources available to those in proximity to forests. Furthermore, FDP face the unique challenge of intergenerational inequalities due to the depletion of forests and degradation of ecosystems. Continued deforestation and forest degradation vastly reduce the quantity and quality of environmental stocks, including forest cover, water quality, biodiversity and other natural resources required to support life. As a result, Indigenous Peoples and other local communities living near forests are the most affected by the impacts.

Seasonal water shortages, low water quality and water-borne diseases are sources of vulnerability for FDP in some types of forests (CENAREMA, 2017). Owing to high rates of poverty and food insecurity, which are frequently accompanied by poor sanitation and lack of access to health and nutrition services, FDP are often especially vulnerable to infectious diseases (CSD, CFRLA and AIFFM, 2020). FDP are also at particular risk in health emergencies such as outbreaks and epidemics, including the COVID-19 pandemic, which cause fear and stress, particularly among economically vulnerable households and those that have poor access to health care.

Social and demographic risks

Many FDP have limited access to formal education and limited social capital and political representation (Mehta and Shah, 2003), and many are Indigenous Peoples and ethnic minorities who are often socially and politically marginalized (Chomitz *et al.*, 2007; Mehta and Shah, 2003). Discrimination and social exclusion are common sources of vulnerability.

In Uganda, for example, social exclusion of FDP is manifest in myriad ways, including in the lack of access to basic social services such as schools, hospitals, transportation and

■ 1. Poverty, vulnerabilities and social protection needs of forest-dependent people

markets, and the lack of representation of FDP in decision-making. Community members in Kalangala reported that they had not been consulted by district officials on issues concerning development and the environment, and hence felt marginalized (Ssanyu, 2017).

Due to the increasing population, the demand for agriculture production has constantly increased, which has further generated pressure on forest resources. FAO's Forest Resources Assessment (FRA) 2020 Remote Sensing Survey identified agriculture expansion as the main driver of deforestation between 2000 and 2018, which accounted for 88.5 percent of deforestation globally (FAO, 2022b). FDP living within forests also compete for access to and use of forest resources with other groups, such as commercial companies, rural households and pastoralists. For example, in Kenya, pastoral cattle merchants depend on nearby forests for animal grazing in the dry season (CENAREMA, 2017).

Gender-related risks

Gender is an additional source of vulnerability and marginalization due to the obstacles women face in accessing services, education, markets and value-added activities, as well as having a voice and agency in policymaking decisions and land and forest tenure (Elias, Joshi and Meinzen-Dick, 2020).

Women are likely to be exposed to critical risks where gender mediates their interaction with forests and forest products. In many developing countries, women are mainly responsible for gathering wood for fuel, water for drinking, food for sustenance, and wild herbs for medicinal purposes (Chiwona-Karlton *et al.*, 2017). As forest resources decline due to overexploitation and climate change, women have to walk long distances to collect fuelwood, water and other forest products, which can increase their exposure to gender-based violence (World Bank, 2009). Informal employment, rife in the labour markets of FDP, is even higher among women (FAO, 2020a), which leaves them vulnerable to exclusion from labour market protection or social insurance responses to economic or health crises, including the global COVID-19 pandemic.

While women in FDP engage in various occupations, they often have: limited access to lucrative income-generating activities, particularly in agriculture; less decision-making authority than men at all levels; and inadequate rights to land. For example, a 2010 study in Uganda found that transport and trade, which are in the middle of the forest-products value chain, are more lucrative than production (Shively *et al.*, 2010). However, women tend to be excluded from transport activities because the assets required (a large vehicle) are typically owned by men, and transportation on poor roads is a dangerous undertaking. Across Eastern and Southern Africa, women dominated both ends of the charcoal value chain (production and retail) while making up only 6 percent of transporters (CIFOR, 2012). Their marginalization in forest planning and policymaking is partly responsible for the prevalent gender pay gaps in forest value chains (FAO, 2018a). This marginalization also represents a lost opportunity to tap into women's distinct knowledge and experiences of sustainable natural resource management (Elias, 2016).

■ 1. Poverty, vulnerabilities and social protection needs of forest-dependent people

Political and policy vulnerabilities

Lack of forest tenure rights (e.g. access, use, management, alienation) is a common source of vulnerability for FDP, particularly women, which is intensified where governance is weak. Having poor access rights diminishes incomes and lead to poverty (Mehta and Shah, 2003). Weak forest tenure prevents livelihood security, investments and high incomes (Sunderlin et al., 2008; Chomitz et al., 2007). FDP that lack secure ownership and use rights for forest land are discouraged from investing in asset accumulation and income generation (FAO, 2018a). In coastal forests in Kenya, for example, a lack of formal tenure inhibits FDP from making long-term investments or using their land as collateral for credit (CENAREMA, 2020).

Forest laws and policies that privilege commercial interests sometimes restrict FDP's access to forest land and resources. Forest areas are vulnerable to land grabbing by corporate entities. Some forest concession programmes or tenure reforms enable 'elite capture',¹⁸ which disenfranchises FDP and hinders their access to forests. Powerful lobbying groups may be able to obtain preferential treatment, which grants them better land tenure than FDP. Most state benefits require participants to have legal land titles, which FDP may lack due to existing land and forest tenure systems.

Lacking a voice, FDP may be particularly vulnerable to polar shifts in policy. In Kenya, for example, the introduction of a logging ban in public forests, consisting of approximately 40 percent of forested land in the country, resulted in widespread distortions in the timber market, a loss of livelihoods, and the closure of sawmills in areas where forests on private land are uncommon, such as the Rift Valley (CENAREMA, 2020).

The remoteness of FDP may result in their exclusion from the political economy and from decisions related to their livelihoods. Given the low population densities in forest areas, governments may be reluctant to provide basic public services, and FDP may lack the political clout to lobby for their provision (Sunderlin *et al.*, 2008). For example, in south-central Gabon, only a few pygmies, who are indigenous FDP, have birth certificates or identity documents (PGIS, 2010).

1.3 Social protection needs for forest-dependent people

Social protection refers to the **"set of policies and programmes that address economic, environmental and social vulnerabilities to food insecurity and poverty by protecting and promoting livelihoods"** (FAO, 2017a). It has three main types of programmes – social assistance, social insurance and labour market protection, which aim to address the various

¹⁸ 'Elite capture' is a phenomenon that occurs when public resources are captured by a few individuals of superior social status (e.g. local elites, corporations) to the detriment of the welfare of the larger population. Hence, elite capture is a common problem for most forest communities, caused by, for example, poorly implemented forest tenure reforms and weak governance and institutions.

■ 1. Poverty, vulnerabilities and social protection needs of forest-dependent people

risks and shocks experienced across a person's lifecycle, protect their rights and assets, and enhance their capabilities (Devereux and Sabates-Wheeler 2004).

In general, social protection instruments are classified into four categories, according to their function (ibid.):

- **Protective instruments** promote recovery and relief from shocks, manage risk in the face of shocks and deprivation, maintain consumption levels, and protect livelihoods by preventing over extraction of forest resources. Examples include cash transfers, public works, non-contributory social pension schemes and feeding programmes.
- **Preventive instruments** aim to mitigate exposure to risks; alleviate poverty; and address risks such as job loss by forestry workers, lack of access to social services such as education and health, and loss of livelihoods. Examples include social insurance instruments (e.g. health insurance, pension schemes, unemployment benefits) and social assistance (cash or in-kind transfers).
- **Promotive instruments** aim to enhance income earning and productive capacities of forest-dependent and rural communities through livelihood-enhancing interventions, and to address social, economic and demographic risks faced by FDP through alternative livelihoods and access to social services. Examples includes conditional and unconditional cash transfers, asset transfers, skills training, public works and wage subsidies.
- **Transformative instruments** protect and enhance social equity, empowerment and human rights, particularly for socially marginalized groups, through laws and policies. They also generate inclusive growth and upward social mobility for FDP, who are among the most marginalized and socially excluded populations. These typically have a broader scope than other types of instruments. Examples include laws governing forest and non-forest workers' rights, discrimination, inheritance and succession.

Despite those living in and around forests being exposed to multiple risks and vulnerabilities, and therefore significantly in need of social protection, evidence shows that the social protection coverage in rural areas, particularly among FDP, is limited (ILO and FAO, 2021; Chen, 2017; CENAREMA, 2017; Ssanyu, 2017; Lwanga-Ntale, 2018). It is estimated that only 29 percent of the world's population has comprehensive social protection coverage (ILO, 2017), and 56 percent of the world's rural population lack adequate access to essential health services (ILO, 2014). The specific data on social protection coverage among FDP are scant and difficult to obtain. A 2020 case study conducted by the Centre for Natural Resources Management (CENAREMA) in Kenya showed that women in Baringo, Isiolo, Nairobi and Machakos, Central Highlands, Upper Eastern and Rift Valley were poorer and more vulnerable than men in sawnwood and charcoal value chains while having less access to national social protection programmes. The coverage of national social protection programmes was generally limited for both male and female actors in both value chains. Out of 21 key social

■ 1. Poverty, vulnerabilities and social protection needs of forest-dependent people

protection programmes, only four reached more than 20 percent of tree growers, sawmill workers and timber traders in the sawnwood value chain. In the charcoal value chain, 20 programmes reached male charcoal producers, while only 12 programmes reached female charcoal producers. Furthermore, within these 12 programmes, 8 programmes covered more male producers than female producers (CENAREMA, 2020).

Indeed, due to numerous access barriers such as political awareness, social exclusion, geographical remoteness and legal, financial, institutional and administrative barriers, FDP face various difficulties in accessing social protection (Box 2). Moreover, in the general situation, it is challenging to determine the legal and effective coverage¹⁹ since specific data are scant, thus increasing the difficulty in obtaining useful estimates of existing social protection and in determining where to fill the gaps.

Box 2. ACCESS BARRIERS TO SOCIAL PROTECTION AMONG FOREST-DEPENDENT PEOPLE

- **Geographical remoteness:** Forest-dependent people (FDP) usually reside in remote areas that are far from markets and public services, thus imposing higher administrative and delivery costs for social protection providers. Remoteness and isolation from markets also prevent the delivery of instruments such as cash transfers, which require developed markets and strong institutions.
- **Legal barriers:** In some countries, the applicable legislation for contributory social protection either does not cover or explicitly excludes workers in the informal sector. FDP and forest workers may be explicitly excluded due to the high rate of informality in the forest sector.
- **Institutional and administrative barriers:** Some governments have low administrative capacities and burdensome procedures. These constraints are even more severe in the forest sector due to a low level of registration and pervasive informality.
- **Political awareness:** The needs and vulnerabilities of FDP are often overlooked by policymakers during the design of national social protection programmes. Moreover, the particular contexts of FDP are neither fully understood nor are they generally explicitly recognized as a vulnerable group. Consequently, FDP are not particularly targeted by social protection schemes nor do social protection programmes specifically address their vulnerabilities.

¹⁹ The International Labour Organization (ILO) differentiates between legal and effective coverage: the former refers to who, by law, is entitled to social protection, and the latter refers to who contributes or receives. FAO and International Policy Centre for Inclusive Growth (2020).

■ 1. Poverty, vulnerabilities and social protection needs of forest-dependent people

- **Financial barriers:** Affordability is a major issue for the uptake of social insurance, even though the need for such insurance mechanisms is particularly high given their high-risk livelihoods. Contributory schemes may be unaffordable for both employers and employees in forestry, especially FDP and informal forest workers in small and medium-sized forest enterprises.
- **Social exclusion:** FDP typically comprise ethnic minorities or indigenous communities that are marginalized from social protection programmes. Hence, they are often politically and culturally excluded, hindered by language and access barriers, from social protection programmes and service delivery.
- **Information asymmetry:** There may be information asymmetry when FDP are not aware of the existing social protection programmes or measures and their eligibility criteria, enrolment, exit procedures and benefits, hence the poor extended coverage to the Indigenous Peoples.
- **Elite capture:** Elite capture is a common problem among FDP, often due to poorly implemented forest tenure reforms, and weak governance and institutions in forest management. Local elites and leaders these communities can use their greater power, knowledge and links to networks to achieve elite capture of benefits, thus preventing the poorest forest-dependent households from accessing public social protection benefits.

Sources:

Allieu, A.M. & Ocampo, A. 2019. *On the path to universal coverage for rural populations: removing barriers of access to social protection*. Rome, FAO. 56 pp. www.fao.org/3/ca7246en/CA7246EN.pdf

ILO & FAO. 2021. *Effectively extending social protection to rural populations: Perspectives for a common FAO and ILO approach*. Geneva. <https://doi.org/10.4060/cb2332en>

Molyneux, M. & Thomson, M. 2011. Cash transfers, gender equity and women's empowerment in Peru, Ecuador and Bolivia. *Gender and Development*, 19(2): 195–212. <http://doi.org/10.1080/13552074.2011.592631>

Tirivayi, N. 2017. *Social protection for building the resilience of forest-dependent people: evidence, linkages, practices and potential applications*. Social Protection and Forestry Working Paper No. 1. Rome, FAO.

2. Why is coherence needed between forestry and social protection?

This section discusses the rationale for building coherence between social protection and forestry programmes for FDP. First, the evidence is presented in this section to demonstrate the ways in which social protection and forestry policies similarly address vulnerabilities among FDP. Second, it discusses potential negative, unintended outcomes of social protection or forestry policies, and how each sector can compensate for these negative effects. Finally, the section discusses how coherence can help improve efficiencies in the forest sector.

2.1 Harnessing synergies in vulnerability reduction, income generation and sustainable forestry for forest-dependent people

Forestry programmes and social protection programmes, when implemented for FDP, are likely to have some overlapping objectives. Both types of programmes have been seen to reduce vulnerability, enhance income-earning capacity and promote SFM. These shared impacts (described here and summarized in Table 2) provide an opportunity to consolidate efforts from both sectors to prevent duplication of efforts and enhance the efficient use of scarce resources.

Vulnerability reduction

Empirical evidence demonstrates that both social protection and forestry programmes reduce the vulnerability of FDP, as described below.

Poverty reduction, income and food security. Most social protection programmes aim to reduce vulnerabilities and poverty, and have achieved this aim for rural communities and FDP. In the Amazon region of the Plurinational State of Bolivia, provision of in-kind food transfers to Tsimane forest forager-farmers resulted in increased incomes among participants

■ 2. Why is coherence needed between forestry and social protection?

©FAO/Qiang Ma



A water collection point in rural area of the United Republic of Tanzania

(Behrman *et al.*, 2011). However, they had no discernible impact on the nutritional status of children, a result that was attributed to social norms such as the food pooling among household members (Undurraga *et al.*, 2014). In Brazil, there is evidence that Bolsa Família resulted in increased height of young forest-dependent males in the Amazon region (Piperata *et al.*, 2011).

It has been observed that forest tenure reforms, PES and forest land restoration have improved community incomes and livelihoods, reduced poverty and enhanced food security (Tirivayi, 2017). Dahal, Larson and Pacheco (2010) found that forest tenure reform attained via community forestry programmes enhanced livelihoods in Cameroon, Guatemala, Nicaragua and the Philippines, which led to the creation of community logging enterprises that enabled wage earnings. In Kenya, the Plantation Establishment and Livelihood Improvement Scheme (PELIS), which encourages forest-adjacent communities to cultivate crops together with the planting of trees (Box 3), has increased both forest cover and incomes of forest workers (International Tree Foundation, 2017). In Costa Rica, a PES programme significantly contributed to household incomes and lifted 50 percent of the targeted population out of poverty (Wunder, 2008). Similar impacts on poverty reduction were observed in another PES programme in Mexico (Perevochtchikova and Vásquez, 2010). In China, several studies found that the Conversion of Cropland to Forests Programme (CCFP) (Box 10) increased household incomes and reduced inequality and poverty (Li *et al.*, 2011; Liu and Wu, 2010; Uchida *et al.*, 2007; Xie *et al.*, 2006; Xie, 2017; Yao, Guo and Huo, 2009; NFGA, 2020). Other studies found

■ 2. Why is coherence needed between forestry and social protection?

that protected areas reduced poverty and increased food security among resin tappers in Cambodia (Clements and Milner-Gulland, 2015; Clements *et al.*, 2014). Poverty-reducing effects of protected areas were also observed in Thailand and Costa Rica (Sims, 2010; Andam *et al.*, 2010).

Asset accumulation and risk coping. In Brazil, a one-time, unconditional rice transfer to the poorest forest-dependent households among the Tsimané population in the Amazon region increased the value of physical assets acquired in the market (Behrman *et al.*, 2011). In Mexico, households benefiting from the Oportunidades CCT programme were less inclined to withdraw their children²⁰ from school after a shock. The highest impacts were observed among indigenous children in rural communities (de Janvry *et al.*, 2006). Oportunidades also reduced child labour and increased school attendance among indigenous children (Bando, López-Calva and Patrinos, 2005; Ulrichs and Roelen, 2012).

Some forestry programmes have also been shown to increase household assets and to have positive spillovers for the communities by encouraging the building of community assets (e.g. schools, hospitals). In China, CCFP increased livestock and housing assets (Xu *et al.*, 2010; Uchida *et al.*, 2007). In Ethiopia, a community forestry programme on participatory forestry management increased the livestock assets of FDP in one site that had exclusive access to grazing areas (Ameha, Nielsen and Larsen, 2014). In Mozambique, the pre-REDD N'hambita Community Carbon Project, via its community trust fund, which received 50 percent of REDD payments, led to the construction of school buildings and a health clinic (Jindal, Kerr and Carter, 2012).

Social inclusion and gender. Gomes (2013) found that the Oportunidades programme in Mexico reduced gender inequality in the education of indigenous children. In addition, through its registry requirement, the programme provided birth certificates and identification cards to those without them, thereby helping to guarantee the civil and social rights of Amazonian FDP, such as the right to vote and citizenship.

PES programmes implemented at the community level and explicitly including FDP in the participatory management of national forest resources have improved community cooperation, leadership and participation in decision-making in Ecuador, India and Mozambique (Pagiola, Arcenas and Platais, 2005; Jindal, Kerr and Carter, 2012). In Nepal, a PES pilot programme targeting community forest groups increased social inclusion by increasing the participation of women, poor families, low-caste families and Indigenous Peoples in general assembly meetings and discussions on forest conservation efforts (Maraseni *et al.*, 2014). The programme's monetary funds were disbursed to the communities, which in turn, dedicated them to pro-poor activities, with a specific focus on women, lower-caste groups and marginalized community members.

²⁰ Using child labour in farm and off-farm activities to increase food and monetary income is a common adverse coping strategy. For further reference, see: <https://www.fao.org/childdlabouragriculture/en>

■ 2. Why is coherence needed between forestry and social protection?

