International Union for Conservation of Nature

Wood energy, sustainable land use & forest management at landscape scale

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IUCN's forest focus

- The Global Forest Program of IUCN supports the forest-related activities of the Union, including its Members and Commissions.

- Works with communities, government agencies, NGOs and businesses, to enable and support locally-driven, sustainable measures that will improve forest management, and deliver multiple benefits to people

Strong focus of IUCN's work on
- Nature-based solutions in support of SDGs
- Rights-based approaches
- Dependence on nature: Understanding and addressing the multiple people-nature interrelations

GFCCP pillars of work

Forest Landscape Restoration (FLR)

- ROAM – policy & institutional analysis (local empowerment and benefits)

- Identifying the role of local institutions as central to delivering FLR

- Asia Farmers Association – exploring opportunities for smallholders, communities, Indigenous Peoples to engage in FLR

Locally controlled forestry

- Working with private investors, donors to mainstream private and public funding into LCF (community, Indigenous Peoples, Smallholders)

- Support Forest & Farm Producer Organisations as a platform for improved investment and policy voice, this as part of the FFF work with FAO and other partners

REDD+

- Facilitating processes & frameworks that clarify, recognize, secure and guarantee long-term enjoyment of substantive and procedural rights

- Piloting improved landscape NR governance frameworks and incentive arrangements that are rights and pro-poor oriented

- Policy advocacy and influence to integrate rights and pro-poor considerations in the design and delivery of policies and strategies

Rights-based approaches

Why wood energy matters

- Poverty and lack of economic options make forest lost unavoidable (GPFLR)

- Estimated more than 1.4 billion people globally lack access to modern energy sources (IUCN)

- An estimated 2.7 billion people – or 40% of the world population – depends on traditional biomass energy sources such as firewood (IUCN)

- Forest management interventions tend to deprive the poor from access to and control on wood energy sources that are vital for their daily immediate needs

Forest Landscape Restoration: a solution to wood energy

- Unstainable extraction of wood for fuel wood is a driver of forest degradation, but also an opportunity for FLR

- A mix of interventions from a landscape perspective is more effective than treating it just as forest or agriculture issues

- When included into FLR, REDD+ and rehabilitation programmes:
  - Wood energy production can be a profitable option for farmers to invest in

- The main advantage of FLR approach in addressing wood energy issues is:
  - the stakeholder process to identify enabling conditions associated with local and national government structures,
  - The focus on securing land tenure, and formalizing the value chain

Principles and advantages of FLR

1. Restoration of **entire landscapes** rather than sites to balance a mosaic of interdependent land uses
2. A forward looking approach to restore the **functionality of the landscape**
3. Aim to generate a **suite of ecosystem goods and services** from a range of restoration activities
4. Actively **engage local stakeholders** in decisions regarding goals, implementation methods and trade-offs
5. Consider a wide range of eligible **technical strategies** for restoring trees on the landscape.
6. Adapt strategies to fit local **social, economic and ecological contexts**
7. Adapt strategies to changes in **human knowledge and societal values**
8. Address ongoing loss and conversion of **primary and secondary natural forest**

FLR interventions with high wood energy potential

Land without trees
1. Planted forests and woodlots
OR 2. Natural regeneration

Planting of trees on formerly forested land: Native species or exotics and for various purposes, fuelwood, timber, building, poles, fruit production, etc.

Degraded forests
3. Silviculture

Enhancement of existing forests and woodlands of diminished quality and stocking

Land under permanent management
4. Agroforestry

Enhancement of existing forests and woodlands of diminished quality and stocking

Land under intermittent management
5. Improved fallow

Establishment and management of trees on fallow agricultural land to improve productivity

Degraded mangroves
6. Mangrove restoration

Establishment or enhancement of mangroves along coastal areas and in estuaries

Other protected land or buffer
7. Watershed protection and erosion control

Establishment and enhancement of forests on very steep sloping land, along water courses, in areas that naturally flood and around critical water bodies

Knowledge and Tools for Forest Landscape Restoration Project (KNOW-FOR) (1)

A Restoration Opportunities Assessment Methodology (ROAM)

- ROAM is a flexible and cost-effective analytic process for identifying restoration opportunities at national levels, as well as describing how those opportunities relate to food, water, and energy security

Forest restoration prioritization tool (ROOT)

- IUCN is working with the Natural Capital Project to develop a tool to identify forest restoration activities that minimize costs and maximize benefits (e.g., enhancement of biodiversity, local livelihoods, water supply and other natural goods and services)

Application of a land degradation surveillance framework (LDSF) to assess opportunities for restoration of farm fallows and pastures

- We pilot tested LDSF tool in Uganda and Peru with ICRAF to know when and where farmland can be restored to increase agricultural productivity and maintain related natural services
- LDSF uses novel data collection methods to produce a suite of spatially-specific and continuous soil and vegetation indicators to allow cost effective assessment and monitoring across any surveyed landscape

Knowledge and Tools for Forest Landscape Restoration Project (KNOW-FOR) (2)

