



Q MA

Conifers planted to rehabilitate an asbestos mining area, Troodos State Forest, Cyprus

6. Priorities and strategies

As discussed in the previous chapter, the overall economic and institutional environment in the West and Central Asia region varies across countries. The changes in the economic and institutional conditions would alter the demand for forest products and services (and the ability of society to fulfil the needs). Thus, while it is important to address current concerns, it is equally important to understand the probable future changes and prepare forestry to adapt to such changes. The options available to policy-makers and planners under different scenarios need to be clearly identified to take full advantage of a given situation.

COMMON OBJECTIVES AND APPROACHES

While the existing scenarios may be different, there are considerable similarities in the broad objectives. Accomplishing sustainable forest management will be a common long-term goal for all the countries. Within this broad objective, what has to be actually accomplished (for example, the mix of goods and services) and how (the nature of interventions, the kind of institutions required and the technologies to be adopted) will differ depending on the specific circumstances. Even when the mix of goods and services differ there may be some identity among the countries, while the differences become more pronounced in details as the nature of products and services are defined more precisely at successive levels. The common issues confronting most of the countries in the region are:

- very low forest cover and extremely low productivity because of adverse climate and soil conditions;
- severe environmental degradation, especially desertification and severe water stress;
- boundaries of forests, wooded land, rangeland and agriculture are not well defined;
- increasing demand for recreational and amenity values, especially in the context of the increasing pace of urbanization;
- overall weaknesses in the policy, legal and institutional framework.

While there may be some variation in the priorities and strategies, the broad similarities of the problems suggest the following priorities:

- give emphasis to the provision of environmental services;
- adopt an integrated approach to land management;
- improve the policy and institutional environment;
- enhance subregional, regional and international collaboration.

Provision of environmental services to remain the key objective

Considering the current environmental situation in the region – the arid and semi-arid conditions, the high level of desertification, declining agricultural

and rangeland productivity because of land degradation, loss of biodiversity, increasing water stress – the provision of environmental services will remain the most important concern for almost all countries. Continued urbanization will require increased investment in urban forestry. Use of forests and woodlands for recreational purposes – for example ecotourism – is another priority owing to the rapid growth of tourism.

What precisely should be given importance largely depends on the specific ecological conditions and the economic situation. For example, for the countries of the Arabian Peninsula, Afghanistan, Armenia, parts of Iran and Turkmenistan, controlling desertification, including sand-dune stabilization, will be an important priority, whereas in countries with mountainous topography, conservation of watershed values will be the most important objective. Both in West and Central Asia, there are several countries where water is harnessed for irrigation and electricity generation (Iran, Kyrgyzstan, Tajikistan and Turkey) and, therefore, stabilizing water flow is critical.

For the most part, the productive functions of forests are declining and the trend is likely to persist. Industrial roundwood production seems to be the least priority for the region, not for lack of demand but because these countries cannot produce it economically. Even in those countries where industrial wood production had at one time been significant, both the ability to substitute local production with imports and the shift in management objectives towards providing environmental services have led industrial wood production to decline.

Although the long-term demand for woodfuel is declining, it will still remain an important use of forests and woodlands in a number of countries, especially for those people whose access to alternative commercial fuels is limited. Charcoal consumption is registering an increase in a number of countries, as higher incomes have led to its greater use as a socially preferred fuel, especially in traditional cooking. Imports have, therefore, increased and the trend is likely to persist. Increasing demand has also led to increased domestic production, most of which is done illegally.

The production of non-wood forest products, including medicinal plants and their processing, will continue to be important for a number of countries; however, a significant share of production is expected to come from organized cultivation. Increasing emphasis on quality control and a stable supply would necessitate the domestication of most commercially important non-wood forest products. Collecting products from the wild is also expected to decline in the context of urbanization, reduced availability of rural workers and the consequent increase in wages.

Integrated approach to resource management

Considering the overall state of forest and tree resources in the region and the continuum of different land uses, accomplishing the objectives of management – whether for the provision of environmental services or for the production of wood

and other products – warrants an integrated approach to resource management. The need for an integrated approach stems from the following factors.

- The extent of area designated as forests is rather limited in most countries. Most countries in the region have low forest cover, less than 10 percent of the geographical area.
- A significant share of woodfuel, fodder, wood and non-wood forest products and services is obtained from non-forest lands, including agricultural land. In addition, in almost all countries in the region, problems like watershed degradation, loss of biodiversity and desertification arise from poor management of agriculture and rangelands, and isolated efforts to arrest these within forests may have little overall impact.