Box 3. THE PLANTATION ESTABLISHMENT AND LIVELIHOOD IMPROVEMENT SCHEME IN KENYA

Following the enactment of the Forest Act in 2005, the Kenya Forest Service created the Plantation Establishment and Livelihood Improvement Scheme (PELIS), a modification of the traditional Shamba* system of cultivation. PELIS allocates plots of land to forest-dependent people (FDP) through Community Forest Associations and allows them to cultivate crops, especially staple crops and plant native tree species in new land or degraded forest land. Crops are grown during the early stages of developing the forest plantation. Both the trees and crops are managed in a ten-year cycle. Once the forest canopy closes after ten years, crop cultivation and tree planting are practised in another area.

PELIS has the dual objective of reducing poverty while increasing forest cover, providing a habitat for wildlife and restoring ecosystems on Mount Kenya. Its benefits to FDP include:

- food, mostly beans, maize and potatoes;
- increased household income of KES 5 000 (USD 50) to KES 15 000 (USD 150) annually from selling crops;
- reduced dependency on the forest (for timber and fuelwood sales).

In terms of environmental benefits, forest cover in Malava Forest increased from 366.9 ha in 2001 to 481.4 ha in 2016 (31 percent).

Note: *Shamba is an agroforestry system practised in East Africa, particularly Kenya. In these lands, various crops are combined – bananas, beans, yams and corn – to which are added timber resources, beekeeping, medicinal herbs, mushrooms, forest fruits, fodder for livestock, etc.

Sources:

Agevi, H., Mwendwa, K.A., Koros, H., Mulinya, C., Kawawa, R.C., Kimutai, D.K., Wabusya, M., Khanyufu, M. & Jawuoro, S. 2016. PELIS forestry programme as a strategy for increasing forest cover and improving community livelihoods: case of Malava Forest, Western Kenya. *American Journal of Agriculture and Forestry*, 4(5): 128–135. doi: 10.11648/j.ajaf.20160405.13;

International Tree Foundation. 2017. Cultivating potatoes, growing a forest. [Cited 24 June 2020]. <http://internationaltreefoundation.org/cultivating-potatoes-growing-forest>

Enhancing economic inclusion

Economic inclusion refers to a process composed of mechanisms that enhance the income-generation capacity of poor, vulnerable households and individuals living in rural areas while addressing social, environmental and productive constraints in a sustainable manner. The objective is to ensure a certain level of income and stability in income sources, enabling a sustainable escape from poverty (FAO, 2020c).

■ 2. Why is coherence needed between forestry and social protection?

FAO has identified two parallel streams of work to support economic inclusion. One stream includes a set of interventions that would strengthen the capacity of individuals and households to engage in and take advantage of economic opportunities. The other requires the identification of economic opportunities and the implementation of mechanisms to make them inclusive (*ibid.*). Social protection and forestry programmes enhance economic inclusion of FDP in the following ways.

Enhancing human capital development. CCTs generally have the long-term objective of developing human capital through conditionalities that compel parents or household heads to invest in the health and education of children. These educational and health investments may have long-term beneficial impacts on human capital accumulation (Kugler and Rojas, 2018). Both the Bolsa Família CCT programme in Brazil (Glewwe and Kassouf, 2012) and Oportunidades in Mexico (Bando, López-Calva and Patrinos, 2005) narrowed the gap in school enrolment between indigenous and non-indigenous children. Likewise, unconditional in-kind and cash transfers can also generate the same long-term impacts. In the Amazon region of the Plurinational State of Bolivia, unconditional rice transfers to FDP increased the study of Spanish, thus amplifying opportunities for off-forest work (Behrman *et al.*, 2011).

A PES programme in Cambodia increased household educational spending and school attendance rates in households with high payments (Clements and Milner-Gulland, 2015). In Ecuador, a PES programme not only increased spending on food, education and medicine, but also enhanced training and local capacity-building, as well as community-level organization and collective bargaining (Pagiola, Arcenas and Platais, 2005; Wunder, 2008).

Promoting inclusive forest value chains. FAO defines a sustainable food value chain as the full range of farms and firms and their successive, coordinated value-adding activities that produce particular raw agricultural materials and transform them into particular food products. These products are then sold to final consumers and disposed of after use in a manner that is profitable throughout the chain, has broad-based benefits for society, and does not permanently deplete natural resources (FAO, 2014b). Inclusive (pro-poor) value-chain development refers to pursuing positive change in a value chain to improve productive operations and generate social benefits that promote inclusive empowerment of poor people, thus sustainably improving their livelihoods (IFAD, 2019). Inclusiveness embraces small-scale and poorer producers, as well as women, youth and minority groups, and Indigenous Peoples. The inclusive forest value chain requires that interventions be designed to enable the poor to obtain access to the value chain, and to increase their benefits from participating in the value chain.

Promoting inclusive forest value chains has been one of the major strategies for poverty reduction in the forest sector of China. Forestry policies and programmes encourage the development of forest value chains in poor rural areas or provide more job opportunities for poor rural people. A comprehensive assessment on various forest value chains in

■ 2. Why is coherence needed between forestry and social protection?

Fujian province identified a number of interventions that central and local governments, leading enterprises and cooperatives adapted for promoting the inclusiveness of forest value chains (DRC, 2020) (Box 4).

Box 4. INTERVENTIONS ADOPTED IN PROMOTING INCLUSIVE FOREST VALUE CHAINS IN FUJIAN PROVINCE OF CHINA

Forest value chains, including timber-based, bamboo-based and non-wood forest products (NWFPs) value chains, have realized value addition and provided employment opportunities for vulnerable groups (e.g. woman, youth, migrant workers and poor households) through the establishment of various interventions. Cooperatives and leading enterprises act as leverage points connecting all the other actors of the value chains. Central and local governments act as service providers.

Interventions of the Government:

- promote forest value chain development through special funds for upgrading equipment and technological improvement;
- establish mechanism for giving priority to the employment of poor households;
- promote forest insurance system through a subsidy to cover as much as 95 percent of the insurance premium;
- promote full and universal coverage of social insurance;
- provide social assistance, such as minimum income, medical and education assistance, to eligible individuals;
- promote skills training by providing subsidies and technical support; and
- provide jobs as ecological rangers for poor households.

Interventions adopted by the leading enterprises or cooperatives:

- provide social insurance, i.e. pension, medical, work injury, unemployment and maternity insurance for workers in enterprises (with coverage of more than 70 percent); and pension and medical insurance for workers in cooperatives (with coverage of more than 90 percent);
- provide training on technical skills and/or occupational health and safety;
- provide market information services and partnership opportunities to forest farmers;
- provide cash directly to the poor households of the counterpart villages;

■ 2. Why is coherence needed between forestry and social protection?

- provide jobs directly for poor households by absorbing them in enterprises or cooperatives;
- provide employment opportunities through the pulling effect on employment of leading enterprises that link actors from upstream to downstream of the value chains. For example, a medium-sized bamboo-processing enterprise could provide job opportunities in raw material production for 100–500 households; and
- facilitate and support for obtaining forest certification.*

Note: * Forest certification is a voluntary process used by forestry organizations to ensure that products come from sustainably managed forests that provide environmental, social and economic benefits. Certification independently assesses forest management planning and practices against a sustainable forest management standard.

Sources:

DRC of NFGA (Development Research Center of National Forestry and Grassland Administration). 2020. Assessment on Social Protection, Decent Work and COVID-19 Impacts and Responses for Promoting Inclusive and Resilient Forest Value Chains (unpublished).

Sustainable forestry

Social protection can contribute to the conservation and sustainable use of forests, and reduce negative environmental externalities. The Productive Safety Net Programme (PSNP) in Ethiopia resulted in increased tree planting and increased tree and vegetation cover (Andersson, Mekonnenn and Stage, 2011). Furthermore, its participants, when exposed to shocks, preferred to reduce livestock rather than cut down trees (ibid.). In India, the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNRES) resulted in the planting of as many as 100 ha of forest plantations and 20.5 ha of fruit orchards in some villages, and has increased biomass stock (Esteves *et al.*, 2013). In Ethiopia and India, public works programmes have not only increased biomass, but are also estimated to have sequestered millions of tonnes of carbon dioxide (Andersson, Mekonnenn and Stage, 2011; Esteves *et al.*, 2013). In Indonesia, the CCT 'Program Keluarga Harapan' (PKH) aimed at poor families has also had positive effects on the environment by reducing deforestation (Ferraro and Simorangkir, 2020). Cash has assumed a function of insurance and substitution for consumption, and goods purchased on the market replace those from deforestation.

Forestry policies and programmes have a primary role in enhancing SFM. This is achieved by mitigating climate change, providing a sustainable source of renewable materials, and maintaining an intact environment (FAO, 2010). PES and Protected Areas in Northern Cambodia have protected tropical forests from the external drivers of ecosystem loss, especially deforestation, and globally threatened wildlife species (Clements *et al.*, 2014; Clements and Milner-Gulland, 2015).

■ 2. Why is coherence needed between forestry and social protection?

Table 2. Summary of the impacts of social protection and forestry programmes on protecting and promoting the livelihoods of forest-dependent households

Impacts	Impact indicators	Type of programme	Country
Vulnerability reduction			
Poverty, income and food security	Increased monetary income	Unconditional food transfers	Bolivia (Plurinational State of)
	Increased height of young men	Bolsa Família (conditional cash transfers)	Brazil
	Increased income and enhanced livelihoods	Forest tenure reform (community forestry programme)	Cameroon Guatemala Nicaragua Philippines
	Increased income and reduced poverty	Payment for environmental services (PES)	Costa Rica Mexico
	Increased food security, income and forest cover; reduced poverty	Plantation establishment and livelihood improvement scheme	Kenya
	Increased income and reduced inequality and poverty	Conversion of cropland to forests programmes	China
Asset accumulation	Increased value of assets acquired in the market	Unconditional food transfers	Brazil
	Increased community assets	Community Forest Management Programme	Ethiopia
	Increased livestock ownership	Community forestry programme	Ethiopia
	Increased community assets such as the construction of school buildings and a health clinic	Pre-REDD+ (N'hambita Community Carbon Project)	Mozambique
Risk coping strategies	Reductions in child labour and school dropout	Oportunidades (Conditional cash transfers)	Mexico
Social inclusion and gender equality	Improved gender equality and attainment of civil and social rights	Oportunidades	Mexico
	Community empowerment	Payment for environmental services (PES)	Ecuador India Mozambique
	Improved participation of vulnerable groups (low-caste families, Indigenous Peoples, women and the poor)	Payment for environmental services (PES)	Nepal

2. Why is coherence needed between forestry and social protection?

Impacts	Impact indicators	Type of programme	Country
Economic inclusion			
Human capital development	Improved school enrolment among indigenous children	Bolsa Família (CCT)	Brazil
	A narrowed gap in school enrolment between indigenous and non-indigenous children	Oportunidades	Mexico
	Increased knowledge of Spanish among Amazonian FDP	Unconditional food transfers	Bolivian Amazon
	Increased educational expenditures and school attendance of children	Payment for environmental services (PES)	Cambodia
	Increased spending on food, education and health	PES	Ecuador
Inclusive forest value chain	Increased jobs and income and value added of forest products	Forest industry development	China
Sustainable forestry			
Forest conservation (and behaviours)	Increased forest cover and tree planting	Productive Safety Net Programme (PSNP)	Ethiopia
	Increased forest cover and tree planting	Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGA)	India
Reduction of deforestation	Reduced deforestation	Programme Keluarga Harapan (PKH) - CCT	Indonesia
Environmental externalities	Increased carbon sequestration	Public works programmes, Protected Areas and PES	Ethiopia India Cambodia

Source: Adapted from Tirivayi, N. 2017. *Social protection for building the resilience of forest-dependent people: evidence, linkages, practices and potential applications*. Social Protection and Forestry Working Paper No. 1. Rome, FAO.

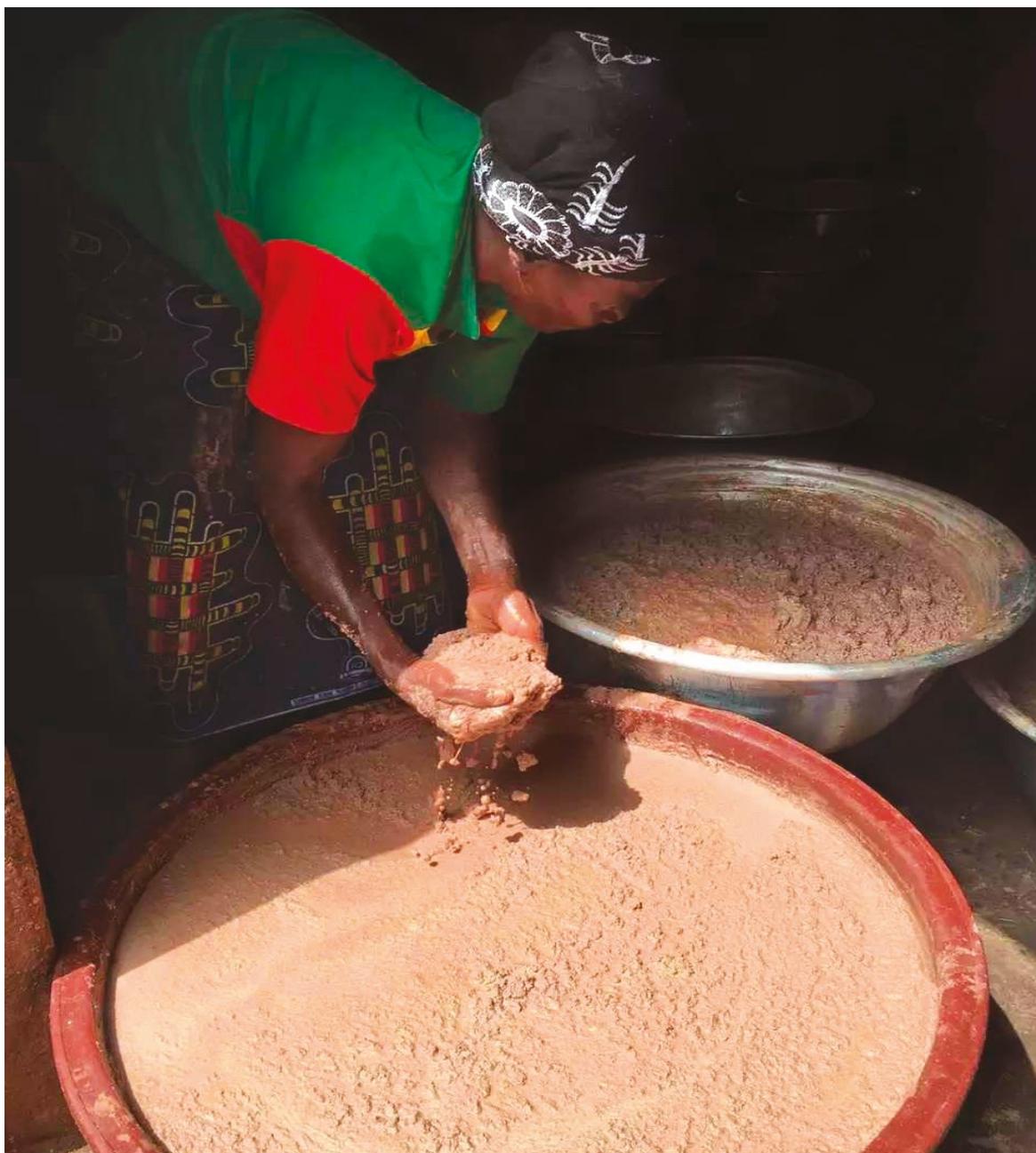
2.2 Compensating for unintended outcomes

Although social protection and forestry policies have positive impacts on the welfare and livelihoods of FDP, they may also have unintended negative impacts. When they operate in isolation, they can trigger negative impacts on nature and people. This occurs when those responsible for social protection and/or forest and environmental policies do not jointly consider the implications on ecology and vulnerable people. The following are some examples of unintended outcomes that could be mitigated through coherent initiatives.

■ 2. Why is coherence needed between forestry and social protection?

Increased extraction of forest resources as a result of social protection programmes. Social protection programmes such as cash transfers (both conditional and unconditional) and agricultural input subsidies have the potential to reduce adverse risk coping behaviours of FDP, such as unsustainable forest resource extraction during shocks. However, the increased disposable income can also encourage farming households to clear more forest land in order to expand agricultural production, or can result in increased demand for fuelwood or wood for housing (Pattanayak, Wunder and Ferraro, 2010). For instance, Alix-Garcia, de Janvry

©FAO/Qiang Ma



A women in a shea group of Burkina Faso is processing shea butter

■ 2. Why is coherence needed between forestry and social protection?

and Sadoulet (2013) found that the Oportunidades CCT programme in Mexico increased the consumption of land-intensive goods such as beef and milk, and ultimately increased deforestation, especially in areas with poor roads. In addition, behavioural modelling experiments in Costa Rica showed that people excluded from a financial rewards programme exhibited less pro-social behaviour than they did before the programme (Alpizar *et al.*, 2013), suggesting that exclusion from such programmes could exacerbate land clearance behaviour (Alix-Garcia and Wolff, 2014). Coherent pro-poor PES schemes could provide incentives to prevent deforestation.

Reduced income sources as a result of forestry programmes. Protected areas and forest landscape restoration policies restrict the use of land for agriculture and the extraction of forest resources for income and food, consequently reducing incomes and food security if alternative opportunities or compensation are not provided (Blom, Sunderland and Murdiyarto, 2010). Logging bans compel timber enterprises to reduce production and downsize the workforce (Durst *et al.*, 2001). Thus, the resulting unemployment and poverty among former timber workers can encourage illegal logging, as observed in Sri Lanka, Thailand and Kenya (Bandaratillake, 2001; Lakanavichian, 2001; CENAREMA, 2020).

Social protection measures can be designed to compensate for the income loss and offer new income opportunities to be included in forestry programmes. For example, the Conversion of Cropland to Forests Programme in China compensates farmers with food and cash transfers in order to stop cultivation on sloping land and provides tree seedlings and training for reforestation and income generation (Xie *et al.*, 2006; Xie, 2017) (Box 10).

Social exclusion and elite capture as a result of both social protection and forestry programmes. Some social protection interventions have created negative impacts by ignoring the cultural and risk-sharing context of FDP. In the Amazon region, the use of non-indigenous languages in social protection programmes has excluded indigenous participants from receiving programme information (Hevia-Pacheco and Vergara-Camus, 2013; Molyneux and Thomson, 2011). Participants have experienced racial discrimination and, due to geographic remoteness, have faced difficulties in accessing public services (Box 5).

Similarly, some forestry programmes have resulted in social exclusion. For instance, India's 2006 Forest Rights Act reduced tribal women's access to forests (Bose, 2010). Case studies in Asia, Latin America and sub-Saharan Africa found that tenure reforms benefited the wealthy or those with high human capital attainment (Dahal, Larson and Pacheco, 2010). In Ghana and Cameroon, tenure reforms enabled the elite capture of benefits (Marfo, 2009; Oyono, Samba and Biyong, 2012). There is also evidence of PES programmes mainly benefiting the wealthy (Wunder, 2008) or encouraging powerful participants to crowd out smallholders and FDP in cases where tenure has not been secure (Landell-Mills and Porras, 2002).