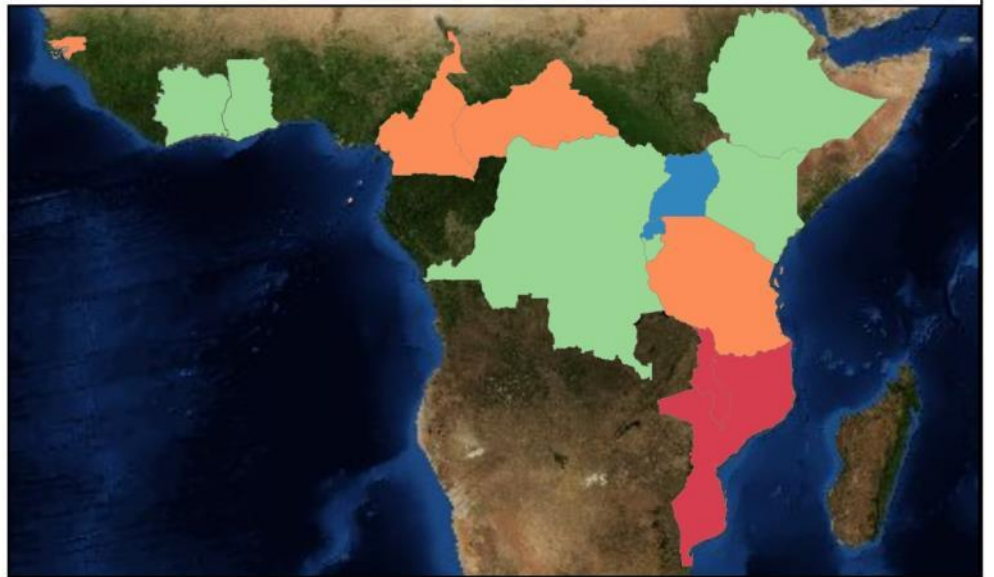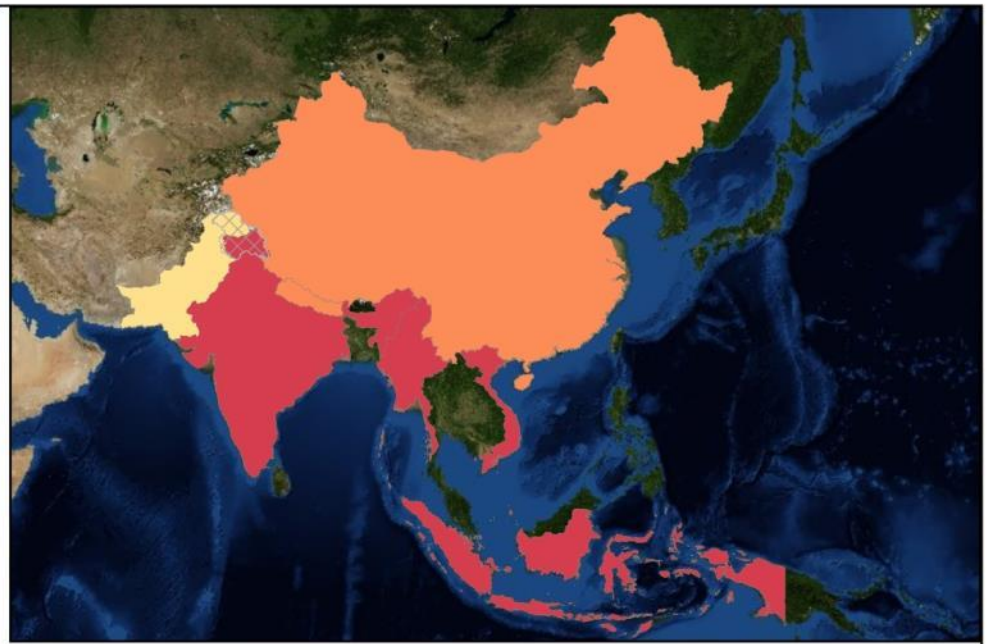## Evaluation criteria for ecosystem services modeling tools (RESTS)

- RESTS provides a set of evaluation criteria for selecting new ecosystem modeling tools to improve the application of ROAM.
- It consists of a decision framework for selecting the appropriate ecosystem service modeling tools based on the context of an assessment, including the levels of available data, time, and other resources.

Mobile phone map of Vegetation and Climate Change in East Africa (VECEA) for extension of FLR and collecting data on fallows IUCN

- IUCN worked with ICRAF to develop an innovative mobile phone application (running on Android software) of VECEA to provide accessible and up-to-date information to farmers who could benefit from restoring their lands but lack crucial information about how and where to do so

Carbon accounting of forest landscape restoration

- IUCN worked with WINROCK International to develop methods for creating reference levels for forest landscape restoration activities.

Status
- ■ Planned (red)
- ■ Tentatively Planned (orange)
- ■ Technical Support (yellow)
- ■ Ongoing (green)
- ■ National Completed (blue)

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Forest Landscape Restoration Assessment Countries

Prepared by Craig R. Beatty February 2016 Data Source Esri, DitigalGlobe, GeoEye, I-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community.

GFCCP 2020 goals

IUCN

Strategic objective 1: Forest Landscape Restoration (FLR) towards reversing global trends in forest, land and soil degradation	Strategic Objective 2: Locally Controlled Forests	Strategic Objective 3: Slowing the Global Deforestation Rate (including LULUCF and REDD+)
Enable 150 million ha of FLR commitments	*Enable the establishment of networks of sustainably managed forest landscapes based on effective local control*	*Achieve slowed deforestation and degradation rates within significant amount of forest area across a representative set of forest countries*

Find out more

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