Addressing the problems of the provision of environmental services and the production of wood and other products requires policies and strategies that cut across the different land uses and sectors and that adopt a landscape approach. This suggests that forestry will not be able to exist as a distinct sector, but that forestry concerns become well-integrated with other land uses.

Policy and institutional adaptations

The focus on the provision of environmental services and the need to adopt an integrated approach to resource management would necessarily imply substantial improvements in the policy framework and institutional arrangements relating to land use in the region. Traditionally, forest policies have largely focused on areas that are controlled by public-sector forestry agencies (State Forest Funds as in the case of many former Soviet Republics). An increase or decrease of forest goods (wood and non-wood products and environmental services) is not entirely dependent on lands that are designated as forests, and most often a significant share comes from other lands. Many environmental problems such as loss of biodiversity, desertification, soil erosion and watershed degradation stem from inappropriate use of agriculture and pasturelands. The prevention and mitigation of these problems requires more broad-based policies than are conventionally formulated.

Formulation and implementation of policies for integrated land-use management also requires more broad-based institutions than what most countries currently have. Revamping public-sector forestry agencies, which currently play a dominant role, will require re-examining the core values, functions and structures and making appropriate changes. Public-sector forestry agencies will have to work very closely with other sectors, especially the agriculture, animal husbandry, urban development and tourism sectors. The increasing role of the private sector, community groups and civil society organizations provides new opportunities for the production of forest products and environmental services. Collective action with other governmental and non-governmental agencies will require redefining the roles and responsibilities of each and developing appropriate policy and institutional frameworks. In some cases, this will require reinventing existing institutions.

Subregional, regional and international collaboration

A common history, economic interdependence and ecological contiguity of countries in the region underscore the importance of intercountry collaboration at different levels. Sharing of information and technology and undertaking joint initiatives are particularly important to reduce costs and to especially enhance the effectiveness of resource management initiatives. Subregional and regional collaboration is particularly effective for addressing problems such as forest fires and pest and disease incidence. Another important area where intercountry collaboration is particularly essential, or even a necessity, is in the management of transboundary protected areas. Resource assessment, education, research and training are other areas that could significantly benefit (as they can reduce costs) from subregional and regional collaboration.

SCENARIO-SPECIFIC STRATEGIES

The broad priorities and strategies proposed for the region as a whole need to be refined taking into account the specific national and local conditions. While it is difficult to elaborate them, some broad indications of the nature of interventions appropriate to different scenarios are given below.

Struggling to achieve development

As pointed out in the previous chapter, countries under the “struggling to achieve development” scenario face substantial economic and institutional problems and, therefore, the priorities and strategies in the forestry sector will have to acknowledge them. Financial and human resource constraints will be of particular concern. Forestry is unlikely to be a high-priority sector. The overall approach under this scenario can be summarized as “build up from the base”, and focuses on the following:

- meeting people’s basic needs sustainably;
- building up local institutional capacity;
- improving/adapting local-level technologies and upgrading skills;
- focusing on options that are less demanding in terms of financial resources.

Meeting people’s basic needs sustainably. A number of countries in the region (Afghanistan, Tajikistan and Yemen) will continue to have a high proportion of the rural population dependent on low productivity agriculture and animal husbandry, which implies high levels of poverty. Even in countries that are largely urbanized there will be a sizeable rural population with limited access to markets and meeting the local consumption needs will be an important objective in resource management. Still even if markets did exist (currently, there is a limited number of specialty products, including medicinal plants and certain non-wood forest products), local communities may not be able to produce products competitively. Meeting basic needs with minimal investments of human and financial resources will hence be the priority for the management of land and other natural resources. Conservation of soil and water in support of sustainable agriculture will be the other thrust area of land management, including forestry.

Opportunities for the production of industrial roundwood will be rather limited as long as this scenario persists. Because both the institutional and economic environments remain unfavourable, they may not be able to make industrial roundwood production sustainable. One of the major problems that many countries will need to address is the illegal removal of wood (particularly in Afghanistan, Azerbaijan and Georgia). A costly law enforcement system, especially through centralized bureaucracies, is unlikely to be viable in such situations and it may be necessary to explore low-cost institutional options.