With social inclusion being the key principle for building coherence (FAO, 2017a), coherent social and forestry policy can help to mitigate such unintended consequences for nature and the people.

■ 2. Why is coherence needed between forestry and social protection?

Box 5. SOCIAL EXCLUSION EXPERIENCED BY INDIGENOUS PEOPLES IN SOCIAL PROTECTION PROGRAMMES IN THE AMAZON REGION

- Oportunidades conditional cash transfer (CCT) (Mexico): Language barriers limit compliance with the conditions of the cash transfers (Álvarez, Devoto and Winters, 2008).
- Juntos CCT (Peru) and Bono de Desarrollo Humano CCT (Ecuador): Indigenous women find it difficult to access and use health and financial services; they experience racial discrimination and mistreatment at health centres (Molyneux and Thomson, 2011).
- Bono Juana Azurduy CCT (Plurinational State of Bolivia): Indigenous women are not treated with dignity and respect (ibid.).
- Red de Oportunidades CCT (Panama): Discrimination in language, culture, health care and schooling (Waters, 2010).

Sources:

Álvarez, C., Devoto, F. & Winters, P. 2008. Why do beneficiaries leave the safety net in Mexico? A study of the effects of conditionality on dropouts. *World Development*, 36(4): 641–658;

Molyneux, M. & Thomson, M. 2011. Cash transfers, gender equity and women's empowerment in Peru, Ecuador and Bolivia. *Gender and Development*, 19(2): 195–212. <http://doi.org/10.1080/13552074.2011.592631>

Waters, W.F. 2010. Qualitative methods for assessing conditional cash-transfer programmes: the case of Panama. *Development in Practice*, 20(6): 678–689.

2.3 Improving harmonization, efficiency and effectiveness

Coherence between social protection and forestry policies and programmes is needed to address inefficiencies, duplication and gaps resulting from the multiplicity of actors involved. Action by multiple stakeholders (e.g. government, interest groups, non-governmental organizations, international organizations), often operating in isolation, can lead to a duplication of efforts in the same geographic areas, substantial coverage gaps among the most vulnerable, and the occurrence of unintended outcomes, as explained in Section 2.2. Lack of harmonization can also lead to inefficiencies in resource-constrained environments, or even to counteracting effects. The two sectors may compete for resources and political influence within policymaking circles. Improving knowledge- and information-sharing and cooperation in planning processes between the two sectors can help resolve these problems.

To date, evidence of the impact of environmental programmes on poverty reduction has been limited and mixed. Rosa da Conceição, 2014, for example, found no tangible evidence of poverty reduction from the several environmental CCTs or pro-poor PES programmes in Latin America, despite evidence suggesting improvements in livelihoods and vulnerability

■ 2. Why is coherence needed between forestry and social protection?

reduction. The failure to reduce poverty could be due to the forestry programmes' lack of budget allocation for pursuing social impact objectives, and also to a lack of expertise on social protection design and delivery in the forest sector. Social protection programmes, however, are designed and funded specifically for these social impact objectives. Joint or aligned programmes in which financial resources and technical expertise are shared among different agencies might therefore be better suited to protect not only forests, but also the people who depend on them for their livelihoods.

3. Strengthening the enabling environment for promoting coherence

Coherence can be strengthened by intervening in the enabling environment and in programme design and operations. This section identifies four enabling factors for building and strengthening coherence between social protection and forestry policies: political will, policy frameworks, institutional and human capacities, and financial resources.

3.1 Political will

Political will is critical in leading efforts to build coherence (FAO, 2016a). The political context, which is shaped by politico-economic factors, as well as historical occurrences, influences the opportunity to garner political support for the strengthening of coherence between social protection and forestry. In particular, the political will for building coherence between the social protection and forestry sectors could be heavily influenced by a *nation's history, political identity* as well as *economic shape and philosophy*. For example, in Sierra Leone, forestry policies are limited by ambiguities and a level of detachment, which prevent them from being implemented. This ambiguity and limited sense of domestic ownership are linked to colonial roots that portray forestry policies as 'eco-imperialist' (Grainger and Konteh, 2007). In addition, *interests* and *values* could also influence the coherence agenda. For example, in some countries, the timber industry increasingly favours larger corporations or companies over FDP because the former are viewed more positively in terms of employment creation and the generation of tax revenues (Mayers and Vermeulen, 2003). In Latin America, social protection programmes are well established by governments, and their impact is well documented. Political commitment is a gradual process. In some African countries, governments are reluctant to make long-term financial commitments to social protection, at times because the social protection programme idea comes from external supports such as donors and thus, becomes difficult to nationalize for fear of fostering dependency (Devereux and White, 2010). Over the past decade, Africa has shown strong political will to put in place policies aimed at building sustainable development

■ 3. Strengthening the enabling environment for promoting coherence

and combating poverty by promoting social protection policies and ensuring universal access to social security. This political commitment is reflected in several declarations, plans of action and strategic frameworks, such as the Yaoundé Tripartite Declaration on the implementation of the Social Protection Floor (2011); the Ouagadougou + 10 Declaration and Plan of Action on Employment, Poverty Eradication and Inclusive Development (2015); The Addis Ababa Declaration on Transforming Africa through Decent Work for Sustainable Development (2015); the African Union's Agenda 2063: The Africa We Want; the Abidjan Declaration – Advancing Social Justice: Shaping the future of work in Africa adopted by International Labour Organization (ILO) Constituents during the 14th African Regional Meeting in December 2019.²¹ In addition, there may also be other intersectoral linkages that may also need political support. Hence, depending on a government's priorities, forestry and social protection linkages may not be high on its agenda unless high-level political support is deliberately mobilized.

High-level political will to strengthen coherence can be expressed through the following:

The building of strategic alliances: Partnerships and alliances between the government ministries responsible for social protection and forestry, ministries of finance, local government, CSOs, CBOs, academic institutions and international organizations can boost support for the coherence agenda. These multi-stakeholder partnerships can stimulate dialogue and coordination, and galvanize support for building coherence.

Evidence-based policy advocacy: Stakeholders can utilize evidence-based research to demonstrate the linkages between social protection and forest sectors. Organizations and agencies should advocate for social protection for FDP and for raising awareness on the potential interaction between social protection and forestry policies. Recognition of this interplay among policies is essential at the government level when national-level systems (e.g. a social protection framework or agriculture and forestry policy) are designed or defined (Ssanyu, 2017). For instance, in the design of environmental CCTs, it is necessary to understand the interaction of environmental incentives and those for social protection. The evidence can also increase understanding among actors engaged in forestry policies of the socioeconomic and vulnerability-reducing effects of these policies. By highlighting the positive and negative spillovers of disharmonious policies on these communities, a body of strong evidence can be brought before officials to demonstrate the precise benefits or drawbacks of building coherence.

Leveraging of local, regional and international initiatives: State and non-state actors can leverage existing initiatives to promote synergies between social protection and forestry policies. The global climate change agenda is being implemented through a number of initiatives that present attractive opportunities for incorporating social protection instruments: climate change funds, REDD+, PES and integrated conservation

²¹ ILO ITC, n.d.

■ 3. Strengthening the enabling environment for promoting coherence

and development projects (ICDPs) could be linked with social protection initiatives to build resilience and promote forest conservation. One way of including social protection measures in the funds would be to dedicate funding to interventions incorporating social protection instruments. Others, such as ICDPs, have been criticized for excluding minority groups and women (Hughes and Flintan, 2001); hence, incorporating social protection instruments could help them to target extremely vulnerable households and thus become more inclusive. Policymakers could introduce social protection instruments such as cash transfers and social insurance into initiatives such as the Forestry Stewardship Council and the Forest and Farm Facility (FFF) designed by alliances of Indigenous Peoples, community forestry and smallholder family forestry. In these initiatives, state and non-state actors could implement social protection instruments targeting households, communities and groups, as well as forest policies and programmes to increase welfare, augment incomes and relax capital constraints. This would, in turn, improve the organization of forest and farm producer groups, who comprise the largest part of the forest private sector and are likely to conserve forests and facilitate poverty reduction. Domestically, a radical shift in the prerogative of parliament may result in a lasting and binding commitment to change. A useful example of this is Kenya's Vision 2030, a framework by the Government that created a network of binding legislation that commits Kenya, regardless of leadership, to certain targets for extending social protection and environmental targets to reduce vulnerability and eliminate poverty.

Effective leadership: Leadership is vital for the establishment of strategic alliances and advocacy campaigns for building coherence (FAO, 2016a). Leadership can engender trust in, and therefore support for, the coherence agenda. Well-positioned, informed and influential individuals can lead the advocacy for coherence. There are examples of national leaders championing policy coherence in developing countries. For example, in Brazil, the Zero Hunger Programme (2003–2012), which builds coherence between social protection, social services and family agriculture with the aim of ending hunger, was championed by Luiz Inácio Lula da Silva, who was president at the time.

3.2 Policy arrangements

Policy arrangements defines the “joint role played by forestry and social protection in moving people out of poverty, vulnerability and marginalization and can provide the strategic vision and guidance necessary to translate political commitments into action” (FAO, 2016a). Policy coherence not only refers to harmonization and coordination of policies, but also extends to the policy arrangements (OECD, 2013). Coherence between social protection and forestry can be strengthened within all-encompassing cross-sectoral policy arrangements. These policy arrangements would provide the overall vision and guidance necessary to translate political commitments for coherence into action.

■ 3. Strengthening the enabling environment for promoting coherence

Policy arrangements can be properly formulated and implemented when the political leadership and all relevant stakeholders support the push for coherence. However, different ministries are likely to have different priorities and at times competing ones (FAO, 2016a). Social protection focuses on alleviating poverty and supporting socioeconomic inclusion, while forestry policies might more generally be concerned with ensuring SFM to protect commercial, environmental and FDP interests. Despite possible synergies, as described in Section 2, there may be some frictions in the quest to promote coherence. The policy arrangements should, therefore, acknowledge and incorporate mitigation strategies for any misalignments and danger of trade-offs between the two objectives. In addition, clear and effective incentives have to be embedded in the frameworks to ensure multisectoral and institutional coordination. In the drafting of policy proposals, the cost-benefit analysis should take note of the potential ramifications on other policy sectors through close coordination, and factor this into programme design. At the evaluation stage, indicators should be able to capture the spillover effects, and efficiency calculations should take into account duplication of work to ensure that the consequences or the benefits of collaboration are fully understood. Another inhibiting factor is the timing of interventions. Forestry policies have long been in existence in most countries with FDP. However, social protection is only now emerging as a priority on the agenda of most of these countries (with the exception of the Amazon region). Therefore, it will take much greater effort to link social protection interventions to already existing forestry policies. This could, however, serve as a window of opportunity if carefully considered.

To develop effective policy arrangements for promoting coherence between social protection and forestry, the following actions should be taken:

Leverage dialogue on social protection and forestry policies: Dialogue among stakeholders is essential to ensure a participatory process that includes FDP in the establishment of a coherent policy arrangements. By their very nature, social protection policies are likely to spark wider national debates and to have a larger scope, with larger budgets. It is essential to ensure that within these debates, recommendations and statutes, there are provisions for, and encouragement of, linkages with existing forestry policies at the start of policy implementation. Possible entry points for dialogue include national poverty alleviation and environmental and social protection policies. This participatory process should be inclusive and involve key stakeholders, including women's groups and organizations.

Define land ownership and property rights: Governments should set up laws and policies that define usufruct, ownership and/or control rights over land, and empower FDP. This framework would create an enabling environment that would enhance the effectiveness of forestry and social protection interventions, building resilience among FDP. Forestry reform processes in some countries may be stagnant, which may impede the building of coherent social protection and forestry programmes. Evidence on the need for coherence within the forest sector should be generated and highlighted to enable uptake of such reforms.

■ 3. Strengthening the enabling environment for promoting coherence

3.3 Institutional and human capacities

Strong institutional capacities can enable the alignment and harmonization of social protection and forestry policies. Institutional capacities for the coherence agenda rely on the adequacy of both human and financial resources to execute coherent programmes. In addition, there need to be appropriate coordination mechanisms (FAO, 2016). Coordination is especially important since forestry and social protection policies are implemented by different ministries and may have different stakeholders. Institutional and human capacities that promote coherence can be built by the following:

Strengthening horizontal coordination processes: Coordinating different mechanisms that are already in place for both forestry and social protection is a challenge. This can be overcome by leveraging inter- and cross-sectoral coordination mechanisms in place, such as social protection steering committees and poverty reduction action plans (FAO, 2016a). For example, Rwanda's Vision 2020 is a cross-sectoral plan to transform the country into a middle-income country. It has several goals aimed at strengthening good governance, skilled human capital, private sector development, infrastructural development, and modernization of agriculture and livestock.²² A cross-cutting issue pertains to natural resources and climate change, under which the forest sector falls. Through another cross-sectoral plan for Rwanda, the Economic Development and Poverty Reduction Strategy, the country has established the flagship social protection programme known as the Vision 2020 Umurenge Programme. In some parts of Africa, the development of cross-sectoral institutional structures for developing social protection systems presents a good opportunity to involve ministries of forestry in social protection interventions (ibid.). Other possible options include supporting the sharing of experiences across countries through international workshops and study tours to countries with a good coherence experience, including South-South and triangular cooperation. In horizontal coordination processes, FDP should be viewed as a 'body' to coordinate activities with, which could be efficient if they are organized and well represented in the coordination processes. This would ensure that the specific needs of FDP are better reflected in the design and implementation of coherent programmes. These coordination processes are better enhanced when FDP are recognized as both custodians and actors within the forest sector. Accordingly, FDP would likely form an integral part in all the coherent programme phases, bringing in local knowledge and expertise. Pre-existing social institutions among FDP pertaining to forest conservation could then complement formal governance structures that may be set up in their communities to achieve better outcomes. The development of multisectoral working groups and steering committees that involve all relevant stakeholders could be a way to ensure effective and efficient coordination of coherent programmes.

²² The national document detailing Rwanda's Vision 2020 is available at <https://repositories.lib.utexas.edu/bitstream/handle/2152/5071/4164.pdf>

■ 3. Strengthening the enabling environment for promoting coherence

Leveraging and strengthening vertical coordination processes: Coherence between social protection and forest sectors is effective when all levels of government (national to local) are engaged. Many developing countries have embraced the devolution of decision-making and resource allocation to subnational governments. While decentralization can ensure that coherent policies are context-specific and responsive, it also poses challenges, such as greater fragmentation at the sub-national levels. In Kenya, decision-making regarding forestry management has been devolved to the county level, while flagship social protection programmes are managed at the national level. Proper inter-linkages across the various decentralized levels of policy are, therefore, crucial for propelling effective programme delivery at the local level.

Coordination guidelines: Guidelines for stakeholder engagement are important and are key tools/frameworks in programme implementation (Newton and Elliott, 2016). Clearly defined stakeholders, their respective roles and areas of coordination are useful for guiding coordination processes among different sectors and different stakeholders (ibid.). For example, an Environmental and Social Framework was developed for the Tanzanian Social Action Fund (TASAF). The framework explicitly states the rules in determining who needs assistance, which kind is needed and how it is provided, and which group of implementers from which sectors are needed for the implementation.

3.4 Financial resources

Financial resources are vital for promoting coordination and coherence between social protection and forest sectors. In most governments, there is usually competition for budgetary resources among different sectors so that governments have to prioritize. In addition, within ministries, funding may be prioritized for current initiatives rather than building coherence. New financing arrangements would need to be created to enable cross-sectoral coordination and harmonization, including through financial incentives and shared budget among ministries.

Governments can finance coherent programmes as follows:

Developing cross-sectoral investment plans: Governments and development partners can develop cross-sectoral investment plans for social protection and forestry policies. Cross-sectoral investment plans can enable the two sectors to decide and agree on financing priorities and key elements of programme design, e.g. targeting, geographic location, type and duration of the intervention (FAO, 2016a).

Leveraging global financing schemes: Recently, several international sources of climate finance have been established, e.g. Climate Investment Funds, the Green Climate Fund, and the Global Environmental Facility. Article 9 of the Paris Agreement requires that developed countries provide funds to developing countries for climate change mitigation

■ 3. Strengthening the enabling environment for promoting coherence

and adaptation. These funding mechanisms can be utilized by governments to finance harmonized forestry and social protection programmes. They can also be used to finance forestry policies that incorporate social protection instruments (see Section 4.2).

Pooling funds: Budgetary resources can be allocated towards policy arrangements that have been established to promote coherence between social protection and forest sectors. Policy arrangements can be the means for channelling funds towards the social protection and forest sectors. This, in essence, would entail pooling funds into one channel for coordinating and harmonizing programmes by both the forestry and social protection ministries. Within these frameworks, resources can be allocated towards maintaining an inter-sectoral working group that provides oversight. For example, in Ethiopia, the Government and development partners established one common fund for the social protection and agricultural components of the Food Security Programme (FAO, 2016a).

Local taxes: Local taxes could also be re-invested in communities with FDP in addition to other sources of finance. This could be a sustainable way of raising funds for financing coherent programmes at the community level. Policies that support the formalization of the workforce, including in agriculture sub-sectors, also play a key role in expanding a country's tax base.

4. Opportunities to strengthen coherence through programming

At the programmatic level, there is a need to understand the different opportunities for and approaches to building coherence between social protection and forestry programmes. While access to social protection must be ensured throughout the life cycle, coherent ‘packages’ of social protection and forestry interventions can be developed in three ways: free-standing programmes, joint programmes and aligned programmes. This section discusses the programmatic approaches and interventions²³ by building on lessons learned that policymakers and programme staff can adopt in order to systematically pursue coherence. It introduces both programming approaches and operational arrangements that can support coherence.

4.1 Programmatic approaches to strengthen coherence

Free-standing programmes

Free-standing social protection and forestry programmes can be designed to incorporate environmental and social protection objectives. They also include social protection programmes that are adapted (design and delivery mechanisms) to the characteristics of FDP, such as language and payment modalities. Free-standing social protection and forestry programmes can therefore be designed to achieve both poverty reduction and forest conservation objectives.

Free-standing social protection programmes

Several social protection instruments are suitable for addressing both poverty reduction and forest conservation objectives.

²³ ‘Interventions’ here refer to policy instruments or measures (e.g. PES) and programmes and schemes (e.g. public works programmes).

