The Land-use Planning Module has been prepared for people involved in the assessment of forestlands and their economic, social and environmental potential for various land uses. The module provides basic and more detailed information on the importance of land-use planning in forestry and offers guidance on the main activities involved in a land-use planning framework.

The module also provides links to tools and case studies to foster effective land-use planning.

What is land-use planning?

Integrated land-use planning (called “land-use planning” here) involves the allocation of land to different uses across a landscape in a way that balances economic, social and environmental values. Its purpose is to identify, in a given landscape, the combination of land uses that is best able to meet the needs of stakeholders while safeguarding resources for the future. Effective land-use planning provides direction on the manner in which land-use activities should take place and encourages synergies between different uses. It requires the coordination of planning and management across the (often) many sectors concerned with land use and land resources in a particular region.

In forestry, land-use planning involves the systematic assessment of forestland and its potential for various land uses, a consideration of the desirability of those land uses, and an understanding of economic, social and environmental conditions to enable the identification and adoption of the best land-use options in a forested (or partly forested) landscape. Land-use planning is driven by the need for (i) improved management and (ii) a different pattern of land use, as dictated by changing circumstances.

Benefits of land-use planning

Land-use planning is often carried out in a highly polarized public context in which decisions on land allocation and use are a source of conflict and tension. Land-use planning can help manage such conflicts, ease tensions, and bring about the more effective and efficient use of land and its natural resources. By examining all land uses in an integrated manner, land-use planning identifies the most efficient tradeoffs between land-use options and links social and economic development with environmental protection and enhancement, thus helping to achieve sustainable land management.

When carried out effectively, land-use planning increases certainty for stakeholders. For example, it can help assure the timber industry of the long-term availability of timber resources so it can invest capital with confidence.
Scale and regulatory framework

Land-use planning can be carried out at different scales, such as local, landscape, subnational, national or regional. Land-use planning tends to be strategic at larger scales and more operational at the local or landscape scale. Land-use planning generally takes place within a framework of laws, policies and customary norms that guide the uses to which forestland may be allocated.

Participation and goals

Until recently, forest-related land-use planning mostly took a top-down, technocratic approach that paid little attention to wider forest values or the interests of the full suite of stakeholders. In many countries now, however, growing environmental awareness and increasing acceptance of participatory democracy in forest decision-making have led to the greater use of multistakeholder mechanisms in planning and managing forest resources.

Despite the increased involvement of various stakeholders, women are still often excluded in the planning process. Land-use planning affects women deeply. Whereas men consider the forest in terms of commercial possibilities, women see it as a source of basic domestic needs. Women rely on forests constantly for their livelihoods, and the resources they collect are different from those of men. Moreover, it is unlikely that they have any land rights or handle power positions. If women are not included in the land-use planning, their needs may not be addressed properly and the products they rely on may not be recognized as essential by men landowners or planners. This could have severe consequence for women and girls such as scarcity of food and medicinal plants, increase of workload with a consequential loss of time for other activities (e.g. girls are not able to go to school), and more risks for their safety if they need to travel long distances.

Key stakeholder groups should agree on the goals of a land-use planning exercise at its commencement. These agreed goals will provide reference points for future decisions on land allocations.

Activities that are common to most land-use planning exercises are:

- assessing the present and future needs of stakeholders and systematically evaluating the capacity of the land to supply them;
- identifying and resolving conflicts between competing uses, the needs of individuals and those of the community, and the needs of the present generation and future generations;
- seeking sustainable options and choosing those that best meet identified needs and will contribute to agreed goals; and
- allocating land to a range of uses to bring about desired changes.

The process of land-use planning is iterative and continuous. Any land-use plan should be able to be renegotiated to take into account new information and changing circumstances and goals.

Land-use planning contributes to SDGs:
11 SUSTAINABLE AND COMMUNITIES

13 CLIMATE ACTION

15 LIFE ON LAND
In more depth

Generic approach to land-use planning

While there is no single blueprint for land-use planning, a generic framework can be used as a guide for the process and adapted to suit circumstances. Such a framework is shown in the table.

