

**NATIONAL FOREST POLICY
2010**



**GOVERNMENT OF PAKISTAN
Ministry of Environment**

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I. Preamble

National Forest Policy 2010 (NFP 2010) provides a framework for sustainable management of forests and allied natural resources, namely watersheds, rangelands, wildlife and associated biodiversity. The Policy seeks to initiate the process of addressing fundamental causes of forest depletion through active participation of all stakeholders, particularly local communities, to maintain and improve ecosystem functions and services of forests and allied natural resources. Under the Constitution of Pakistan 1973, Forestry sector is dealt as a provincial subject and Federal government focuses on coordination, facilitation and international cooperation for realizing targets of Forestry sector, both in terms of environmental services and forest products. Immense environmental services associated with the forest ecosystems including mitigation of climate change and conservation of biological diversity have attracted enhanced international attention towards this natural resource over the last decade make it essential for a more robust and effective National Forest Policy to harvest the opportunities available worldwide. The Policy seeks to build capacities at all levels to cope with the challenges of environmental degradation more efficiently as well as meet the Millennium Development Goals (MGDs) targets committed at the national level. This is an umbrella policy providing guidelines to the Federal and Provincial Governments, Government of Azad Jammu and Kashmir (AJK) and administrations of Federally Administered Tribal Areas (FATA) and Gilgit Baltistan territories for protection, conservation, and sustainable management of renewable natural resources (RNR) for devising policies, strategies and action plans specific to their priorities, needs, socio-economic and ecological conditions.

II. Aim

The aim is to provide guidelines to the federal and provincial agencies for restoration, development, conservation and sustainable management of forests and allied natural resources to ensure sustainability of ecosystem functions, services and benefits for present and future generations of Pakistan.

III. Objectives

The following basic objectives shall be realized for achieving the goal of NFP 2010:

1. Restoration and maintenance of natural forests to preserve ecological cycles, functions and services of forests.
2. Increasing productivity of forests to meet requirements of timber, fuel wood, fodder and non-wood forest products and to promote sustainable natural resource based livelihoods.
3. Encouraging efficient utilization of wood and non-wood forest products, maximizing wood substitution and development of alternative renewable energy resources.
4. Development of forest resource base to enhance carbon sequestration capacity and mitigation of climate change effects, through massive afforestation programmes, especially on all denuded, degraded and unproductive lands.

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5. Mainstreaming sustainable forest management into sectoral policies, plans and programmes, ensuring effective inter-provincial and inter-ministerial coordination at Federal and Provincial levels.
6. Conservation of biological diversity, protection and sustainable use of indigenous flora and fauna.
7. Fostering public-private partnerships to enhance forest cover and promote commercial forestry in private sector and encourage role of civil society organizations.
8. Strengthening forestry education and research institutions to cope with the emerging challenges of deforestation and climate change.
9. Creating mass awareness and involving local communities in sustainable natural resource management.
10. Meeting national obligations under Multilateral Environmental Agreements especially Convention on Biological Diversity (CBD), United Nations Convention to Combat Desertification (UNCCD), United National Framework Convention on Climate Change (UNFCCC) and United National Forum on Forests (UNFF).

IV POLICY MEASURES

Following measures are prescribed to achieve the intended objectives and overall goal:

1. Measures to reducing adverse impacts of socio-economic causes

1.1 Protection of Forest Lands from Encroachments

Forest encroachments are on the increase and this trend has to be curbed through effective legislation and law enforcement, prohibiting regularization of encroached forestlands. At federal and provincial levels, regular monitoring systems will be established for ensuring integrity of State forest boundaries with the help of Geographic Information System (GIS) and Global Positioning System (GPS) technologies. The Provincial Governments shall ensure mutation of state forestlands, maintenance of proper revenue record, demarcation and establishment of permanent boundary pillars. Changes in forest resources shall be regularly assessed and monitored by using satellite based data supplemented with field inventories.