■ 4. Opportunities to strengthen coherence through programming

Public works programmes are typically used to provide work for poor and vulnerable people in exchange for cash or food. Some public works programmes fulfil both social protection and forest conservation objectives because they provide cash or food in exchange for work on reforestation and afforestation projects. They also increase the conservation skills and knowledge of participants. In 2012, during a drought in Kenya, World Food Programme (WFP) granted cash or food vouchers to approximately 450 000 people in exchange for work on agroforestry, soil and water conservation (Turner *et al.*, 2016). In Ethiopia, the Productive Safety Net Programme (PSNP) targeted poor adults of working age; activities in the programme included planting woodlots (Tirivayi, 2017). In India, the MGNRES guaranteed a minimum of 100 days of wage employment annually to interested households, and an additional 50 days of wage employment to scheduled tribes in forest areas (ILO, 2018b). Another public works scheme promoted the planting of trees by FDP in Mauritania (Box 6).

Other social protection instruments can also potentially address both poverty reduction and forest conservation objectives. For example, **CCTs** can be used to meet social protection and forest conservation objectives via a conditionality such as forest conservation or restoration. **Public social insurance schemes** such as health, unemployment insurance and pensions can be extended to current or former forest workers across various forest value chains, and help to make the value chains more inclusive and sustainable (Tirivayi, 2017). For example, in Zambia, the National Pension Scheme Authority, with ILO's facilitation, signed a Memorandum of Understanding with informal sector organizations, expressing its intent to extend social security coverage to informal workers, including sawmill workers (ILO, 2018a). Social insurance schemes should also be extended to small-scale forest-based enterprises and FPOs.

©FAO/Virginia Vallejo



A group of women showcasing their farm products in Ecuador

■ 4. Opportunities to strengthen coherence through programming

Box 6. A PUBLIC WORKS SCHEME PROMOTING SOCIAL PROTECTION AND SUSTAINABLE FORESTRY IN MAURITANIA

The World Food Programme (WFP) project “Enhancing Resilience of Communities to the Adverse Effects of Climate Change on Food Security in Mauritania” promoted the rehabilitation of land and forests in Mauritania through food-for-work, cash-for-work and food-for-training schemes.

Activities:

- food transfer in exchange for planting trees, building dams and planting of forests for the supply of community fuelwood;
- planting by participants of the recently depleted *Acacia sénégalaïse*, which is a source of gum arabic for sale;
- planting of other tree species to promote diversity and enhance food security and livelihoods.

Achievement:

- 300 000 trees planted in protected areas through the food-for-work programme.

Sources:

Tirivayi, N. 2017. *Social protection for building the resilience of forest-dependent people: evidence, linkages, practices and potential applications*. Social Protection and Forestry Working Paper No. 1. Rome, FAO.

WFP (World Food Programme). 2012. *Standard Project Report 2012: Protecting and Rebuilding Livelihoods in Arid and Semi-Arid Areas*. Rome.

Free-standing forestry programmes

There are several forestry programmes with poverty reduction objectives that are currently being implemented in China and Latin America. These include a series of pro-poor PES, also known as ‘environmental conditional cash transfers (CCTs) (Rosa da Conceição, 2014). PES are typically provided to landowners. However, pro-poor PES or environmental CCTs are also provided to communities, for example, in Ecuador, Brazil and China. Socio Bosque in Ecuador aims to increase income and human capital, and conserve forests and ecosystems (ibid.) (Box 7). Brazil’s Bolsa Verde provides cash transfers in return for the maintenance of forest cover, while Bolsa Floresta provided cash transfers on condition that poor forest-dependent households reduce deforestation, attend environmental awareness training sessions, and send children to school (ibid.). In China, the Conversion of Cropland to Forest Programme is an example of a free-standing forestry programme with social protection components as

■ 4. Opportunities to strengthen coherence through programming

it provides food subsidies and cash transfers in exchange for the conversion of cropland to forests (Xie, 2017) (see Box 8). China has interrelated social protection and forestry policies, which are mutually supportive. For example, the major approach for rural poverty alleviation in the Rural Poverty Alleviation and Development Programme (2011–2020), which is a social policy, was forestry and ecological restoration and protection (Xie, 2017).

Box 7. ENVIRONMENTAL CONDITIONAL CASH TRANSFERS AND PRO-POOR PAYMENTS FOR ENVIRONMENTAL SERVICES, IN BRAZIL AND ECUADOR

Bolsa Floresta in Brazil

Bolsa Floresta promoted the conservation of the Amazon forest, climate change mitigation and poverty reduction for forest-dependent people (FDP), including indigenous communities residing near national forests and reserves. As a payment for environmental services (PES) scheme, Bolsa Floresta provided cash transfers provided that participants reduced deforestation, attended environmental awareness training sessions, and sent their children to school. The programme also funded projects on education, health, communication, transportation and sustainable livelihood practices.

The programme involved more than 30 000 people (mostly in poor households) in and around 15 forest reserves covering over 10 million ha. The cash component was important in improving the income levels and livelihoods of FDP, and forest loss declined by 12 percent in participating Amazon reserves (Börner *et al.*, 2013).

Sources:

Bakkegaard, R.K. & Wunder, S. 2014. Bolsa Floresta, Brazil. In: E.O. Sills, S.S. Atmadja, C. de Sassi, A.E. Duchelle, D.L. Kweka, I.A.P. Resosudarmo & W.D. Sunderlin, eds. *REDD+ on the ground: a case book of subnational initiatives across the globe*. Bogor, Indonesia, CIFOR.

Börner, J., Wunder, S., Reimer, F., Bakkegaard, R.K., Viana, V., Tezza, J., Pinto, T., Lima, L. & Marostica, S. 2013. *Promoting forest stewardship in the Bolsa Floresta Programme: local livelihood strategies and preliminary impacts*. Rio de Janeiro, Center for International Forestry Research (CIFOR), Manaus, Fundação Amazonas Sustentável (FAS), Bonn, Zentrum für Entwicklungsforschung (ZEF), University of Bonn.

Rosa da Conceição, H. 2014. Conditional cash transfers in the context of social welfare and environmental incentive-based public policies. Bonn, Germany, Centre for Development Research, University of Bonn. https://www.researchgate.net/publication/323700950_Conditional_Cash_Transfer_in_the_context_of_social_welfare_and_environmental_incentive-based_public_policies

Socio Bosque in Ecuador

Initiated in 2008, Socio Bosque not only pays for environmental services, but also incorporates elements of conditional cash transfers (CCTs) in its implementation. The conditionality attached to Socio Bosque is that participants present and



■ 4. Opportunities to strengthen coherence through programming

implement an investment plan for their payments, either in education, health or other social needs, during their participation in the programme. The financial compensation ranges from USD 0.50 to USD 60 per ha per year, depending on the geographic location and ownership of the land.

The programme targets areas that meet the three criteria of relevance for the generation of environmental services (e.g. biodiversity refuge, hydrologic cycle regulation, carbon capture), high deforestation risk and high level of poverty. Participants must be individuals or communal landowners with proof of landownership. The Government has put measures in place to help Indigenous Peoples obtain proof of land ownership if they do not have it.

The impacts of the programme have included: increased household investment in health, education, housing and productive activities; conservation of 1.2 million ha of forests; and community investments in saving funds, conservation, education, health and ecotourism opportunities.

With the success of Socio Bosque, the Ecuadorian Government designed a sister programme, Socio Manglar, which aims to protect Ecuador's coastal mangrove forests through direct economic incentives. Since Ecuador's mangroves (unlike its Amazonian forests) are not privately owned, Socio Manglar focuses on those who use them rather than those who own them.

Source:

Rosa da Conceição, H. 2014. Conditional cash transfers in the context of social welfare and environmental incentive-based public policies. Bonn, Germany, Centre for Development Research, University of Bonn. www.bmu-cbc.org.pe/admin/assets/uploads/files/07ddd-Conditional_Cash_Transfers.pdf

Box 8. CONVERSION OF CROPLAND TO FORESTS PROGRAMME IN CHINA

Launched in 1999, the Conversion of Cropland to Forests Programme (CCFP), also known as the Grain for Green Programme (GGP), is China's largest ecological restoration programme. It aims to convert marginal lands and steep slopes into forest and grassland to prevent soil erosion and desertification. From 1999 to 2019, the CCFP contributed to the successful restoration of 34.3 million ha of degraded land and farmland, achieved significant environmental improvements, increased farmer incomes and alleviated poverty. Nationwide, 41 million households have participated in the programmes, and 158 million farmers have benefited directly.

■ 4. Opportunities to strengthen coherence through programming

The programme targets people, particularly poor people, living in poor mountainous and environmentally degraded areas. It has fostered local social capital and endogenous growth, empowered participating households by including instruments with social protection functions, and encouraged the participation of poor farmers. CCFP has provided both food subsidies and cash transfers in exchange for planting forests, which include grain, living allowance and cash for buying seedlings. Technical assistance for forest restoration has also been provided:

- Initially, the Programme provided an annual grain subsidy for farmers of 2 250 kg per ha in the Yangtze River Basin and 1 500 kg per ha in the Yellow River Basin. It provided a living allowance of USD 43 (CNY300) per ha, and a seedling fee of USD 109 (CNY750) per ha.
- In 2004, grain subsidies were changed to cash subsidies of about USD 456 (CNY3 150) and USD 304 (CNY2 100) per ha per year, respectively. Subsidies last for eight years if farmers plant ecological forests; five years if they plant economic forests; and two years if they plant grasses.
- From 2014 to date, CCFP provided a total of USD 3 474 (CNY24 000) per ha covering a living subsidy (75 percent) and a seedling fee (25 percent), which were provided three times within five years.

In 2016, a total of more than 1.09 million poor households covering more than 4.08 million poor people participated in CCFP. The average income through subsidies amounted to USD 1 270 per household.

According to the national forest law, the county-level authority for forest tenure registration registers the restored forest and forest land, and issues the forest tenure certificate to each of the participants in CCFP. The participants will then have the ownership and use rights of the restored forest.

Sources:

Development and Research Center of the National Forestry and Grassland Administration 2022. Identification and development of various poverty alleviation models based on China's experiences and practices in the forest sector. (unpublished).

NFGA (The National Forestry and Grassland Administration). 2020. Twenty Years' Restoration of Forests and Grasslands from Farmland in China. Beijing, China.

Xie, C. 2017. Links between social protection and forestry policies: lessons from China. Social Protection and Forestry Working Paper No. 4. Rome, FAO.

Xie, C., Zhao, J., Liang, D., Bennett, J., Zhang, L., Dai, G. & Wang, X. 2006. Livelihood impacts of the conversion of cropland to forest and grassland programme. *Journal of Environmental Planning and Management* 49(4): 555–570.

Wang, Y.M., Wu, Q., Li, Y., Yi, X.T., Ma, L.B. et al. 2021. *Forestry and grassland ecological poverty alleviation – monitoring report*. Beijing, China Forestry Publishing House.

■ 4. Opportunities to strengthen coherence through programming

Another example from China shows how the objectives of forest policy include poverty alleviation, a more comprehensive and a well-sequenced form of support. This can encourage small-scale farmers to increase their income by participating in forestry conservation, restoration and/or forest value chains. All the national key forest conservation and restoration programmes of China have contributed to the overall national targeted poverty alleviation strategy and were also key to ecological poverty reduction. These are forestry interventions that have been designed to be more socially protective. Box 9 provides detailed information on the targeted poverty reduction strategy and some of the forestry interventions such as ecological ranger, PES, afforestation subsidies and pro-poor afforestation cooperatives.

Box 9. CHINA'S TARGETED POVERTY REDUCTION STRATEGY AND INSTRUMENTS USED FOR FORESTRY ECOLOGICAL POVERTY ALLEVIATION

China successfully implemented a **targeted poverty reduction strategy** from 2013 to 2020. A targeted poverty reduction is defined as a strategy in which policies and measures are aimed at the poor families and population, who are identified through targeting. These targeted interventions aim to fundamentally eliminate various obstacles that lead to poverty and to achieve the goal of sustainable poverty alleviation. **Accurate targeting**, which is one of the main components of the targeted poverty alleviation strategy, refers to identifying the families and population that are below the poverty line and the key factors leading to poverty. The **identification criteria** for poor households are composed of per capita net income as well as education, medical care and housing security. The **identification process** includes an application by farmers, an evaluation by villagers, a villager assembly and public notice, a township-level review and public notice, and a county-level review, comparison and announcement. In 2014, the State Council established an **information system of national poverty alleviation** that covered the identified and registered 128 000 poor villages, 29.48 million poor households and 89.62 million poor.

Forestry ecological poverty alleviation interventions including forestry policy measures and institutional measures align with national targeted poverty reduction strategy and targets the registered poor households and population, such as *ecological ranger, PES and poverty alleviation and afforestation cooperatives*.

Ecological rangers

Providing public welfare posts such as forest patrols, i.e. 'ecological rangers' for qualified and registered poor farmers has proved highly effective in poverty alleviation in forest areas, which operates similarly to the public works scheme – work for cash. From 2016 to 2020, the number of ecological rangers increased from 300 000 to 1.1 million, enabling 700 000 to 3 million poor people to exit out of poverty. The average annual income per ecological ranger was increased from USD 1 082 to USD 1 200.



■ 4. Opportunities to strengthen coherence through programming

Payment for environmental services

The payment for environmental services (PES) mechanism has been implemented since 2004, with the aim of compensating forest owners and protecting and managing public welfare forest. The subsidy standard for state-owned public welfare forest increased from USD 13 per ha in 2015 to USD 36 per ha in 2020. The public welfare forest area covered by PES increased from 48 million ha in 2012 to 56 million ha in 2019. In addition, the PES mechanism provided job opportunities for forest protection and management; the number of poor employed increased from 369 000 to 1.41 million.

Afforestation subsidies and pro-poor afforestation cooperatives

Afforestation subsidies include subsidies for planting and tending. From 2012 to 2020, the Central Government invested a total of USD 3 billion to cover 48.57 million ha for tree planting and USD 3.5 billion to cover 6.5 million ha for forest tending. These funds/subsidies have promoted the establishment of the pro-poor afforestation cooperatives that organize activities of tree planting, forest tending and management. As at 2020, 23 000 pro-poor afforestation cooperatives were established, which absorbed 1.6 million poor farmers.

Sources:

DRC of NFGA (Development Research Center of National Forestry and Grassland Administration). 2022. Identification and development of various poverty alleviation models based on China's experiences and practices in the forest sector.

Wang, Y.M., Wu, Q., Li, Y., Yi, X.T., Ma, L.B. *et al.* 2021. *Forestry and grassland ecological poverty alleviation – monitoring report*. Beijing, China Forestry Publishing House.

©FAO/Qiang Ma



A female worker in a Chinese enterprise is processing a bamboo product

■ 4. Opportunities to strengthen coherence through programming

Joint programmes

In the case of an overlap in objectives, targeting criteria, participants or geographic scope, it may be appropriate to integrate forestry and social protection programmes into one joint programme that can be implemented in forested areas. Forestry and social protection interventions that are similar in design, function and target participants also offer opportunities for integration. The advantage of joint or integrated programmes is a reduction in transaction costs and the avoidance of double targeting. There is a risk, however, that one agency might not be able to manage both the social protection and forestry components of the programme.

REDD+ initiatives present opportunities for the creation of joint programmes because they may overlap with social protection interventions targeting people living near forests. For instance, CCTs and PES both provide incentives in exchange for desirable behaviours, and both are used to correct market failures. Other examples of joint programmes are cash plus programmes, which are increasingly being implemented in various developing contexts to enhance livelihoods and contribute to behavioural change. It is therefore possible to envisage a cash plus intervention that would jointly offer cash transfers with tree seedlings or training in forest conservation and management. Such an intervention would contribute to achieving forestry aims while providing income-generating opportunities.

Joint programmes can be particularly useful when social protection interventions are needed to address gaps or shortcomings in forestry approaches. Hence, joint implementation can be simultaneous or sequential with interlinked stages. An example of a joint programme (simultaneous) is the merging of the National Mission for Green India with the Mahatma Gandhi National Rural Employment Guarantee Scheme in India (Box 10). In Paraguay, FAO's Poverty, Reforestation, Energy and Climate Change (PROEZA) project (FAO, 2018b) tops up the Tekoporã CCTs, a government social protection scheme. It provides income support for production and income diversification, and technical and social assistance for the establishment of climate-smart agroforestry production systems to 17 100 poor and environmentally vulnerable households while concessional credit is provided to landowners (medium-sized holdings) to encourage investments in reforestation.

Another example is the implementation of logging bans in parallel with or following unemployment benefits or cash transfers for former workers to prevent deprivation resulting from job loss and help to prevent illegal logging. In China, a logging ban under the Natural Forest Resource Protection Programme has been combined with access to pension, health, unemployment, injury and maternity insurance for workers laid off from state-owned forestry firms (Xie, 2017; Dai *et al.*, 2012). In addition, reforms of collective forest tenure have been accompanied by input subsidies for afforestation and forest insurance to aid forest farmers during natural disasters (Xie, 2017).

Successful sequencing depends on a clear understanding of the programme goals and vision, and of how households can transition between different welfare thresholds and intervention components. Rwanda's flagship social protection programme – the Vision 2020 Umurenge Programme – is a good example of how to sequence programmes. In

■ 4. Opportunities to strengthen coherence through programming

Box 10. MERGING OF A PUBLIC WORKS SCHEME WITH ENVIRONMENTAL OBJECTIVES AND A FORESTRY PROGRAMME IN INDIA

The National Mission for Green India aims to enhance India's forest cover within the framework of the National Action Plan for Climate Change. Its goal is to conduct afforestation over 10 million ha of land from 2015 to 2025.

The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) is India's largest and flagship social protection programme. It guarantees an annual minimum of 100 days of wage employment for households willing to engage in activities such as afforestation, farm forestry and water harvesting, and an additional 50 days for scheduled tribes in forest areas.

In 2015, MGNREGS and the National Mission for Green India were merged to create synergies, improve the country's forest cover and address climate change.

Guidelines for the convergence set out that:

- all lands (i.e. village common lands, community lands, revenue wastelands, shifting cultivation areas, wetlands and private agricultural lands) would be eligible for afforestation;
- MGNREGS public works would include afforestation and forest works such as pre-plantation, pit digging, planting and watering, fencing, plant support and protection, weeding, mulching and manuring plants;
- financing from Green India Mission funds would be used to cover shortages under MGNREGS.

Source: The Times of India. 2015. Green India Mission converged with MGNREGA to reclaim forest [online]. 15 March. [Cited 3 June 2020]. <https://timesofindia.indiatimes.com/home/environment/developmental-issues/Green-India-Mission-converged-with-MGNREGA-to-reclaim-forest/articleshow/46570739.cms>

the first stage, participants receive cash transfers or engage in public works programmes, enabling them to accumulate savings. In the second stage, participants gain access to microfinance and skills training.

