



Food and Agriculture
Organization of the
United Nations

Approaches for ecosystem based adaptation in forestry

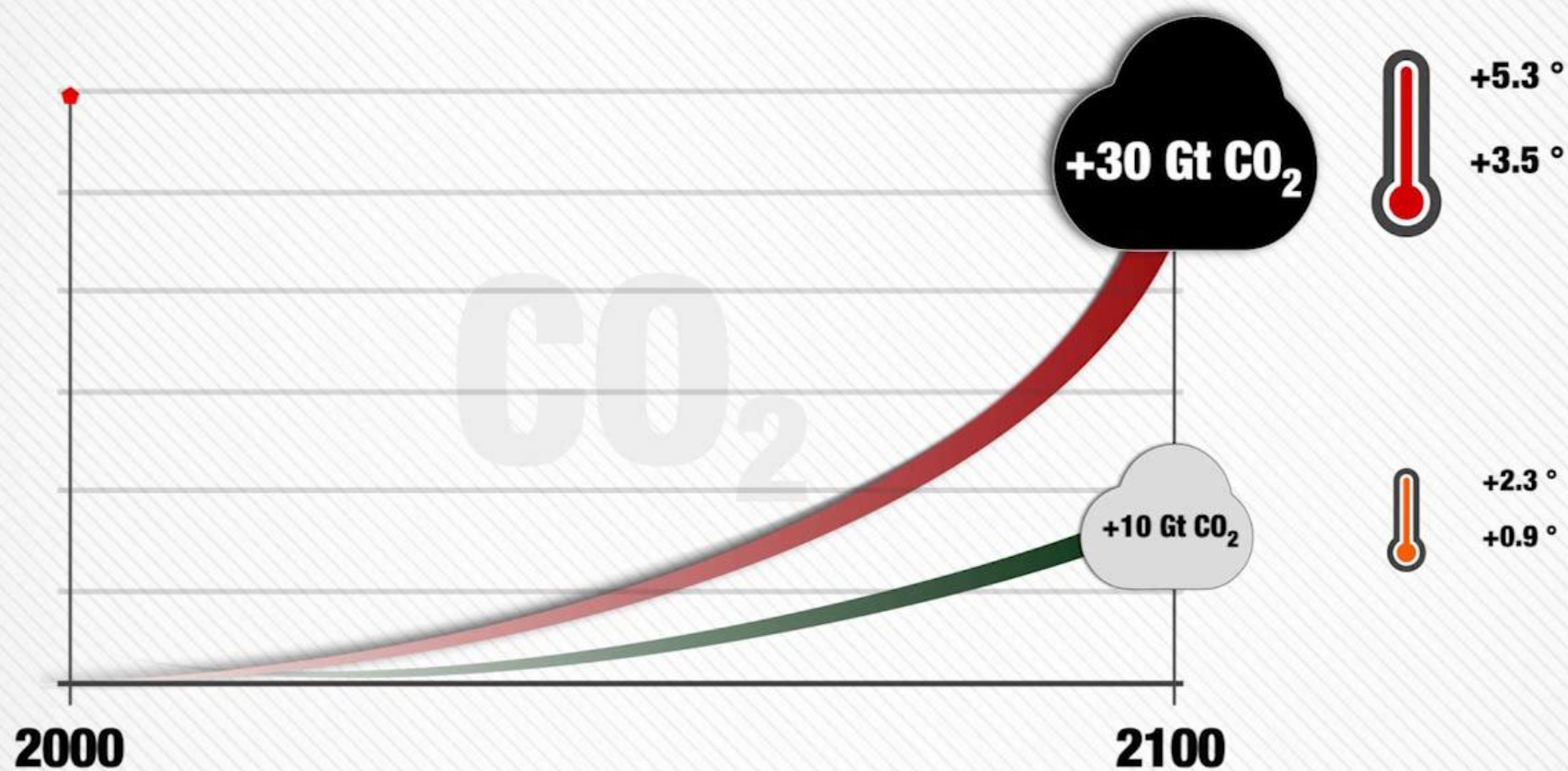
Simmone Rose
Forestry Officer – Climate Change
FAO