1.2 Transfer of Forest Land to Non-Forestry Uses

Federal, Provincial and territorial governments will ensure halting transfer and conversion of forestlands for any non-forestry uses. In case such conversion is inevitable, permission for transfer shall be granted on the recommendation of a committee established in the respective provincial/ territorial government, subject to the condition that proper arrangements are made for provision of alternate land and funds for compensatory afforestation. Any diversion of forest land for non-forest purposes should be subject to most careful scrutiny by the specialists from the stand point of social and environmental costs and benefits. Necessary legislation to curb the practice of forest conversions to non-forestry uses shall be promulgated.

1.2.1 Forest Fire Management

The incidence of fires in mountain forests is high leading to enormous damage to the growing stock and natural regeneration. Forest Departments will adopt special precautions, improved management practices and modern technology to deal with forest fires.

1.2.2 Regulating Mining and Quarrying

Mining and quarrying in designated forest lands and lands covered by trees should be allowed only after ensuring that the beneficiaries shall repair and re-vegetate the area in accordance with established forestry practices. No mining lease should be granted, private or public, without carrying out a proper Environmental Impact Assessment (EIA) and a management plan, appraised from the environmental angle and enforced by adequate set-up.

1.3 Bringing additional land under tree cover

The concept of social forestry, farm forestry, agro-forestry will be promoted by providing appropriate incentives to the farmers. Tree planting, soil stabilization and watershed management will be an integral component of all Federally funded projects for construction of new dams, water reservoirs, roads, railways, canals, industrial estates, housing schemes, etc. The corporate sector shall be motivated to participate in afforestation campaigns under Corporate Social Responsibility (CSR) and under obligation to sequester green house gases emitted from the industrial processes.

1.4 Firewood Substitution

In order to reduce pressure on natural forests, alternate energy resources including energy plantations, micro-hydro power generation, bio-gas, solar and wind energy, Liquid Petroleum Gas (LPG) and natural gas shall be promoted in critical mountain ecosystems. Fuel efficient cooking stoves and energy efficient houses shall be promoted throughout the country.

1.5 Sustainable livelihoods through Integrated NRM

Government of Pakistan shall assign high priority to development programmes aiming at sustainable livelihood for local communities through integration of forestry component where feasible with projects and programmes of other economic sectors including agriculture, water, tourism, housing, communication.

1.6 Transparency and Good Governance

National, provincial and local governments shall provide adequate institutional mechanisms for ensuring career protection and safety of Forestry professionals in the discharge of their official duties, keeping in view transparency and accountability at different levels.

1.7 Wood substitution and import liberalization

In order to reduce pressure on natural forests, use of solid timber of precious tree species like deodar and shisham for construction and furniture should be discouraged in government

buildings. A programme for promotion of composite wood, non-wood and synthetic wood products in construction of government buildings may be launched. As a major step towards wood substitution and import liberalization, the Government will exempt timber imports from all types of taxes, including sales tax.

1.8 Regulation of grazing

Heavy, indiscriminate and ubiquitous grazing being one of major cause of degradation of forests and allied natural resources, programmes to promote regulated (controlled) grazing, stall feeding and breed improvement shall be launched in collaboration with Livestock Division, Government of Pakistan and Provincial Livestock Departments.

1.9 Forest Development Fund

Provision of financial resources on sustainable basis is essential for implementing various measures proposed in this policy. To meet this requirement, a Forest Development Fund/Endowment Fund will be established at national level, as an independent company. The fund will be managed by a Board of Directors representing Federal Government, Provincial Forest Departments, NGOs and Civil Society. The investment capital will be mobilized from domestic and international sources and the income generated will be used for promotion of sustainable forest management, forestry research and education.