Aligned programmes

Target populations for forestry programmes may differ from those of social protection programmes. Where the poor are not agents of deforestation, it might be impossible for certain social protection programmes to have an effective environmental objective. In these instances, aligning separate forestry and social protection programmes in communities with FDP might be more beneficial than designing a joint programme.

■ 4. Opportunities to strengthen coherence through programming

Aligned programmes exploit positive interactions between or among (sectoral) instruments. Alignment ensures that structural synergies can also be exploited. Aligning programmes usually involves coordinating and harmonizing different programmes that are delivered in a similar location, or similar programmes delivered in different locations. In Brazil, the Bolsa Verde programme was aligned with the Bolsa Família²⁴ programme (Box 11). Bolsa Verde provided quarterly cash transfers for poverty alleviation in return for the maintenance of forest cover and other conservation activities, while Bolsa Família provided CCTs for poverty alleviation and human capital development. Aligning the two programmes allowed them to share a common M&E framework, common targeting and geographic scope, which enabled the expansion of the Bolsa Verde programme to the most vulnerable without the need for sourcing new political and financial support.

Box 11. LARGE-SCALE SOCIAL PROTECTION PROGRAMMES IN THE AMAZON REGION

Bolsa Família in Brazil

Bolsa Família was a conditional cash transfer (CCT) programme that offered poverty relief, fostered human capital development through compliance with conditionalities, and provided participants with access to complementary services. The programme had high levels of coverage, with 14 million beneficiary households in 2014. The programme enhanced coverage for FDP in the following ways:

Registration. Since forest-dependent people (FDP) are by nature difficult to locate and identify, Bolsa Família had a specific provision for registering them. Indigenous groups, particularly in the Amazon region, received special identification, which was valid for ten years, because many did not have official citizenship documentation. This provision increased coverage tenfold from 2003 to 2009 (Gomes, 2013).

Linkages with complementary programmes. Bolsa Família linked FDP with other social protection programmes, increasing the social assistance coverage among FDP. For example, participants were linked with Bolsa Verde through joint enrolment using the same registration and monitoring database (, 2014). Bolsa Verde enhanced environmental conservation and poverty reduction specifically for those in the Amazon region.

Social inclusion. Bolsa Família reached the most remote and isolated FDP in the Amazon through mobile pay-points using trucks and ships, thus fostering social inclusion and promoting indigenous social rights (Gomes, 2013).

²⁴ The Bolsa Família programme ended and was replaced by a new programme called 'Auxílio Brasil' in 2021. The new programme has different design features. See <https://www.gov.br/cidadania/pt-br/auxilio-brasil>.



■ 4. Opportunities to strengthen coherence through programming

Bono Desarrollo Humano in Ecuador

Bono Desarrollo Humano (BDH) is a de facto unconditional cash transfer programme, which was launched in Ecuador in 2003. This large social assistance programme transfers cash monthly to poor mothers with children under the age of 18 years and the elderly. The aim is to support human capital accumulation and to alleviate poverty among the most vulnerable. By 2014, the programme boasted more than 1.5 million participants, with many residing in rural areas. The programme benefits FDP in the following ways:

Targeting. The BDH targeting method uses a composite welfare index based on multidimensional poverty indicators, strongly targeting rural poverty among FDP. As a result, take-up rates in rural areas (85 percent) are much higher than in urban areas (59 percent) (Fernald and Hidrobo, 2011).

Effective advocacy. Strong grassroots movements among indigenous and racial minorities led to changes in the targeting methods, increasing ethnic and cultural inclusion in the programme, and supporting progressive equality of FDP through better coverage and access to important social programmes (Hevia-Pacheco and Vergara-Camus, 2013).

Social mobility. BDH improves the social mobility of indigenous, rural and female-headed households by boosting productive capacity and asset accumulation (Mideros and Gassman, 2017).

Access to complementary social services. BDH links female participants to livelihood-enhancing services such as business financial support and job training, increasing their coverage in social assistance programmes. These activities build motivation among FDP and transmit key competencies that help in the job market (Molyneux and Thomson, 2011).

Sources:

Fernald, L.C. & Hidrobo, M. 2011. Effect of Ecuador's cash transfer program (Bono de Desarrollo Humano) on child development in infants and toddlers: a randomized effectiveness trial. *Social Science and Medicine*, 72(9): 1437–1446.

Gomes, C. 2013. Family, poverty and inequalities in Latin America and the Caribbean. *Sociology Mind*, 3(1): 25–31. <http://doi.org/10.4236/sm.2013.31005>

Hevia-Pacheco, P. & Vergara-Camus, L. 2013. Addressing intersecting inequalities: inclusive political regimes, democratically elected left-wing governments – the cases of Brazil and Ecuador. www.chronicpoverty.network.org/s/LAmerica-Left-Wing-Regimes-Hevia_Vergara_2013.doc

Mideros Mora, A. & Gassmann, F. 2017. Fostering social mobility: the case of the 'Bono de Desarrollo Humano' in Ecuador. Working Paper Series 2017-002. Maastricht, The Netherlands, UNU-MERIT.

Molyneux, M. & Thomson, M. 2011. Cash transfers, gender equity and women's empowerment in Peru, Ecuador and Bolivia. *Gender and Development*, 19(2): 195–212. <http://doi.org/10.1080/13552074.2011.592631>

Rosa da Conceição, H. 2014. Conditional cash transfers in the context of social welfare and environmental incentive-based public policies. Bonn, Germany, Centre for Development Research, University of Bonn. www.bmu-cbc.org.pe/admin/assets/uploads/files/07ddd-Conditional_Cash_Transfers.pdf

■ 4. Opportunities to strengthen coherence through programming

In 2015, in the United Republic of Tanzania, the Private Forestry Programme (PFP) and the Tanzania Social Action Fund (TASAF) signed a Memorandum of Understanding to cooperate in forest management and to improve the livelihoods of FDP in the first phase of the programme. The PFP encourages FDP to grow trees, harvest timber and strengthen forest-based income generation, which can help lift them out of poverty. TASAF is the national agency for social protection in Tanzania, which implements its flagship social protection programme, “Productive Social Safety Net”. The collaboration between the PFP and TASAF aimed to support tree growers and vulnerable groups through TASAF’s CCTs and public works programmes. The initiative first targeted seven communities where PFP was already engaged, with the goal to expand to other forested areas in the country (allAfrica, 2015).²⁵

Alignment can also prevent negative spillovers that result in inefficiency and waste in resource-constrained environments. For example, while cash transfers are directed towards the poorest forest-dependent households, PES can be directed towards users of forests in the same communities who might not necessarily be poor. These programme alignments can help prevent retaliatory practices by non-participants of one programme.

Key issues to consider in programme-level coherence

Box 12 explains the main characteristics that need to be considered in selecting an appropriate approach for building coherent programmes for FDP. Some other important considerations in building programme-level coherence are as follows:

- Forestry and social programmes may overlap significantly in target populations and in overarching unified goals at the policy and programme levels, but different stated objectives at the implementation level, which may influence the allocation of resources and, in turn, the impact.
- Regardless of the approach, programme objectives must be formulated with coherence in mind. If the objectives of the programme do not acknowledge the possible duality of purpose between social protection and forestry, M&E indicators will not be calibrated to measure the impact across coherent domains. As a result, future policy or programme design may fail to take into account spillovers and may result in unintended, adverse consequences.
- Administrative and programme-level coherence can facilitate budgetary coordination in a multisectoral context. Maintaining separate budgets but ensuring multisectoral dialogue from programme inception can help eliminate budgetary inefficiency by avoiding duplication of work, which would entail drawing from two budgets.
- Engaging a neutral umbrella organization to coordinate activities between different departments is recommended to overcome competition in resource allocation and to ensure clearly defined leadership roles, oversight and responsibilities.

²⁵ United Republic of Tanzania, Ministry of Natural Resources and Tourism. Forestry and Beekeeping Division & Finland Ministry for Foreign Affairs, 2019. Participatory Plantation Forestry Programme. Programme Document. https://www.privateforestry.or.tz/uploads/PROGRAMME_DOCUMENT.pdf

■ 4. Opportunities to strengthen coherence through programming

Box 12. MAIN CHARACTERISTICS OF STRENGTHENING PROGRAMME-LEVEL COHERENCE

Free-standing programmes: A social protection programme is aimed at forest-dependent people (FDP) who do not have access to a forestry programme; a forestry programme is aimed at FDP who do not have social protection coverage. These programmes can address both poverty reduction and forest conservation objectives.

Joint programmes: When social protection and forest programmes are jointly implemented, there may be:

- an overlap in geographical locations;
- an overlap in participants;
- complementarities; and/or
- the possibility of one programme augmenting the negative effects of the other.

Aligned programmes: These programmes refer to the coordination and harmonization of different programmes that are delivered in a similar location, or similar programmes delivered in different locations.

4.2 Design and operational arrangements that can support coherence

This section discusses various design and implementation aspects that can facilitate the strengthening of coherence between the forestry and social protection programmes (free-standing, joint and aligned).

Efficient and harmonized targeting

Clearly defined and accurate targeting criteria

Well-defined and accurate targeting criteria for choosing poor FDP are essential for cross-sectoral administration between some forestry and social protection programmes.

- In free-standing programmes with multiple objectives, such as public works programmes or pro-poor PES, targeting criteria can be used to identify participants and communities that are both poor and forest-dependent.
- In joint programmes, it is important to consider the potential trade-offs and conflicts in targeting forestry and social protection interventions. For example, REDD+ interventions usually target the biggest contributors to deforestation, which are usually large private

■ 4. Opportunities to strengthen coherence through programming

landholders or companies (trade-off of efficiency), while CCTs usually target the poorest households (trade-off of equity). The design of a joint programme must consider this trade-off between efficiency and equity (Wong, 2014).

- In aligned forestry and social protection programmes, targeting criteria can identify communities whose participation in several programmes overlap (Rodríguez *et al.*, 2011).

In any context, monitoring should ensure that targeting is efficient and that there are minimal inclusion and exclusion errors.

Harmonized targeting

The aim of harmonized targeting is to reduce inefficiencies, for example, duplication, a waste of resources and delays. Harmonized targeting can be achieved through the following means, as described below.

A single or unified registry of participants. Targeting methods and beneficiary registries for social protection and forestry programmes can be shared. Single or unified registries of participants enable cross-sectoral linkages, enhance targeting efficiency, and strengthen monitoring activities.

Single registries enable the movement of participants from one programme to another (FAO, 2016a). Chile, Indonesia and Kenya have developed unified registry systems for their social protection programmes. In Brazil, the *Cadastro Único*, is a single registry for social programmes that is also used by some forestry programmes. For example, the registry recorded the participants who were enrolled in both the largest social protection programme in Brazil, Bolsa Família (CCT programme), and Bolsa Verde, which provided cash transfers for poverty alleviation in return for participants conserving forest cover. The shared registry enables rapid and efficient targeting and delivery of benefits.

In areas with limited social protection coverage but relatively advanced forest-based interventions, multisectoral cooperation would enable new social protection programmes to use the existing administrative infrastructure, communication channels and registries to channel assistance. Where social programmes and forest-based interventions have different beneficiaries, the stand-alone registries of participants can continue to be used, but a process of matching and merging would create a richer picture of the pressing needs of the population and allow for more effective policy creation and targeting.

Building on programme infrastructure

Using forestry programmes in place to expand social services and social protection. Some forest producer organizations routinely provide social services such as education, health care and education and training aimed at improving employment opportunities. New social protection schemes could use the delivery methods of such FPOs. In the same vein, forestry programmes could also be harmonized with existing social protection programmes, as explained in the

■ 4. Opportunities to strengthen coherence through programming

following section on the role of FPOs and rural CBOs. However, special care should be taken to ensure that the poorest and most vulnerable, including women, are not excluded. At the national level, social protection programmes with environmental goals, and forestry programmes with social protection measures can be included in national social protection systems and, where possible, implemented together with standard social protection programmes.

Human resource management, coordination and financing. The cross-fertilization of ideas between departments can be encouraged by ensuring regular dialogue at the central and local levels, and by appointing a cross-departmental chair to monitor and analyse areas of overlap. Joint or aligned programmes could mitigate high costs of targeting and enforcing conditionalities, and weaknesses in ministerial human resource capacities through effective coordination and cost-sharing between sectors (Rodríguez *et al.*, 2011; Wong, 2014). Coherence can also be promoted by pooling financial resources from social protection and forestry ministries, in addition to other related ministries such as water, agriculture and rural development, as well as from global climate change funds.

Sharing of information between management information systems (MISs). Both forestry and social protection programmes require MISs to support the flow of information from one programme to the other. Information sharing can help prevent a duplication of efforts and make it easier to perceive and mitigate negative effects of one programme on the other. Some lessons can be learned from the implementation of Bolsa Verde in Brazil, where the MIS already established for Bolsa Família is also employed for Bolsa Verde (Box 11). Mongolia has established the one-stop shop (OSS), which is a single delivery point for information for all existing social programmes. The OSS approach aids in expanding social protection to otherwise inaccessible areas and enhances coordination among different institutions responsible for social protection. Mobile OSSs offer services to people who cannot travel to an OSS facility, such as people with disabilities (ILO, 2018b). Chile has an innovative and effective MIS, which not only allows the exchange of information, but also integrates information from many different sources into one system (Box 13).

Box 13. CHILE'S INTEGRATED SOCIAL INFORMATION SYSTEM

Chile's *Registro Social de Hogares (RSH, Social Registry of Households)* contains information on over 80 social programmes coordinated across ministries and different levels of government. These programmes use the nation's integrated social information system for the targeting and selection of participants.

The data stored in the *RSH* are derived from existing administrative databases, on-demand registration (either self-reported online or through municipal officers) and census surveys. The data are updated monthly using sources such as the civil registry and online registrations of new users.

■ 4. Opportunities to strengthen coherence through programming

Variables that are used to calculate eligibility scores are also updated monthly. Households can self-report any changes in person at the municipalities or on the website. The data stored in *RSH* are protected by data security and privacy laws. As of 2017, 12.3 million people (75 percent of the population) were registered in the system (Leite *et al.*, 2017).

RSH integrates data and eligibility criteria across all social assistance programmes, integrates data from other sectors (health and education), and is fully integrated with the national identification database and some social insurance programmes.

How is it used?

Targeting. Using pre-set criteria, data are analysed using a targeting formula that calculates an overall score for each household. This score, accompanied by household information, determines programme eligibility.

Administration. Institutions are given an access identifier so that information and functionalities can be shared. Municipalities are able to generate a document from the *RSH*, which shows a household's targeting score with a security barcode, which can be used to request access to public services. In addition, participants of multiple programmes can request assistance from 15 institutions that have specific legal arrangements with the *RSH* without proving eligibility, since this information is already in the system.

Challenges and lessons learned

Risk of excluding categories of individuals. Exclusion in one programme, which usually arises from the targeting algorithm used, implies an integrated exclusion error. Policies are being designed to include people who are outside the formal system or have special living conditions, such as the homeless.

Insufficient capacity at the municipal level. At the local level, challenges include lack of reliable internet access and lack of adequate facilities.

Limited focus on research. The ultimate goal is to make *RSH* a databank that can be used by researchers, but this goal has not yet been achieved.

Source:

Barca, V. 2017. Integrating data and information management for social protection: social registries and integrated beneficiary registries. Canberra, Commonwealth of Australia, Department of Foreign Affairs and Trade. <https://www.dfat.gov.au/sites/default/files/integrating-data-information-management-social-protection-s1.pdf>

Leite P., George, T., Sun C. & K. Lindert. (2017). Social registries for social assistance and beyond: A guidance note and assessment tool. Social Protection and Labour Discussion Paper no. 1704. Washington DC: World Bank. In: V. Barca. 2017. Integrating data and information management for social protection: social registries and integrated beneficiary registries. Canberra, Commonwealth of Australia, Department of Foreign Affairs and Trade. <https://www.dfat.gov.au/sites/default/files/integrating-data-information-management-social-protection-s1.pdf>

■ 4. Opportunities to strengthen coherence through programming

Approaches of forest producer organizations and rural community-based organizations in supporting social protection programmes

Approaches in supporting the design, implementation and monitoring of formal social protection programmes

Local knowledge. FPOs and rural CBOs can use their knowledge, infrastructure and networks, as well as the trust of the communities to help in identifying vulnerabilities, risks and needs of FDP (Asen et al., 2012; Vinci, Djeddah and Hani, 2016). They can also help identify instruments and resources suited for addressing particular social protection needs, taking into account the implications of different social protection instruments in terms of gender, local knowledge and customary institutions. FPOs and CBOs have the advantage in collecting information on FDP to be included in the national social protection registration systems, thus promoting access to formal social protection programmes by FDP.

Collective action. FPOs and other CBOs are characterized by collective action that is premised on the principles of reciprocity and mutual support among members (Vinci et al., 2016). In Guatemala's highland region, the *Programa de incentivos forestales* (PINFOR) provided subsidies for forest plantations, but they were only available on sizeable plots of land beyond the reach of most forest-dwelling citizens, thus favouring large agrobusiness interests. The Ut'z Ché forest association, an FPO of 33 community landholders, successfully pushed for the creation of the 2006 *Programa de incentivos para pequeños poseedores de tierras de vocación forestal o agroforestal* (PINPEP), which provided subsidies to smallholders without formal land title. Originally implemented by a donor-funded programme, it has now become a statute in Guatemala (Merlet and Fraticelli, 2016).

Delivery, monitoring and evaluation. FPOs and CBOs can serve as conduits of information and delivery of formal social protection programmes, thus promoting their sustainability. For example, the state of Uttarakhand, India identified village forest councils (Van Panchayats) as key implementing partners of the Mahatma Gandhi National Rural Employment Guarantee Scheme in order to ensure an inclusive and transparent delivery of the programme's delivery. The forest councils also ensure that public works within the jurisdiction of the programme's focus on afforestation and tree planting activities (Forest Research Institute, 2006).

Given the private and mostly unregulated nature of FPOs and rural CBOs, some foundational elements are needed to achieve the objectives of the social protection programme. The pre-conditions for FPOs and rural CBOs in supporting social protection programmes are described below.

Inclusiveness. FPOs and other CBOs can be susceptible to elite capture (see Section 2.2), and in requiring regular monetary contributions, they may exclude the poorest community members (Vinci, Djeddah and Hani, 2016) as well as economically inactive people such as the elderly and people with disabilities (deMarsh et al., 2014). They must be regulated to ensure that the benefits

■ 4. Opportunities to strengthen coherence through programming

from formal social protection systems are not exclusively granted to their own members. This is particularly important when they are involved in the delivery of programme components.

Institutional trust. FPOs and other CBOs must have a long-standing reputation of trust in the communities where they are located in order to effectively support the provision of formal social protection to FDP,

Conflict management system. A conflict resolution system must be in place to ensure that FPOs that partner with the government are trained and well equipped to aid in handling any conflicts that might arise within the community, such as disputes concerning land allocations or forest land claims.