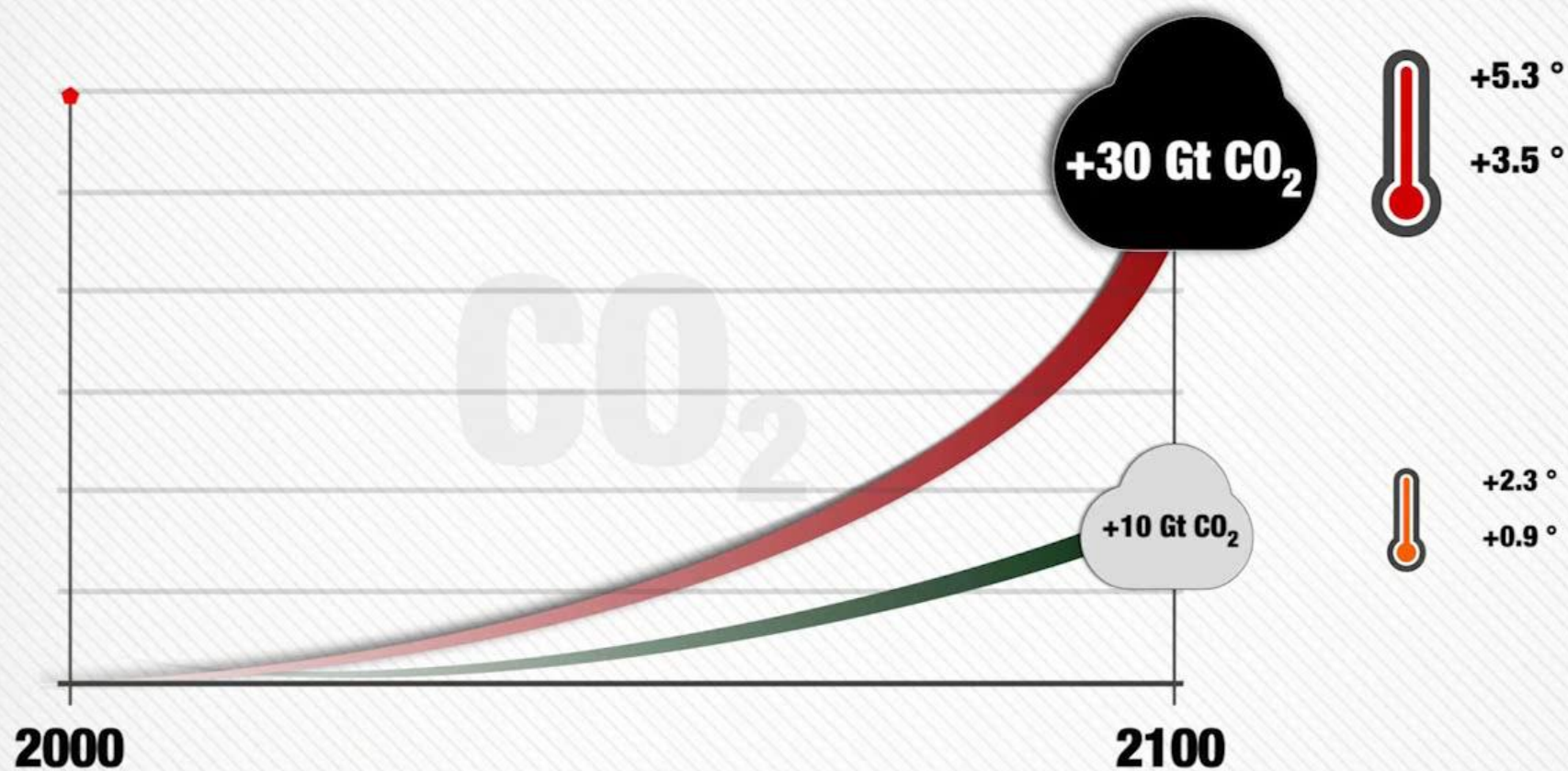
23/October/ 2018



Food and Agriculture
Organization of the
United Nations









Food and Agriculture
Organization of the
United Nations

Why are forests and trees important?