Building up local institutional capacity. While institutional reinvention will be important under all scenarios, the scenario of “struggling to achieve development” will require specific attention, especially because of the poorly developed formal forestry institutions. The economic situation in most countries under this scenario excludes developing institutional arrangements that have high transaction costs. While external support comes in handy to build up institutions – forestry departments, research and education institutions, community resource management agencies – countries often find it difficult to sustain them once donor support ceases. The financial resources that will be available will often just be adequate to pay salaries, and the state forestry agencies will be unable to undertake even routine forest management responsibilities.

Much of the actual resource management will have to be implemented by local community groups and organizations, especially the committee of tribal elders, shuras, tribal protectorates, etc. As such, in many situations these are the only effective institutional arrangements at the local level. Supporting these groups so that they can conserve and manage forest resources remains the most cost-effective option. Governments’ efforts should be primarily to function in a facilitator role in order to strengthen the technical and managerial competence of local-level organizations.

Improving and adapting local-level technologies and upgrading skills. Considering the limited resources, introducing off-the-shelf technologies that are readily available from the outside will be difficult. There is a need to make an assessment of local technologies and to nurture them. Because people are familiar with these technologies, they will be able to build upon such knowledge.

This does not imply total reliance on indigenous technologies, which due to lengthy isolation and the limited knowledge base of local communities, may not be able to address new problems. Selectively adapting technologies from other situations will be particularly advantageous, as well as improving the science base of existing technologies. However, the fundamental thrust should be to involve local communities in the innovation and adaptation phases.

Focusing on less resource demanding options. In view of the limited resources situation, countries under this scenario will have to be very careful in choosing investment options, making sure that they are affordable and within the capacity of the countries. Adverse environmental conditions that affect productivity make

a number of investment options unattractive. In many cases, critical inputs such as water are extremely scarce. Much of the emphasis will be to pursue investment options that are less resource demanding.

Unbalanced development

As this scenario is characterized by institutional weaknesses, much of the thrust will be to build up institutional capacity to correct the imbalances. The overall approach for countries under this scenario will be to “improve fundamentals and change direction”, with emphasis on the following:

- encouraging pluralistic institutional arrangements;
- improving the role of public sector agencies as facilitator to support the development of other institutions;
- upgrading technologies and skills.

Encouraging pluralistic institutional arrangements. The major strategic thrust under the scenario is to develop and support diverse institutional arrangements. In addition to local-level community organizations, there is a need to support and nurture the private sector, farmers’ associations and civil society organizations so that they can play divergent roles in order to take full advantage of their unique capabilities. Wood production is one area that offers scope for substantial involvement of non-governmental players, although this will be limited to areas that have better growing conditions.

Community organizations, local bodies and the private sector may have some role in the provision of environmental services, especially in managing recreational areas in national parks or other similar areas. Moving up the value chain in recreation, particularly the management of visitor areas, nature trails, establishment and management of related infrastructure, could be better executed by the private sector rather than by public-sector agencies. However, the public sector will also need to play an important role to ensure that private sector management does not negatively impact the environment.

Improving the role of public-sector forestry agencies. The fact that in most countries an integrated approach is required for land use implies that forestry concerns are to be mainstreamed into the functions of agencies (ministries/ departments) that address agriculture, range management, urban development and watershed management. In most cases, this would dictate against establishing a separate forestry department that would be directly responsible for the management of forests and woodlands. The thrust should be to develop a strong policy and technical unit that facilitates the integration of forests and forestry in all land uses, and which oversees the formulation of appropriate policies and legislation that enable the participation of various stakeholders.

Upgrading technologies and skills. Improved management of the environment will require substantial efforts to augment technologies and to upgrade the skills

of professionals. However, many countries, notwithstanding their relatively better economic situation, have not adequately invested in research and development nor upgraded the skills of professional and technical staff. In some countries, there is a substantial shortfall of qualified professionals in the national forestry system. Some of the steps required to improve the situation include:

- a detailed assessment of the requirements of professionals and development of the critical mass of expertise required to meet the anticipated needs;
- strengthening of the technical and professional skills of forestry staff through appropriate technical training programmes;
- assessment of the capacity of existing research and development institutions to develop and adapt technologies that address desertification, watershed degradation and other problems.