An entry point to increase access to formal social protection programmes

An entry point may be identifying FDP as vulnerable groups in order to organize training and to undertake data collection and profiling. The data collected may be included in the national social protection registry system. The establishment of a partnership between producer organizations and the Ministry of Social Protection has proved to be the key factor of success in the process. This entry point has been recently practised by forestry and farm producer organizations (FFPOs) in Ghana and Kenya with support of the Forest and Farm Facility (FFF). FFF has acted as the accelerator in the process by facilitating the collaboration between producer organizations and the ministries of social protection, and by providing technical support for training and data collection. The process can ensure that poor and vulnerable forest producers are included in the national social protection registry system and benefit from accessing some of the social protection programmes. To scale up implementation, actions include expanding information collection, advocating for relevant policy and legislation, and enhancing partnership. Detailed information on practices of Ghana and Kenya is provided in Box 14.

©FAO/Qiang Ma



Members of a forest community in United Republic of Tanzania, Zanzibar discuss their future activities

■ 4. Opportunities to strengthen coherence through programming

Box 14. THE ROLE OF FORESTRY AND FARM PRODUCER ORGANIZATIONS IN INCREASING ACCESS TO FORMAL SOCIAL PROTECTION PROGRAMMES IN GHANA AND KENYA

With support of the Forest and Farm Facility (FFF) and the Ministry of Gender, Children and Social Protection (MoGCSP), in April 2022, Ghana Federation of Forest and Farm Producers (GhaFFaP) organized a four-day training on social protection programmes and data collection. GhaFFaP, in cooperation with the decentralized units of the Ministry, is planning to undertake the data collection and profiling for 17 forestry and farm producer organizations (FFPOs), and to include this information in the Ghana National Household Data registry, which is a major entry point to access the available social protection support in the country. The GhaFFaP is targeting access to three ongoing social protection programmes for the 17 FFPOs.

In Ghana, there has been a significantly positive movement towards collaboration in expanding social protection. Currently, a Memorandum of Understanding between MoGCSP, GhaFFaP and FFF is under discussion and preparation. GhaFFaP is planning to: develop joint project proposals with social protection institutions; highlight the special needs of forest and farm producers, and the need for tailor-made social protection through its national-level advocacy platforms; and join efforts with the MoGCSP in the ongoing national advocacy on the passage of the Ghana Social Protection Bill into Law.

With support of FFF, in 2021, the National Social Protection Secretariat and the Centre for Natural Resource Management (CENAREMA), the Farm Forestry Smallholder Producers Association of Kenya (FF SPAK) organized training and collected data for 450 poor charcoal producers in Baringo and Turkana counties by using the Harmonized Targeting Tool. The collected data were shared with the Secretariat for inclusion into the Enhanced Single Registry, which is the main national social protection database. As a preliminary outcome of this process, some charcoal producers in Turkana started to benefit from the National Drought Management Authority programme on emergency drought response, which provides a USD 30 cash transfer per family per month.

In Kenya, FF SPAK and charcoal producer associations are planning to scale up implementation by taking four major actions: carrying out demographic data collection for vulnerable forest producers and charcoal producers in other counties; developing operational guidelines for the expansion of social protection for FFPO members and FDP; advocating for the newly revised national social protection policy; and raising awareness on the importance of coherence between forestry and social protection policies and programmes through their own platforms or networks.

Source: FFF in Ghana and Kenya.

■ 4. Opportunities to strengthen coherence through programming

Overcoming barriers to forest-dependent people's access to social protection

FDP face a number of barriers, which can hinder access to formal social protection schemes, as explained in section 1.4. To expand social protection coverage for them, it is important to address these challenges, which are mostly associated with their remote location and marginalized status, as follows:

- It is important to ***maintain social registries and conduct routine vulnerability assessments***. These registries should explicitly include remote and otherwise marginalized FDP and vulnerable groups among FDP, including women.
- To prevent information asymmetry, whereby ethnic minorities or indigenous communities in particular may have less information than others, ***social protection programmes should ensure that information is provided in indigenous languages***. In Nicaragua, for example, the Child at Risk (CAR) programme, which provided CCTs, school feeding and community education workshops to the poor, extended coverage to Indigenous Peoples by culturally adapting their educational workshop materials (World Bank, 2018b). Language barriers in social protection programmes can also be reduced by employing workers from the Forest Dependent Communities to help with implementation. Other solutions include using local opinion leaders among FDP to raise awareness among specific communities or social groups, or facilitating local champions to build capacities and community support for the programme.
- To offset transaction costs caused by remoteness and isolation from markets, one option is to ***use mobile technology in the delivery of social transfers***, especially in remote areas without banking services. In Kenya, during a post-election conflict, cash transfers were delivered to one of the remotest parts of the country, Kerio Valley, using mobile money (Brewin, 2008). These innovative delivery mechanisms reduce household transaction costs, leakages in the delivery system and self-stigmatization of participants (Hanna and Karlan, 2017). However, they may also exclude technologically disadvantaged groups (e.g. women, illiterate). Therefore, needs and feasibility assessments should be carried out before implementing mobile delivery of social transfers. In some contexts, such as remote areas that do not usually use liquid cash to meet basic needs, cash transfers might not be the best form of social protection. In these cases, consideration should be given to alternative non-cash instruments such as food transfers.
- It is important to consider whether the cultural context and discriminatory practices may diminish the retention of beneficiaries in the programmes, leading to social exclusion. In some CCT programmes in Latin America, for example, forest-dependent women have experienced racial and gender discrimination, finding it difficult to access health and financial services provided under the programmes (Molyneux and Thomson, 2011). ***Racial and gender discrimination should be eliminated with gender-responsive and sensitization measures, and grievance mechanisms put in place to prevent it.***

■ 4. Opportunities to strengthen coherence through programming

©FAO/José Díaz



A teenager coming back from school in Guatemala highlands

- Safeguards are necessary to **prevent local leaders from using their greater power, knowledge and network linkages to capture a disproportionate share of public social protection benefits**, possibly depriving the poorest or marginalized forest-dependent households of these benefits. Such safeguards might include more inclusive targeting with community input that goes beyond consultation with elders and community leaders. Alternatively, centralized registries using quantitative survey results (or census information) can be used to target beneficiaries using objective measures.

■ 4. Opportunities to strengthen coherence through programming

Shared or harmonized monitoring and evaluation frameworks

A shared or harmonized M&E framework tailored for FDP can provide evidence of the impact of coherent interventions and can allow better management of trade-offs between forest conservation and social protection objectives (FAO, 2016a). Unified registries and common MISs can facilitate the development of common M&E frameworks. In Brazil, the unified registry is used to monitor the poverty reduction indicators of Bolsa Família and the conservation conditions of Bolsa Verde.

Shared or harmonized M&E requires an open data policy between relevant departments and regular joint sessions for retrospective analysis and programming decisions. This flow of information, reaching the public and legislative bodies, forms a vital part of the programme cycle because it informs the next round of programme revisions and inceptions. By highlighting the benefits of coherence, these information flows can help coherent policies become mainstream. Participatory M&E approaches can increase the voices of FDP, and also improve accountability channels and the effectiveness of the implementation of coherent social protection and forestry programmes.

M&E frameworks for coherent programmes should monitor both environmental and poverty alleviation indicators. For example, Socio Bosque, a pro-poor PES or environmental CCT in Ecuador (see Box 9), is monitored by the Ministry of the Environment. Forest cover is measured using remote sensing or other available technology to ensure that FDP comply with the requirement to conserve forests. To ensure compliance with the poverty alleviation objectives of the programme, participants submit a financial and narrative report on how the cash transfers were spent in investments. Lack of compliance is sanctioned through either suspension or expulsion from the programme and the requirement to reimburse the cash transfers to the government. A clear theory of change and a broader set of indicators are needed to describe the effect of social protection and forestry programmes for FDP, which include environmental, social, economic and poverty indicators.

5. Conclusions and way forward

Governments, CSOs and development partners can consider the following policy and programme options for increasing social protection coverage among FDPs and strengthening coherence between forestry and social protection.

Strengthen the evidence base on the impact on forest-dependent people

The design of appropriate social protection instruments for FDPs depends on evidence-based identification of these vulnerabilities. In addition, greater attention to FDPs is required in impact evaluations of social protection interventions, as the evidence base on the impact of social protection on FDPs and on forest conservation is currently sparse. Additional evidence is required to understand and minimize any unintended adverse outcomes and to characterize risk and vulnerability profiles and the market environment. At the government level, M&E systems should be strengthened and should allow for the collection of evidence from FDPs, including data disaggregated by gender, age and other characteristics. A clear theory of change and a broad set of environmental, social, economic and poverty indicators are needed to describe the effect of social protection on FDPs. M&E systems should be strengthened among state and non-state actors, and should allow for the collection of evidence from FDPs.

Expand coverage of national social protection programmes and enhance their inclusivity

National social protection programmes can become more inclusive, and coverage can be increased by ensuring that targeting criteria of social protection programmes identify FDPs as vulnerable groups. Well-defined and accurate targeting is central for cross-sectoral coordination between programmes and sectors. Key national stakeholders should assess whether the targeting criteria sufficiently take into account the specific needs and vulnerabilities of FDPs. Harmonized targeting systems such as a single registry/unified registry database and exchanging information through programme MIS can be critical for fostering coherence and coordination across programmes. To maintain social protection coverage of

■ 5. Conclusions and way forward

FDPs, information on social protection programmes should be disseminated in a culturally appropriate, inclusive manner and without discrimination. If feasible, mobile technology can be used to overcome the administrative and delivery challenges of transporting transfers to remote areas.

Leverage opportunities at policy, programme and operational levels to promote coherence

Building coherence between social protection and forestry policies and programmes can generate synergies among their similar risk reduction and livelihood-enhancing objectives, help reduce coverage gaps, and prevent vulnerable FDPs from employing socially and environmentally harmful risk-coping strategies. Countries that aim to develop or reform a social protection system have a window of opportunity for building coherence and including a diverse range of actors in the formulation process. Coherence between the social protection and forest sectors can be built and strengthened through the exploitation of opportunities at the policy, programme and operational levels. It is also important to ensure women's meaningful participation in the formulation, implementation and monitoring processes, and to be gender-sensitive, -responsive and -transformative in policies and programmes. The following are some critical success factors:

- **Strong leadership and political will.** Both are required to establish partnerships and alliances between ministries, CSOs and international organizations. Policymakers should use evidence to advocate for and increase awareness of the linkages between social protection and forestry policies and programmes. Local, regional and international development and climate change initiatives can be exploited to promote coherence between social protection and the forest sector.
- **Robust legal and policy arrangements.** State actors should foster dialogue among all stakeholders, including FDPs, in setting up coherent policy arrangements. In addition, usufruct, ownership and control rights over land should be properly defined since they are key to an enabling environment for effective and coherent policies and interventions.
- **Strong institutional, human and financial capacities.** Institutional and human capacities can be strengthened through effective coordination of the plans, policies and steering committees of the two sectors and across all levels of government (national to local). Financial resources underpin all cross-sectoral coordination efforts and therefore need to be allocated towards building coherence between the two sectors.
- **Design of coherent programmes.** At the programme level, three types of coherent schemes can be designed and implemented to fulfil environmental and poverty alleviation objectives simultaneously: (i) free-standing programmes (either social protection or forestry) that socially protect FDPs and fulfil forest conservation objectives;

■ 5. Conclusions and way forward

(ii) joint programmes that combine social protection and forestry interventions into one programme or sequence them over time, especially where there is overlap in geographic areas and beneficiaries; and (iii) aligned programmes that leverage positive interactions between social protection and forestry interventions, and enable coordination of programmes in similar locations.

- **Harmonization of operational processes.** Approaches to ensure operational coherence include: leveraging of infrastructures of established social protection programmes; harmonized and accurate targeting; unified registries and management information systems; improved human resources management; and common M&E frameworks. Community-level organizations have a vital role in ensuring community representation and consultations, which are essential for harnessing efficiencies from coherence and harmonized targeting. The state must assume some responsibility in building the human and skills capacity of these community members. Participation in inclusive forums will ensure that FDPs benefit from formal social protection and forestry programmes that are appropriate to their needs.

Leverage the complementary role of forest producer organizations and other community-based organizations

FPOs and other CBOs can support the design and implementation of national social protection programmes in FDPs by providing information needed for targeting and aiding the delivery, communication on and monitoring of programmes, thus increasing social protection coverage and retention. It needs to be ensured that these approaches are inclusive; for example, the role of women and other marginalized groups may need to be specifically promoted. An entry point for FPOs and CBOs can be identifying FDP as vulnerable groups in order to organize training and to undertake data collection and profiling. The data collected will then be included in the national social protection registry system.

Take advantage of pathways in global agendas

Global agendas on the SDGs including social protection, climate change and agrifood system transformation offer opportunities for expanding social protection coverage and fostering coherence between the social protection and forest sectors. The expansion of social protection coverage is already enshrined in the 2030 Agenda for Sustainable Development: Target 1.3 of SDG 1 is “Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable”. The Joint SDG Fund is an innovative instrument to incentivize the transformative policy shifts and to stimulate strategic investments required to catalyse and accelerate progress against the SDGs at the country level by promoting a whole-of-government approach and by supporting collaboration amongst United Nations agencies and other development partners. It has been critical in effectively responding to the COVID-19 pandemic and

■ 5. Conclusions and way forward

stimulating SDG integration in national systems and programmes. To date, it has funded 230 joint programmes focused on integrated social protection or SDG finance.²⁶ FAO country offices have successfully partnered with other United Nations agencies under the SDG Fund to implement social protection work, such as in Chile, Costa Rica, Kenya, Mexico, Mongolia, the Philippines and Rwanda.

Regional commitments have also been made towards increasing social protection coverage, for example, in Africa: The Yaoundé Tripartite Declaration on the implementation of the Social Protection Floor (2011); The Ouagadougou + 10 Declaration and Plan of Action on Employment, Poverty Eradication and Inclusive Development (2015); The Addis Ababa Declaration on Transforming Africa through Decent Work for Sustainable Development (2015); and the Abidjan Declaration – Advancing Social Justice: Shaping the future of work in Africa, adopted by ILO Constituents during the 14th African Regional Meeting in December 2019. Asia and Pacific countries passed resolutions on strengthening social protection floors and systems at meetings convened by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and ILO in 2011 (Schmitt, Paienjton and De, 2014). The Forum of Ministers in Charge of Social Development from South Asia signed the Colombo Declaration in 2011 (UNESCO, 2011), and Southeast Asian leaders adopted the Association of Southeast Asian Nations Declaration on Strengthening Social Protection in 2013. These commitments have spurred the development of national social protection policies in various developing countries and provide opportunities for harnessing political support to extend social protection coverage to FDPs.

A number of climate change initiatives present attractive opportunities for linking with social protection instruments and objectives to build resilience and promote forest conservation and restoration. These include global climate change funds, REDD+, ICDPs and FLR. Global climate change funds could be lobbied to dedicate funding to interventions that incorporate social protection objectives. Most REDD+ programmes in rural areas overlap geographically with social protection instruments, and the associated PES are similar in design and function to CCTs. Incorporating social protection instruments could help ICDPs target extremely vulnerable households more effectively and become more inclusive. Including instruments such as cash transfers and social insurance in initiatives of the Forestry Stewardship Council and the FFF could be a way to help increase incomes and well-being, and relax capital constraints. This will ultimately improve the functions of forest producer groups, which constitute the largest part of the forest private sector and are likely to conserve forests and facilitate poverty reduction. Currently, the Framework is being piloted in Nepal and Viet Nam with the support of FFF in order to support policy reforms towards better coherence and to enhance the social protection role of FPOs.

The United Nations Food Systems Summit (UNFSS), held in 2021, set the stage for global food systems (GFS) transformation to achieve the SDGs by 2030. The UNFSS established five

²⁶ The Joint SDG Fund. <https://www.jointsdgfund.org>

■ 5. Conclusions and way forward

action areas to help inform the transitions needed to realize the vision of the 2030 Agenda for Sustainable Development, which are to: (i) nourish all people; (ii) boost nature-based solutions; (iii) advance equitable livelihoods, decent work and empowered communities; (iv) build resilience to vulnerabilities, shocks and stresses; and (v) accelerate the means of implementation.²⁷ Opportunities are emerging that enable local and global communities of practice and stakeholders to work together with national governments under the umbrella of these action areas. In particular, there are opportunities for transforming GFS through financing, data, science and innovation, governance and trade.²⁸ Social protection instruments are crucial for enabling the transformation towards inclusive agrifood systems. Forests and trees are part of agrifood systems and contribute to resilient and sustainable food systems as well (Ickowitz *et al.*, 2022). Therefore, the transformation of GFS also presents opportunities for strengthening coherence between forestry and social protection policies and programmes.

²⁷ The Secretary-General's Chair Summary and Statement of Action on the UN Food Systems Summit: <https://www.un.org/en/food-systems-summit/news/making-food-systems-work-people-planet-and-prosperity>

²⁸ UN Food Systems Summit: www.un.org/en/food-systems-summit

References

- Agevi, H., Mwendwa, K.A., Koros, H., Mulinya, C., Kawawa, R.C., Kimutai, D.K., Wabusya, M., Khanyufu, M. & Jawuoro, S. 2016. PELIS forestry programme as a strategy for increasing forest cover and improving community livelihoods: case of Malava Forest, Western Kenya. *American Journal of Agriculture and Forestry*, 4(5): 128–135. doi: 10.11648/j.ajaf.20160405.13
- Alix-Garcia, J., McIntosh, C., Sims, K.R. & Welch, J.R. 2013. The ecological footprint of poverty alleviation: evidence from Mexico's Oportunidades program. *Review of Economics and Statistics*, 95(2): 417–435.
- Alix-Garcia, J. & Wolff, H. 2014. Payment for ecosystem services from forests. *Annual Review of Resource Economics*, 6(1): 361–380.
- Alkire, S. 2007. The missing dimensions of poverty data: introduction to the special issue. *Oxford Development Studies*, 35(4): 347–359.
- allAfrica. 2015. Tanzania: Tree planting to alleviate poverty [online]. *Tanzania Daily News* (Dar es Salaam), 6 January. [Cited 20 June 2020]. <https://allafrica.com/stories/201501060437.html>
- Alpízar, F., Nordén, A., Pfaff, A. & Robalino, J. 2013. Behavioral spillovers from targeted incentives: losses from excluded individuals can counter gains from those selected. Duke Environmental and Energy Economics Working Paper EE 13-07. Durham, North Carolina, USA, Nicholas Institute for Environmental Policy Solutions & Duke University Energy Initiative.
- Ameha, A., Nielsen, O.J. & Larsen, H.O. 2014. Impacts of access and benefit sharing on livelihoods and forest: case of participatory forest management in Ethiopia. *Ecological Economics*, 97: 162–171.
- Andam, K.S., Ferraro, P.J., Sims, K.R.E., Healy, A. & Holland, M.B. 2010. Protected areas: reduced poverty in Costa Rica and Thailand. *Proceedings of the National Academy of Sciences of the United States of America*, 107(22): 9996–10001. <http://doi.org/10.1073/pnas.0914177107>
- Andersson, C., Mekonnen, A. & Stage, J. 2011. Impacts of the productive safety net programme in Ethiopia on livestock and tree holdings of rural households. *Journal of Development Economics*, 94(1): 119–126.
- Angelsen, A., Jagger, P., Babigumira, R., Belcher, B., Hogarth, N.J., Bauch, S., Börner, J., Smith-Hall, C. & Wunder, S. 2014. Environmental income and rural livelihoods: a global-comparative analysis. *World Development*, 64(S1): S12–S28.