**Generic steps and activities for land-use planning**

<table>
<thead>
<tr>
<th>Step</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial engagement</td>
<td>Identify key stakeholders and stakeholder groups with an interest in the land-use planning exercise and its outcomes</td>
</tr>
<tr>
<td>Background information</td>
<td>Gather and document biophysical, economic and social information of relevance to the land-use planning exercise, as well as policy and legal material</td>
</tr>
<tr>
<td>Planning team</td>
<td>Establish a planning team containing representatives of all key stakeholder groups Agree on roles and responsibilities in the planning team</td>
</tr>
<tr>
<td>Areas of planning interest</td>
<td>Identify and catalogue the current and proposed future uses of the land Identify current and potential conflicts associated with actual or potential uses</td>
</tr>
<tr>
<td>Terms of reference for land-use plan</td>
<td>Negotiate the objectives of the land-use plan Agree on the process to guide the development of the land-use plan (including conflict resolution)</td>
</tr>
<tr>
<td>Draft land-use plan</td>
<td>Negotiate and agree on land-use allocations (using participatory multistakeholder approaches) and permitted uses, and review requirements</td>
</tr>
<tr>
<td>Final land-use plan</td>
<td>Obtain approval of the land-use plan from relevant authorities and stakeholder representatives</td>
</tr>
<tr>
<td>Review and amendments</td>
<td>Work together with key stakeholders to review and amend the land-use plan over time</td>
</tr>
</tbody>
</table>

A central part of land-use planning in forest landscapes is reaching agreement on those areas to be managed under differing regimes. These might include:

- areas for commercial timber harvesting (see Forest inventory);
- areas of high conservation value to be included in a protected-area network or afforded other special management status (see Wildlife management and Forest protected areas);
- areas that have special significance for indigenous peoples and other local communities (see Cultural and spiritual values of forests);
- areas that are part of local agricultural or agroforestry systems (see Trees outside forests);
- parts of the landscape, such as highly erodible soil types or riparian zones, that need special management treatment (see Forest protected areas, Forests and water and Watershed management);
- areas that should be managed for recreation values (see Forest recreation);
- areas that need restoration or rehabilitation (see Forest restoration and rehabilitation);
- areas that require special management because of climate change (see Climate change adaptation and mitigation).

**Information collection and display**

Land-use planning requires the application of various tools and techniques to collect and display data and information. The collection of basic data is important as a prelude to deciding on land-use allocations. Multipurpose forest inventories and forest monitoring systems can provide the necessary data to support decision-making and land-use planning. Geographic information systems (GIS) are a useful tool for capturing, storing, managing and presenting a wide range of information, such as socioeconomic data, the geographic distribution of major landforms, dominant land cover, and inventories of natural resources.

**Multistakeholder processes and integrating socioeconomic aspects into planning**

In many countries, government decentralization and the devolution of decision-making over forest allocation and use have led to increased local government and community control over forests. Combined with growing public interest in decisions on forest use, decentralization and devolution have made the engagement of a wide range of stakeholders an integral and essential part of contemporary land-use planning processes. Such engagement involves the effective application of participatory approaches (see Participatory approaches and tools in forestry) and, in particular, the establishment and effective functioning of participatory multistakeholder planning teams. In addition to biophysical aspects, such teams need to take into account socioeconomic aspects of land-use planning (see socioeconomic aspects) and are generally charged with reconciling diverse interests and finding ways of managing forests equitably (see Collaborative conflict management in forestry).
Further detailed guidance and support for forest land-use planning can be found in the Tools and Cases segments of this module.
Further learning


Sridhar, A. 2004. Pre-and post-tsunami coastal planning and land-use policies and issues in India.

van Lier, H.N. 1998. The role of land use planning in sustainable rural systems. Landscape and Urban Planning Volume 41, Issue 2, pp 83–9

Winterbottom, R. 1990. Taking stock: the tropical forest action plan after five years, World Resources Institute (WRI).
Credits

This module was developed with the kind collaboration of the following people and/or institutions:

**Initiator(s):** Don Gilmour

**Reviewer(s):** ITTO; IUFRO; Tropenbos

This module was revised in 2018 to strengthen gender considerations.

**Initiator(s):** Gender Team in Forestry

**Reviewer(s):** FRM Team