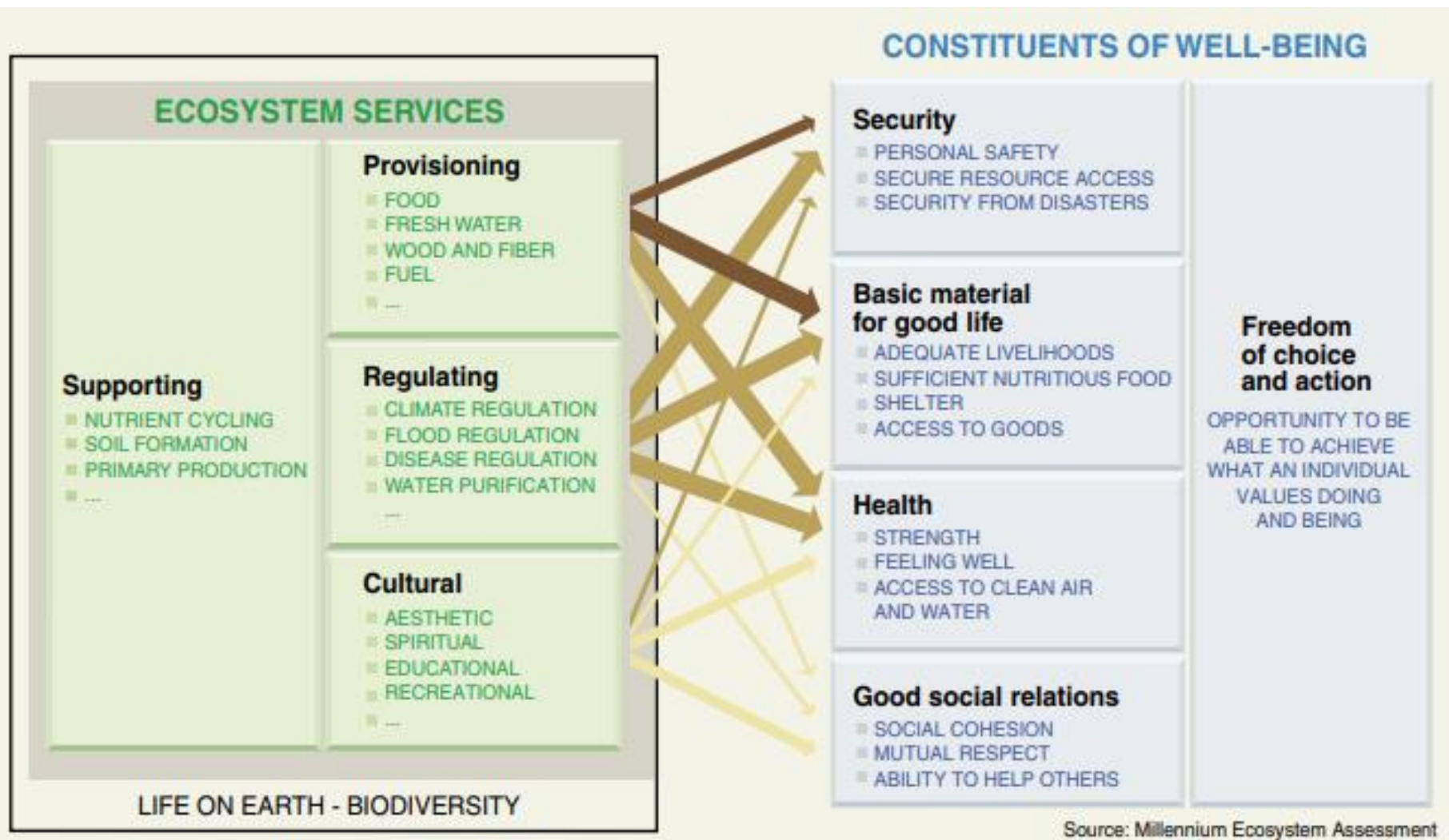
- 1.6 billion people depend on forests/trees for most or some of their livelihoods
- >2 billion people rely on biofuels for cooking/heating
- Bushmeat is a significant protein source for 150 million people
- Forests provide 10 million jobs and informal incomes for 30-50 million people in developing countries
- Forests are home to 80% of terrestrial biodiversity
- Forest ecosystem services are essential for food security and health