■ References

- Asen, A., Boscolo, M., Carrillo, R., van Dijk, K., Nordheim-Larsen, C., Oystese, S., Savenije, H., Thunberg, J. & Zapata, J. 2012. *Unlocking national opportunities: new insights on financing sustainable forest and land management*. Rome, FAO, National Forest Programme Facility, Global Mechanism, Horaplantsoen, Tropenbos International & Yokohama, International Tropical Timber Organization.
- Atkinson, A.B. 1998. Social exclusion, poverty and unemployment. In J. Hills, ed., *Exclusion, Employment and Opportunity*, pp. 1–20. London, Centre for Analysis of Social Exclusion (CASE), London School of Economics and Political Science.
- Bacil, F., C. Bilo & W. Silva. 2020. Social protection coverage toolkit. Brasília and Cairo: International Policy Centre for Inclusive Growth and Food and Agriculture Organization of the United Nations Regional Office for the Near East and North Africa. <https://doi.org/10.4060/cb0>
- Bandaratillake, H.M. 2001. Impacts and effectiveness of logging bans in natural forests: Sri Lanka. In: P.B. Durst, T.R. Waggener, T. Enters & T.L. Cheng, eds. *Forests out of bounds: impacts and effectiveness of logging bans in natural forests in Asia-Pacific*, pp. 137–166. Bangkok, FAO Regional Office for Asia and the Pacific.
- Bando, G., López-Calva, L.F. & Patrinos, H.A. 2005. Child labour, school attendance and indigenous households: evidence from Mexico. World Bank Policy Research Working Paper No. 3487. Washington, DC, World Bank.
- Bandyopadhyay, S., Shyamsundar, P. & Baccini, A. 2011. Forests, biomass use and poverty in Malawi. *Ecological Economics*, 70(12): 2461–2471.
- Behrman, J.R., Godoy, R., Goodman, E., Undurraga, E.A., Leonard, W.R. & Team, T.B.S. 2011. Short-run effects of one-time, in-kind income transfers and reduction in village income inequality on well-being: results from a randomized controlled trial among native Amazonians in Bolivia. Tsimane' Amazonian Panel Study (TAPS) Working Paper No. 65. <http://heller.brandeis.edu/sustainable-international-development/tsimane/wp/TAPS-WP-65.pdf>
- Béné, C., Cannon, T., Davies, M., Newsham, A. & Tanner, T. 2014. *Social protection and climate change*. OECD Development Co-operation Working Paper No. 16. Paris, Organisation for Economic Co-operation and Development (OECD).
- Blom, B., Sunderland, T. & Murdiyarso, D. 2010. Getting REDD to work locally: lessons learned from integrated conservation and development projects. *Environmental Science and Policy*, 13(2): 164–172. <http://doi.org/10.1016/j.envsci.2010.01.002>
- Bose, I. 2010. How did the Indian Forest Rights Act 2006 emerge? IPPG Discussion Paper No. 39. Manchester, UK, University of Manchester.
- Brewin, M. 2008. Evaluation of Concern Kenya's Kerio Valley Cash Transfer Pilot (KVCTP), April–June 2008. Dublin, Concern Worldwide.

■ References

- Bradley, A. & Fortuna, S. 2021. Collective tenure rights for REDD+ implementation and sustainable development. Rome, FAO. <https://doi.org/10.4060/cb3521en>
- Byron, N. & Arnold, M. 1999. What futures for the people of the tropical forests? *World Development*, 27(5): 789–805.
- Calder, R. & Tanhchareun, T. 2014. *Informal social protection: social relations and cash transfers*. Canberra, Commonwealth of Australia, Department of Foreign Affairs and Trade.
- CENAREMA (Centre for Natural Resource Management). 2017. A diagnostic on social protection needs and opportunities for forest-dependent communities and assessment of social protection provided by forests in Kenya. (unpublished draft).
- CENAREMA, 2020. Assessment on sawn wood and wood charcoal value chains with focus on social protection for male and female forest workers and producers in Kenya. (unpublished draft).
- Chen, T. 2017. *The impact of the shea nut industry on women's empowerment in Burkina Faso*. Social Protection and Forestry Working Paper No. 3. Rome, FAO.
- Chiwona-Karltun, L., Kimanzu, N., Clendenning, J., Bergman Lodin, J., Ellingson, C., Lidestav, G., Mkwambisi, D., Mwangi, E., Nhantumbo, I., Ochieng, C., Petrokofsky, G. & Sartas, M. 2017. What is the evidence that gender affects access to and use of forest assets for food security? A systematic map protocol. *Environmental Evidence*, 6, Article 2. <https://doi.org/10.1186/s13750-016-0080-9>
- Chomitz, K.M., Buys, P., de Luca, G., Thomas, T.S. & Wertz-Kanounnikoff, S. 2007. *At loggerheads? Agricultural expansion, poverty reduction and environment in the tropical forests*. World Bank Policy Research Report. Washington, DC, World Bank.
- CIFOR (Center for International Forestry Research). 2012. Forests: gender and value chains. CIFOR Info Brief No. 49. www.cifor.org/online-library/browse/view-publication/publication/3752.html
- Cirillo, C., Györi, M. & Soares, F.V. 2017. Targeting social protection and agricultural interventions: the potential for synergies. *Global Food Security*, 12: 67–72.
- Clay, J.W., Alcorn, J.B. & Butler, J.R. 2000. *Indigenous peoples, forestry management and biodiversity conservation*. Washington, DC, World Bank.
- Corbera, E., Estrada, M., May, P., Navarro, G. & Pacheco, P. 2011. Rights to land, forests and carbon in REDD+: insights from Mexico, Brazil and Costa Rica. *Forests* 2[4]: 301–342. <http://doi.org/10.3390/f2010301>
- Clements, T. & Milner-Gulland, E.J. 2015. Impact of payments for environmental services and protected areas on local livelihoods and forest conservation in northern Cambodia. *Conservation Biology*, 29(1): 78–87. <http://doi.org/10.1111/cobi.12423>

■ References

Clements, T., Suon, S., Wilkie, D.S. & Milner-Gulland, E.J. 2014. Impacts of protected areas on local livelihoods in Cambodia. *World Development*, 64: S125–S134. <http://doi.org/10.1016/j.worlddev.2014.03.008>

CSD (Campaign for Survival and Dignity), CFRLA (Community Forest Rights Learning Group) & AIFFM (All India Forum of Forest Movements). 2020. Impact of COVID-19 outbreak and lock down measures on tribal and forest dwellers. A report for the Ministry of Tribal Affairs and other concerned Ministries, India. www.fra.org.in/document/COVID-19%20Assessment%20Report.pdf

Dahal, G.R., Larson, A.M. & Pacheco, P. 2010. Outcomes of reforms for livelihoods, forest condition and equity. In: A. Larson, D. Barry, G.R. Dahal & C.J. Pierce Colfer, eds. *Forests for people: community rights and forest tenure reform*. London & Washington, DC, Earthscan.

Dai, G., Zhang, S., Wen, C. & Li, Y. 2012. Assessment of the contribution of forestry to poverty alleviation in the People's Republic of China. In *Making forestry work for the poor: assessment of the contribution of forestry to poverty alleviation in Asia and the Pacific*, pp. 77–97. RAP Publication No. 2012/06. Bangkok, FAO Regional Office for Asia and the Pacific.

de Janvry, A., Finan, F., Sadoulet, E. & Vakis, R. 2006. Can conditional cash transfer programmes serve as safety nets in keeping children at school and from working when exposed to shocks? *Journal of Development Economics*, 79(2): 349–373.

deMarsh, P., Boscolo, M., Savenije, H., Grouwels, S., Zapata, J., Campbell, J. & Macqueen, D. 2014. *Making change happen: what can governments do to strengthen forest producer organizations*. Forest and Farm Facility Working Paper. Rome, FAO.

Devereux, S. & Sabates-Wheeler, R. 2004. *Transformative social protection*. IDS Working Paper No. 232. Brighton, UK, Institute of Development Studies (IDS).

Devereux, S. & White, P. 2010. Social protection in Africa: evidence, politics and rights. *Poverty and Public Policy*, 2(3): 53–77.

Dhir, R.K., Cattaneo, U., Cabrera Ormazá, M.V., Coronado, H. & Oelz, M. 2020. *Implementing the ILO Indigenous and Tribal Peoples Convention No. 169: Towards an Inclusive, Sustainable and Just Future*. Geneva, ILO. www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_735607.pdf

Diaz, G. 2003. Multidimensional poverty. Paper presented at the WIDER (World Institute for Development Economics Research) Conference on Inequality, Poverty and Human Well-Being, Helsinki, 30–31 May.

DRC of NFGA (Development Research Center of National Forestry and Grassland Administration). 2020. Assessment on Social Protection, Decent Work and COVID-19 Impacts and Responses for Promoting Inclusive and Resilient Forest Value chains. Beijing. (unpublished).

■ References

- DRC of NFGA. 2022. Identification and development of various poverty alleviation models based on China's experiences and practices in the forest sector. Beijing. (unpublished).
- Durst, P.B., Waggener, T.R., Enters, T. & Cheng, T.L., eds. 2001. *Forests out of bounds: impacts and effectiveness of logging bans in natural forests in Asia-Pacific*. Bangkok, FAO Regional Office for Asia and the Pacific. www.fao.org/3/x6967e/x6967e.pdf
- Elias, M. 2016. *Gendered knowledge sharing and management of Shea (Vitellaria paradoxa) in Central-West Burkina Faso*. In: C.J.P. Colfer, B.S. Basnett, B.S. & M. Elias (eds.) *Gender and Forests. Climate change, tenure, value chains and emerging issues*. New York, Routledge.
- Elias, M., Joshi, D. & Meinzen-Dick, R. 2020. Restoration for whom, by whom? A feminist political ecology of restoration. *Ecological Restoration*, 39(1–2): 3–15.
- Esteves, T., Rao, K.V., Sinha, B., Roy, S.S., Rai, B.B., Rao, I.B., Sharma, N., Rao, S., Patil, V., Murthy, I.K., Srinivasan, J., Chaturvedi, R.K., Sharma, J., Jha, S.K., Mishra, S., Singh, A.B., Rakhroy, H.S., Rai, S., Sharma, R., Schwan, S., Basu, K., Guerten, N., Porsché, I., Ranjan, N., Tripathy, K.K & Ravindranath, N.H. 2013. *Environmental benefits and vulnerability reduction through Mahatma Gandhi National Rural Employment Guarantee Scheme*. Synthesis report. New Delhi, Ministry of Rural Development & German Agency for International Cooperation (GIZ).
- FAO. 2010. *Developing effective forest policy – A guide*. FAO Forestry Paper 161. Rome. Italy. www.fao.org/3/i1679e/i1679e00.pdf
- FAO. 2011a. *Payments for ecosystem services and food security*. Rome. 281 pp. www.fao.org/3/i2100e/i2100e.pdf
- FAO. 2011b. *Reforming Forest Tenure: Issues, Principles and Process*. Rome.
- FAO. 2014a. *State of the World's Forests 2014: Enhancing the Socioeconomic Benefits from Forests*. Rome.
- FAO, 2014b. *Developing sustainable food value chains – Guiding principles*. Rome
- FAO. 2015. *The State of Food and Agriculture 2015 – Social protection and agriculture: breaking the cycle of rural poverty*. Rome.
- FAO. 2016a. *Strengthening coherence between agriculture and social protection to combat poverty and hunger in Africa – framework for analysis and action*. Rome.
- FAO. 2016b. *Forty years of community-based forestry: A review of its extent and effectiveness*. FAO Forestry Paper 176. Rome. <http://www.fao.org/3/a-i5415e.pdf>
- FAO. 2016c. *Social protection for forest-dependent communities*. Policy brief. Rome.
- FAO. 2017a. *FAO Social Protection Framework: promoting rural development for all*. Rome.
- FAO. 2017b. *Cash+: FAO's approach*. Rome.

■ References

FAO. 2017c. Combined effects and synergies between agricultural and social protection interventions: What is the evidence so far? Rome.

FAO. 2018a. *State of the World's Forests 2018 – Forest pathways to sustainable development*. Rome.

FAO. 2018b. 90 million to fight climate change: the PROEZA project in Paraguay sets new precedent [online]. Agronoticias: agriculture news from Latin America and the Caribbean, 2 February. Rome. [Cited 3 June 2020]. www.fao.org/in-action/agronoticias/detail/en/c/1104392

FAO. 2019a. *FAO framework on rural extreme poverty – towards reaching Target 1.1 of the Sustainable Development Goals*. Rome.

FAO. 2019b. Sub-regional workshop on social protection for forest-dependent communities in East Africa held in Dar es Salaam on 8 and 9 November 2018. Rome. www.fao.org/forestry/social-protection/93923/en

FAO. 2020a. Impact of COVID-19 on informal workers. Brief, 7 April. Rome. www.fao.org/3/ca8560en/CA8560EN.pdf

FAO. 2020b. Global Forest Resources Assessment 2020 – Key findings. Rome. <https://doi.org/10.4060/ca8753en>

FAO. 2020c. *The contribution of social protection to economic inclusion in rural areas*. Rome. www.fao.org/3/cb2458en/CB2458EN.pdf

FAO, 2021a. "EU and FAO call for the transformation of agri-food systems. Leaders spoke of continued partnership at the 2021 Strategic Dialogue. 6 May 2021. Rome. www.fao.org/news/story/en/item/1397898/icode

FAO. 2021b. *Strategic Framework 2022–2031*. Rome. www.fao.org/3/cb7099en/cb7099en.pdf

FAO. 2021c. *The Director-General's Medium Term Plan 2022-25 and Programme of Work and Budget 2022-23*. Rome. www.fao.org/3/ne576en/ne576en.pdf

FAO. 2022a. The State of the World Forests. Green Recovery, Building Inclusive & Sustainable Green Economies. Rome. www.fao.org/documents/card/en/c/cb9360en

FAO. 2022b. FRA 2020 Remote Sensing Survey. FAO Forestry Paper No. 186. Rome. www.fao.org/3/cb9970en/cb9970en.pdf

FAO. n.d.a. Climate Change. Helping countries comply with the Paris Agreement's Enhanced Transparency Framework. Rome. www.fao.org/climate-change/our-work/what-we-do/transparency/en

FAO. n.d.b. Climate Smart Agriculture Sourcebook. Rome. www.fao.org/climate-smart-agriculture-sourcebook/concept/module-a2-adaptation-mitigation/chapter-a2-3/en

■ References

- FAO. n.d.c. Social Protection and Forestry. Expert meeting to discuss the draft guiding framework for strengthening coherence between forestry and social protection for forest-dependent communities. 5–6 June 2019. Rome. www.fao.org/forestry/social-protection/97504/en
- FAO & AgriCord. 2012. *Strength in numbers: effective forest producer organizations*. Rome.
- FAO & AgriCord. 2016. *Forest and farm producer organizations – operating systems for the Sustainable Development Goals (SDGs): strength in numbers*. Rome.
- FAO & CPF (Collaborative Partnership on Forests). 2019. Expert Workshop in support of the CPF Joint Initiative on streamlining forest related reporting: strengthening the global core set of forest-related indicators to support the implementation of the 2030 Agenda and the UN Strategic Plan for Forests. Co-chairs summary report. Rome, 22–24 October 2019.
- FAO & CPF. 2022. Status of, and trends in, the global core set of forest-related indicators. Rome, FAO. <https://doi.org/10.4060/cb9963en>
- FAO & UNEP (United Nations Environment Programme). 2020. *The State of the World's Forests 2020 – forests, biodiversity and people*. Rome. <https://doi.org/10.4060/ca8642en>
- Fernald, L.C. & Hidrobo, M. 2011. Effect of Ecuador's cash transfer program (Bono de Desarrollo Humano) on child development in infants and toddlers: a randomized effectiveness trial. *Social Science and Medicine*, 72(9): 1437–1446.
- Ferraro, P.J. & Simorangkir, R. 2020. Conditional cash transfers to alleviate poverty also reduced deforestation in Indonesia. *Sci Adv*. 6(24): 12 June 2020. eaaz1298. doi: 10.1126/sciadv.aaz1298
- Fisher, R., Srimongkontip, S. & Veer, C. 1997. People and Forests in Asia and the Pacific: Situation and Prospects. Asia-Pacific Forestry Sector Outlook Study, Working Paper No. APFSOS/WP/27. Rome.
- Fisher, R.J., Srimongkontip, S. & Veer, C. 1997. People and forests in Asia and the Pacific: situation and prospects. Asia-Pacific Forest Sector Outlook Study Working Paper No. APFSOS/WP/27. Rome & Bangkok, FAO.
- Forest Research Institute. 2006. Forest works manual and schedule of rates for forestry related works in Uttarakhand under the Mahatma Gandhi National Rural Employment Guarantee Act. Dehradun, India.
- Gentilini, U., Almenfi, M., Orton, I. & Dale, P. 2020. Social protection and jobs response to COVID-19: a real-time review of country measures. (unpublished).
- Gioli, G., Thapa, G., Khan, F., Dasgupta, P., Nathan, D., Chhetri, N., Adhikari, L., Mohanty, S.K., Aurino, E. & Scott, L.M. 2019. Understanding and tackling poverty and vulnerability in mountain livelihoods in the Hindu Kush Himalaya. In: P. Wester, A. Mishra, A. Mukherji & A.B. Shrestha, *The Hindu Kush Himalaya Assessment*, pp. 421–455. Cham, Switzerland, Springer.