A number of countries are already using new technologies, such as irrigation with wastewater for afforestation, and there is substantial scope to improve and widely adopt such technologies. Arresting land degradation, afforestation of areas with poor soils, stabilization of sand dunes, improved management of watersheds, and sustainable management of recreation areas all require substantial investments to enhance knowledge in the biophysical and social sciences.

Balanced development

Many countries are striving to reach this ideal scenario, where economic and institutional development is well-balanced. However, these countries operate in a highly globalized situation in that their economies are closely intertwined with those of other countries. Policy processes and legislation will have to comply with regional and international agreements and take into account perceptions of other stakeholders outside the country. Participating in economic cooperation bodies such as the European Union suggests that countries need to be more competitive and efficient. Policies relating to energy, agriculture and environment at the regional level will have significant influence and it will be necessary for countries to adjust and adapt to the changing policies and legislation in these areas. Strong external linkages also increase competition in both domestic and external markets and this would necessitate continuous scaling up of the quality of products and services provided. The overall approach under this scenario could be summarized as “keep moving forward”, with the focus being on the following:

- maintaining vibrancy of institutions and their adaptability;
- investing in human skills to improve efficiency and competitiveness;
- focusing on unique and high-value products and services.

Maintaining vibrancy of institutions and their adaptability. While institutions are reasonably well-developed under the “balanced development” scenario, they will have to remain vibrant and adaptable to survive and perform in a highly competitive environment. The ability of institutions to forge linkages with regional and international bodies will have to be strengthened substantially.

National policies and institutions will have to be adapted to regional and international agreements. At the same time, institutions will have to respond to the conflicting demands of domestic stakeholders. Balancing the divergent demands will require highly adaptable organizations that are able to learn quickly from their environment.

Investing in human skills. The success of institutions operating in a globalized environment will largely depend on enhancing human skills. This will require both deepening and broadening the knowledge base. With an increasing emphasis on an ecosystem approach to management, the skill set of land managers, including foresters, will have to be improved significantly. Social science skills will also need to be improved.

Focusing on unique and high-value products and services. As countries are exposed to increasing competition, they will need to focus on providing unique products and services, integrating local skills and improving technologies. Countries will be able to enhance income through adding value to local products. Focusing on unique products catering to high-value niche markets (for example some non-wood forest products, including medicinal plants) will be advantageous, especially to enhance rural employment and income.

SUMMARY OF PRIORITIES AND STRATEGIES

Enhancing the contribution of the forest sector through increased provision of goods and services requires substantial interventions at the policy and institutional level. It is important, however, to take into account the overall economic and institutional scenarios in designing the interventions. Table 6.1 provides an overview of the priorities and strategies that are relevant to the region and to the three scenarios.

TABLE 6.1
Priorities and strategies

| Overall priorities and strategies | Scenario-specific priorities and strategies | | |
|------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| | Struggling to achieve development | Unbalanced development | Balanced development |
| Emphasis on the provision of environmental services | Build up from the base: | Improve fundamentals and change direction: | Keep moving forward: |
| Integrated approach to land management | <ul style="list-style-type: none"> • Meeting people's basic needs sustainably • Building up local institutional capacity | <ul style="list-style-type: none"> • Support and strengthen pluralistic institutional arrangements | <ul style="list-style-type: none"> • Maintain vibrancy of institutions and their adaptability |
| Policy and institutional adaptation | <ul style="list-style-type: none"> • Improving and adapting local-level technologies and upgrading skills | <ul style="list-style-type: none"> • Improve the role of public-sector agencies as facilitator to support the development of other institutions | <ul style="list-style-type: none"> • Invest in strengthening human skills to improve efficiency and competitiveness |
| Strengthen subregional, regional and international collaboration | <ul style="list-style-type: none"> • Focusing on less resource-demanding investment options | <ul style="list-style-type: none"> • Upgrade technologies and skills | <ul style="list-style-type: none"> • Focus on unique and high-value products and services |

West and Central Asia is likely to witness important political, economic, social and environmental changes in the next 15 years, especially as countries become more integrated into the world economy and new opportunities and challenges emerge. Certainly, environmental issues will be at the forefront of policies relating to natural resource management. At the same time, several countries will have to continue grappling with poverty and making the best use of natural resources to address development needs. The priorities and strategies outlined under different scenarios are indicative and they need to be elaborated in the context of the specific economic and institutional conditions at the national and subnational levels. This is a task that needs to be pursued at the country level.