Food and Agriculture
Organization of the
United Nations

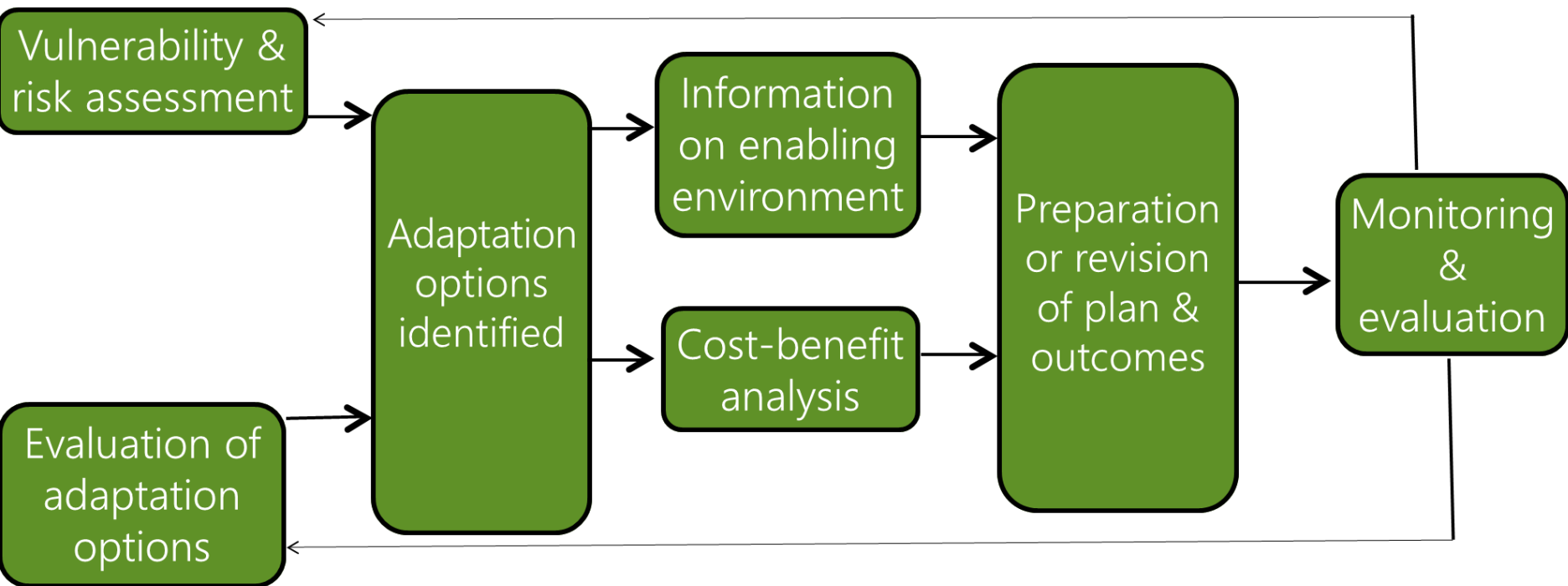
Why are forests and trees important?