■ References

- Glewwe, P. & Kassouf, A.L. 2012. The impact of the Bolsa Escola/Familia conditional cash transfer program on enrollment, dropout rates and grade promotion in Brazil. *Journal of Development Economics*, 97(2): 505–517. <http://doi.org/10.1016/j.jdeveco.2011.05.008>
- Gomes, C. 2013. Family, poverty and inequalities in Latin America and the Caribbean. *Sociology Mind*, 3(1): 25–31. <http://doi.org/10.4236/sm.2013.31005>
- Grainger, A., & Konteh, W. (2007). Autonomy, ambiguity and symbolism in African politics: the development of forest policy in Sierra Leone. *Land Use Policy*, 24(1), 42-61.
- Guedes, G.R., VanWey, L.K., Hull, J.R., Antigo, M. & Barbieri, A.F. 2014. Poverty dynamics, ecological endowments and land use among smallholders in the Brazilian Amazon. *Social Science Research*, 43: 74–91. doi: 10.1016/j.ssresearch.2013.09.002
- Hajjar, R., Cheek, J.Z., Jagger, P., Kamoto, J., Newton, P., Oldekop, J. & Razafindratsima, O.H. 2021. Research frontiers on forests, trees, and poverty dynamics. *Forest Policy and Economics*, 131: 102554. <https://doi.org/10.1016/j.forpol.2021.102554>.
- Hanna, R. & Karlan, D. 2017. Designing social protection programs: using theory and experimentation to understand how to help combat poverty. In: A.V. Banerjee & E. Duflo, eds. *Handbook of Economic Field Experiments*, pp. 515–553. Amsterdam, North-Holland.
- Hardin, G. 1968. The tragedy of the commons. *Science*, 162(3859): 1243–1248.
- Harman, L. 2016. Cross-sector insights into the challenges of targeting and crowding-out in agricultural and health voucher subsidy schemes: an economic analysis. Doctoral dissertation. London, University of London, School of Oriental and African Studies (SOAS).
- Hevia-Pacheco, P. & Vergara-Camus, L. 2013. Addressing intersecting inequalities: inclusive political regimes, democratically elected left-wing governments – the cases of Brazil and Ecuador. London. www.chronicpoverty.org/s/LAmerica-Left-Wing-Regimes-Hevia_Vergara_2013.doc
- Hughes, R. & Flintan, F. 2001. *Integrating conservation and development experience: a review and bibliography of the ICDP literature*. London, International Institute for Environment and Development (IIED).
- Ickowitz, A., McMullin, S., Rosenstock, T., Dawson, I., Rowland, D., Powell, B., Mausch, K. et al.. 2022. Transforming food systems with trees and forests. *The Lancet Planetary Health*, 6(7), e632-e639. [https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(22\)00091-2/fulltext](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(22)00091-2/fulltext)
- IFAD (International Fund for Agricultural Development), 2019. *IFAD's engagement in pro-poor value chain development*. Rome.
- ILO (International Labour Organization). 2014. *Addressing the global health crisis: universal health protection policies*. Social Protection Policy Papers No. 13. Geneva.

■ References

- ILO. 2017. *World Social Protection Report: Universal social protection to achieve the Sustainable Development Goals, 2017–19*. Geneva.
- ILO. 2018a. National Pension Scheme Authority (NAPSA) of Zambia signs Memorandum of Understanding with seven (7) informal sector associations [online]. Press release, 22 August 2018. Geneva. [Cited 24 June 2020]. www.ilo.org/africa/media-centre/pr/WCMS_644052
- ILO. 2018b. Social protection for indigenous peoples. Social Protection for All Issue Brief. Geneva.
- ILO. 2021. World Social Protection Report 2020-22: Social protection at the crossroads - in pursuit of a better future. Geneva.
- ILO. International Training Centre (ITC). n.d. Social Protection: Africa's Hope for Achieving the Sustainable Development Goals Launch of the Regional Strategy for Accelerating Social Protection Coverage in Africa 16–17 November 2021. Geneva. <https://www.itcilo.org/events/social-protection-africas-hope-achieving-sustainable-development-goals>
- ILO & FAO. 2021. *Effectively extending social protection to rural populations: Perspectives for a common FAO and ILO approach*. Geneva. <https://doi.org/10.4060/cb2332en>
- International Tree Foundation. 2017. Cultivating potatoes, growing a forest [online]. Oxford. [Cited 24 June 2020]. <http://internationaltreefoundation.org/cultivating-potatoes-growing-forest>
- IPCC (Intergovernmental Panel on Climate Change). 2022. Climate Change 2022: Impacts, Adaptation and Vulnerability. Working Group II Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, Summary for Policymakers. Geneva. https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf
- Jagger, P., Cheek, J.Z., Miller, D.C., Ryan, C., Shyamsundar, P. & Sills, E. 2021. Forest-poverty dynamics: towards an enhanced understanding of the contribution of forests and trees to poverty alleviation. *Forest Policy and Economics*, 131.
- Jindal, R., Kerr, J.M. & Carter, S. 2012. Reducing poverty through carbon forestry? Impacts of the N'hambita Community Carbon Project in Mozambique. *World Development*, 40(10): 2123–2135.
- Katila, P., Pierce Colfer, C., De Jong, W., Galloway, G., Pacheco, P. & Winkel, G., eds. 2019. Sustainable Development Goals: Their Impacts on Forests and People. Cambridge, Cambridge University Press. doi: 10.1017/9781108765015
- Kazoora, C., Acworth, J., Tondo, C. & Kazungu, B. 2006. *Forest-based associations as drivers for sustainable development in Uganda*. Discussion paper. London, Sustainable Development Centre, Uganda & International Institute for Environment and Development (IIED).

■ References

Kugler, A.D. & Rojas, I. 2018. Do CCTs improve employment and earnings in the very long-term? Evidence from Mexico. NBER Working Paper No. 24248. Cambridge, Massachusetts, USA, National Bureau of Economic Research (NBER).

Kuriakose, A.T., Heltberg, R., Wiseman, W., Costella, C., Cipryk, R. & Cornelius, S. 2013. Climate-responsive social protection. *Development Policy Review*, 31(s2): o19–o34. <https://doi.org/10.1111/dpr.12037>

Landell-Mills, N. & Porras, I.T. 2002. *Silver bullet or fools' gold? A global review of markets for forest environmental services and their impact on the poor*. London, International Institute for Environment and Development (IIED).

Leite, P., George, T., Sun, C., Jones, T. & Lindert, K. 2017. *Social registries for social assistance and beyond: a guidance note and assessment tool*. Washington, D.C., World Bank.

Liu, C. & Wu, B. 2010. 'Grain for Green Programme' in China: policy making and implementation. Policy Briefing Series No. 60. Nottingham, UK, University of Nottingham, China Policy Institute.

Lwanga-Ntale, C. 2018. *A diagnostic on social protection needs and opportunities for forest-dependent communities in the United Republic of Tanzania*. Forestry Working Paper No. 6. Rome, FAO.

Maraseni, T.N., Neupane, P.R., Lopez-Casero, F. & Cadman, T. 2014. An assessment of the impacts of the REDD+ pilot project on community forests user groups (CFUGs) and their community forests in Nepal. *Journal of Environmental Management*, 136: 37–46.

Marfo, E. 2009. *Security of tenure reforms and community benefits under collaborative forest management arrangements in Ghana*. Accra, CIFOR & Forestry Research Institute of Ghana (FORIG).

Mayers, J. & Vermeulen, S. 2003. Challenges, innovations and principles for multi-scale partnerships between forestry companies and local communities. Congress on *Globalisation, localisation and tropical forest management in the 21st century*. Amsterdam, 22–23 October 2003. https://moam.info/congress-on-globalisation-localisation-and-tropical-_59abc0c11723ddb9c5112aa8.html

Mehta, A.K. & Shah, A. 2003. Chronic poverty in India: incidence, causes and policies. *World Development*, 31(3): 491–511.

Merlet, M. & Fraticelli, M. 2016. *Protecting forests, improving livelihoods – comparing community forestry in Cameroon and Guatemala*. Moreton-in-Marsh, United Kingdom, FERN.

Mideros Mora, A. & Gassmann, F. 2017. Fostering social mobility: the case of the 'Bono de Desarrollo Humano' in Ecuador. Working Paper Series 2017-002. Maastricht, The Netherlands, UNU-MERIT.

■ References

- Molyneux, M. & Thomson, M. 2011. Cash transfers, gender equity and women's empowerment in Peru, Ecuador and Bolivia. *Gender and Development*, 19(2): 195–212. <http://doi.org/10.1080/13552074.2011.592631>
- Newton, A. & Elliott, M. 2016. A typology of stakeholders and guidelines for engagement in transdisciplinary, participatory processes. *Frontiers in Marine Science*, 3: 230.
- Newton, P., Miller, D.C., Agrawal, A. & Byenkya, M. 2016. Who are forest-dependent people? A taxonomy to aid livelihood and land use decision-making in forested regions. *Land Use Policy*, 57: 388–395.
- Newton, P., Castile, S.E., Kinzer, A.T., Miller, D.C., Oldekop, J. A., J.A., Linhares-Juvenal, T., Pina, L., Madrid, M. & de Lamo, J. 2022. *The number of forest- and tree-proximate people – A new methodology and global estimates*. Rome, FAO.
- NFGA (The National Forestry and Grassland Administration). 2020. Twenty Years' Restoration of Forests and Grasslands from Farmland in China.
- OECD (Organisation for Economic Co-operation and Development). 2013. Handbook for Fisheries Managers: Principles and Practice for Policy Design. Paris.
- OECD & ILO. 2019. *Tackling vulnerability in the informal economy*. Development Centre Studies. Paris, OECD Publishing.
- Oyono, P., Samba, S. & Biyong, M. 2012. Beyond the decade of policy and community euphoria: the state of livelihoods under new local rights to forest in rural Cameroon. *Conservation and Society*, 10(2): 173–181. <http://doi.org/10.4103/0972-4923.97489>
- Pagiola, S., Arcenas, A. & Platais, G. 2005. Can payments for environmental services help reduce poverty? An exploration of the issues and the evidence to date from Latin America. *World Development*, 33(2): 237–253. <http://doi.org/10.1016/j.worlddev.2004.07.011>
- Pattanayak, S.K., Wunder, S. & Ferraro, P.J. 2010. Show me the money: do payments supply environmental services in developing countries? *Review of Environmental Economics and Policy*, 4(2): 254–274.
- Perevochtchikova, M. & Vásquez, A. 2010. Impacto del programa de pago por servicios ambientales hidrológicos en suelo de conservación del D.F., México. Paper prepared for the X Reunión Nacional de Investigación Demográfica en México, Sociedad Mexicana de Demografía (SOMEDE), Mexico City, 3–6 November.
- Persson, U.M. & Alpizar, F. 2013. Conditional cash transfers and payments for environmental services: a conceptual framework for explaining and judging differences in outcomes. *World Development* 43, pp. 124–137. <https://www.sciencedirect.com/science/article/abs/pii/S0305750X12002501>

■ References

- Piperata, B.A., Spence, J.E., Da-Gloria, P. & Hubbe, M. 2011. The nutrition transition in Amazonia: rapid economic change and its impact on growth and development in Ribeirinhos. *American Journal of Physical Anthropology*, 146(1): 1–13. <http://doi.org/10.1002/ajpa.21459>
- PGIS (Participatory Geographic Information Systems). 2010. Our forest, our dignity. Forest-dependent indigenous peoples voice their rights for existence and call for recognition of their cultural heritage and indigenous knowledge [online]. 22 October. [Cited 24 June 2020]. <http://participatorygis.blogspot.com/2010/10/our-forest-our-dignity-forest-dependent.html>
- RECOFTC. 2013. *Community forestry in Asia and the Pacific: pathway to inclusive development*. Bangkok.
- Riveros, J.C., Hofstede, R., Granizo, T., Maretti, C.C. & Oliveira, D. 2014. Protected areas and indigenous territories of the Amazon – five decades of change (1960–2012). WWF Living Amazon Initiative report (internal draft).
- Rodríguez, L.C., Pascual, U., Muradian, R., Pazmino, N. & Whitten, S. 2011. Towards a unified scheme for environmental and social protection: learning from PES and CCT experiences in developing countries. *Ecological Economics*, 70(11): 2163–2174. <http://doi.org/10.1016/j.ecolecon.2011.06.019>
- Rosa da Conceição, H. 2014. Conditional cash transfers in the context of social welfare and environmental incentive-based public policies. Bonn, Germany, Centre for Development Research, University of Bonn. www.bmu-cbc.org.pe/admin/assets/uploads/files/07ddd-Conditional_Cash_Transfers.pdf
- Schmitt, V., Paienjtou, Q. & De, L. 2014. UNDG Asia-Pacific social protection issues brief. Bangkok, ILO Regional Office for Asia and the Pacific.
- Schwartz, Chris. 2019. Culture and Survival. After 30 Years, Only 23 Countries Have Ratified Indigenous and Tribal Peoples Convention ILO 169. 5 June 2019. www.culturalsurvival.org/news/after-30-years-only-23-countries-have-ratified-indigenous-and-tribal-peoples-convention-ilo
- Shah, G. 2007. The condition of Muslims. *Economic and Political Weekly*, 42(10): 836–839.
- Shepherd, G. 2012. Rethinking forest reliance: findings about poverty, livelihood resilience and forests from IUCN's "livelihoods and landscapes" strategy. Landscape Papers 1. IUCN, Gland Switzerland
- Shively, G., Jagger, P., Sserunkuuma, D., Arinaitwe, A. & Chibwana, C. 2010. Profits and margins along Uganda's charcoal value chain. *International Forestry Review*, 12(3): 270–283.
- Shyamsundar, P., Ahlroth, S., Kristjanson, P. & Onder, S. 2020. Supporting pathways to prosperity in forest landscapes – a PRIME Framework. *World Development*, 125: 104622.

■ References

- Sims, K.R.E. 2010. Conservation and development: evidence from Thai protected areas. *Journal of Environmental Economics and Management*, 60(2): 94–114. <http://doi.org/10.1016/j.jeem.2010.05.003>
- Ssanyu, R. 2017. *A mapping of social protection needs and opportunities for forest-dependent communities in Uganda*. Social Protection and Forestry Working Paper No. 2. Rome, FAO.
- Sunderlin, W.D., Dewi, S., Puntodewo, A., Müller, D., Angelsen, A. & Epprecht, M. 2008. Why forests are important for global poverty alleviation: a spatial explanation. *Ecology and Society*, 13(2): 24.
- Tirivayi, N. 2017. *Social protection for building the resilience of forest-dependent people: evidence, linkages, practices and potential applications*. Social Protection and Forestry Working Paper No. 1. Rome, FAO.
- Tirivayi, N., Nennen, L. & Tesfaye, W. 2018. *The Role of Forest Producer Organizations in Social Protection*. Forestry Working Paper No. 7. Rome, FAO. www.fao.org/3/ca0370en/CA0370EN.pdf
- Tirivayi, N., Nennen, L., Tesfaye, W. & Ma, Q. 2018. The benefits of collective action: Exploring the role of forest producer organizations in social protection. *Forest Policy and Economics*, 90: 106–114.
- Turner, S., Critchley, W., Hassan, F. & Loveday, L. 2016. *An evaluation of WFP's asset creation programme in Kenya's arid and semi-arid areas 2009 to 2015*. Nairobi, World Food Programme Kenya.
- Uchida, E., Xu, J., Xu, Z. & Rozelle, S. 2007. Are the poor benefiting from China's land conservation programme? *Environment and Development Economics*, 12(4): 593. <http://doi.org/10.1017/S1355770X07003713>
- Ulrichs, M. & Roelen, K. 2012. Equal opportunities for all? A critical analysis of Mexico's Oportunidades. IDS Working Paper 413. Brighton, United Kingdom, Institute of Development Studies (IDS).
- Undurraga, E., Zycherman, A., Yiu, J., Behrman, J.R., Leonard, W.R. & Godoy, R.A. 2014. Gender targeting of unconditional income transfers and child nutritional status: experimental evidence from the Bolivian Amazon. Working paper. Philadelphia, USA, University of Pennsylvania. http://repository.upenn.edu/gcc_economic_returns/12
- UNESCO (United Nations Educational, Scientific and Cultural Organization). 2011. Colombo Declaration. Forum of Ministers in Charge of Social Development from South Asia, Colombo, Sri Lanka, 20–22 February 2011.
- Vinci, I., Djeddah, C. & Hani, M. 2016. *Local solutions to social protection: the role of rural organizations*. Rome, FAO.

■ References

- Wang, W.L., Xie, C., Fan, L.S, Zhang, K., Zeng, Y.Q., Zhou, Y.T., Dai, H.C. & Lin, H. 2020. A report of piloting social protection indicators in China's Southern Collective Forestry Region. (unpublished).
- Wong, G. 2014. The experience of conditional cash transfers – lessons for REDD+ benefit sharing. CIFOR Policy Brief No. 97. Bogor, Indonesia.
- World Bank. 2009. Gender in Agriculture Source Book. Washington, DC.
- World Bank. 2018. Transforming the delivery of social protection services. Results Briefs. 30 January. Washington DC. [Cited 24 June 2020]. www.worldbank.org/en/results/2018/01/30/transforming-the-delivery-of-social-protection-services
- WFP (World Food Programme). 2012. Standard Project Report 2012: Protecting and Rebuilding Livelihoods in Arid and Semi Arid Areas. Rome.
- Wunder, S. 2008. Payments for environmental services and the poor: concepts and preliminary evidence. *Environment and Development Economics*, 13(3): 279–297. <http://doi.org/10.1017/S1355770X08004282>
- Wunder, S., Börner, J., Shively, G. & Wyman, M. 2014. Safety nets, gap filling and forests: a global-comparative perspective. *World Development*, 64: 529–542.
- WWF (World Wildlife Fund) 2020. Forests. [Cited 26 June 2020]. Washington, DC, World Wildlife Fund. www.worldwildlife.org/initiatives/forests
- Xie, C., Zhao, J., Liang, D., Bennett, J., Zhang, L., Dai, G. & Wang, X. 2006. Livelihood impacts of the conversion of cropland to forest and grassland programme. *Journal of Environmental Planning and Management* 49(4): 555–570.
- Xie, C. 2017. *Links between social protection and forestry policies: lessons from China*. Social Protection and Forestry Working Paper No. 4. Rome, FAO.
- Xie, C., Zhang, K., Wang, J., Jiang, X. & Hu, Y. 2017. Expanding the coverage of social protection and strengthening the coherence of forest policies and programmes in rural collective forestry – a case study from Luocheng County of Guangxi Province. (unpublished).
- Xu, J., Tao, R., Xu, Z. & Bennett, M.T. 2010. China's Sloping Land Conversion Program: does expansion equal success? *Land Economics*, 86(2): 219–244.
- Yao, S., Guo, Y. & Huo, X. 2009. An empirical analysis of the effects of China's land conversion program on farmers' income growth and labour transfer. In: R. Yin, ed. *An integrated assessment of China's ecological restoration programmes*, pp. 159–173. The Hague, the Netherlands, Springer.

For more information, please contact:

Forestry Division - Natural Resources and Sustainable Production
E-mail: NFO-Publications@fao.org
Web address: www.fao.org/forestry/en

Food and Agriculture Organization of the United Nations
Rome, Italy