Food and Agriculture
Organization of the
United Nations

Integrating adaptation





Food and Agriculture
Organization of the
United Nations

Adaptation approaches in sync





Food and Agriculture
Organization of the
United Nations

Recommended adaptation approaches in forestry

Adaptation of forests

(Forest management interventions)

- improve resilience through “best practices”
- adapt management plans and practices to increase resilience, reduce risks and adapt to changes
- in-situ and ex-situ genetic conservation

Adaptation using forests

(Forestry measures to decrease vulnerabilities of people)

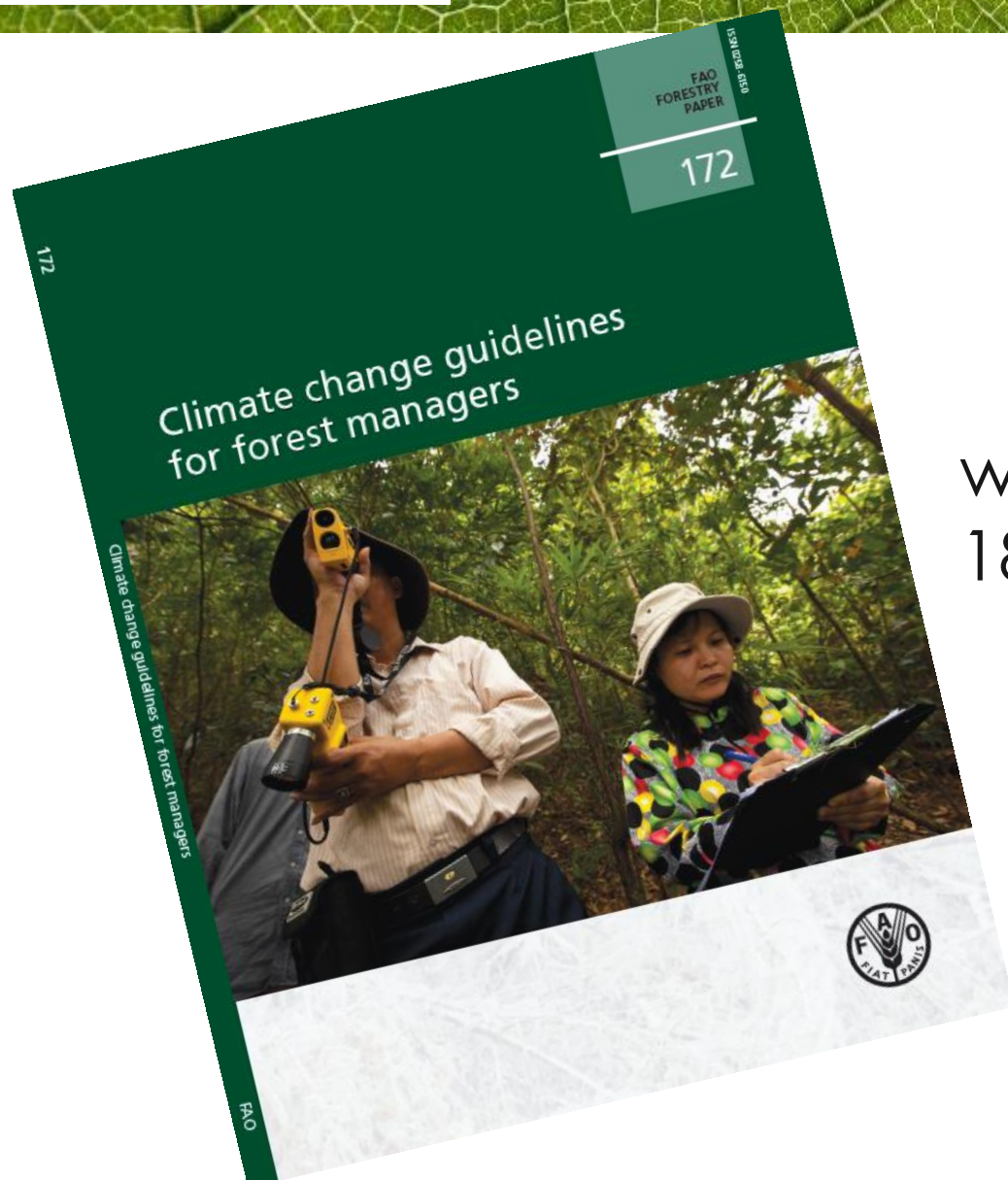
- diversify rural incomes & support establishment of SMFEs
- reinforce coping strategies & maintain access to forests as “safety nets”
- “rights based approach” to adaptation measures incl. tenure rights
- strengthen local (incl. participatory & community-based) governance





Food and Agriculture
Organization of the
United Nations

FAO guidance








www.fao.org/docrep/018/i3383e/i3383e00.htm



Recommended adaptation approaches in forestry (2)

- FOREST PRODUCTIVITY: recommended adaptation actions
- BIODIVERSITY: recommended adaptation actions
- WATER AVAILABILITY AND QUALITY: recommended adaptation actions
- FIRE: recommended adaptation actions
- PESTS AND DISEASES: recommended adaptation actions
- EXTREME WEATHER EVENTS: recommended adaptation actions
- SEA-LEVEL RISE: recommended adaptation actions
- SOCIAL CONSIDERATIONS: recommended adaptation actions
- ECONOMIC CONSIDERATIONS: recommended adaptation actions
- INSTITUTIONAL CONSIDERATIONS: recommended adaptation actions

CLIMATE CHANGE IMPACTS AND RISKS	MANAGEMENT ACTIONS	RESPONSIBILITY
New climate change policies and strategies that create new obligations and opportunities for forest managers	Remain well informed on policy changes and their implications for forest management through public information sources, direct contact with forestry officials, and forest producer and trade associations	  
	Work through forest associations and other means to provide information to policy-makers on the impacts of climate change and climate change policy responses on forest management, with the aim of influencing decision-making	 



Food and Agriculture
Organization of the
United Nations

Adaptation approaches to support other sectors – crops & livestock

- Promote agroforestry & farm forestry for income diversification
- Restore degraded agricultural lands through reforestation and land restoration
- Maintain and enhance trees for fodder supply
- Allow sustainable use of forest products off-farm
- Watershed management and, on-farm, soil and water conservation measures





Food and Agriculture
Organization of the
United Nations

Adaptation approaches to support other sectors – water

- Maintain and increase tree cover on vulnerable upper watersheds
- Protect water courses (riparian strips)

Adaptation approaches to support other sectors – energy

- Management and sustainable use of woodfuels
- Improved conversion to charcoal
- Improved woodstoves





Food and Agriculture
Organization of the
United Nations

Adaptation approaches to support urban areas and coastal zones

- Urban forests and trees in cities regulate temperature and water
- Coastal ecosystems (e.g. mangrove forests) protect these vulnerable areas from extreme events and sea level rise





Targeting the most vulnerable

✓ **Women**

- Support collection and marketing of NWFPs
- Increase and improve management of fuelwood supply
- Improve woodstoves
- Support agroforestry development in home gardens
- Ensure access to forest-sourced traditional medicines

✓ **Indigenous people**

- Support small & medium sized forest enterprise dev.
- Recognize rights and access to resources

✓ **Mountain, dryland and coastal dwellers**





In conclusion

- Forests are critical for increasing human and ecosystem resilience
- Climate change represents additional challenges to forests
- Adaptation needs to be mainstreamed into forest policies
- Forest and trees should be adequately reflected in adaptation policies





Food and Agriculture
Organization of the
United Nations

THANK YOU!

FOR MORE INFORMATION

WWW.FAO.ORG/FORESTRY