1.10 Forest Carbon trading for mitigating climate change

Pakistan as a party of UNFCCC and Kyoto Protocol will implement CDM projects of “afforestation” and “reforestation” sectors as viable options for mitigating climate change. In order to avoid deforestation and forest degradation and storing maximum carbon in forest ecosystems REDD+ mechanism will be fully implemented to give incentives and alternate livelihoods to forest dependent communities.

2. Institutional strengthening

Improvement and strengthening of Federal and provincial institutions responsible for education, research, management and extension of forestry and allied disciplines in the country will receive high priority. The institutions will be restructured to enable them to handle present day challenges and responsibilities. Pakistan Forest Institute will also be gradually transformed into a University of Forests and Natural Resource Sciences. National Forestry Council will be established as a think tank on forest policy, maintain and monitor academic and professional standards in forestry and allied disciplines. Federal and Provincial institutions will be strengthened to discharge their mandated functions including planning and policy making, inter-provincial and inter-ministerial coordination, financing and international cooperation. Special resources will be allocated to effectively deal with the new challenges like climate change through capturing emerging opportunities under Clean Development Mechanism (CDM) and Reduced Emissions from Deforestation and forest Degradation (REDD).

3. Enhancing role of local governments in sustainable management of natural resources

The local governments shall be provided with adequate financial and institutional support for promotion of forests and allied natural resources in their rural development programmes.

4. Measures for specific forest ecosystems

A number of important ecosystems in the country have been depleted due to variety of factors. Adequate arrangements will be made for conservation and restoration of the following fragile ecosystems:

4.1 Mountain Forests

Mountain forest ecosystems are critically important to Pakistan. They provide a carbon sink to mitigate global warming, act as repositories of invaluable biodiversity, safeguard water supplies, retard loss of soil and water from watersheds, thereby reducing siltation of water storage reservoirs, and afford sustenance to large number of human communities and their livestock. The conservation and sustainable management of mountain forest ecosystems shall be ensured through following interventions;

4.1.1 Sustainable Management in Reserved, Protected, Guzara and Private Forests

Ban on commercial harvesting, imposed in 1993 by the Federal Cabinet has disrupted forest management cycle depriving forest owners of their legitimate rights. Consequently the Forest Management Plans have become non-operational and the forest owners have lost interest in protection and management of their forests. Out of sheer frustration many of them have resorted to large scale illicit cutting of forests. Therefore, in order to restore the process of forest management, to promote natural forest regeneration and to regain confidence of the forest owners, it is imperative to lift ban on timber harvesting. However, Government of AJK may continue the ban to implement Green Kashmir Vision.

Provincial governments may resume sustainable commercial timber harvesting in the Reserved, Protected, Guzara and Private Forests. However, Reserve Forests shall only be subjected to hygienic felling and left alone for preserving gene pool and maintaining ecosystem integrity, structure and functions. Timber harvesting in Protected, Guzara and Private Forests shall be allowed on the basis of following conditions:

- a. Timber harvesting shall only be resumed in well stocked forests that are covered under approved/valid working/management plans approved by the respective government. All operations such as marking, felling, logging, transportation and regeneration of forests shall be ensued through scientifically developed working plans and be monitored by an independent committee having representation of the Forest Department, District Administration, reputable environmental NGO, concerned community and the Federal Government. Such committees shall be notified by the respective provincial governments.

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- b. Timber harvesting shall only be resumed in those areas whose owners and right-holders undertake to fully participate in the management and regeneration of their forests in association with the Forest Department, with due regard to meeting the minimum sustainable needs of the non-right-holders to the extent of the productive capacity of each forest.
- c. Essential criteria for classifying forests into commercial and non-commercial categories shall not only be stocking but terrain, need for regeneration and a creditable guarantee from the owners, right-holders and users that they will ensure the regeneration of the forests by affording them protection from grazing, fires and other sources of injuries.
- d. The principal objective of timber harvesting in the above forests shall be poverty alleviation through providing income to the owners and right holders and to promote economic activity through generating local employment. Provincial Governments will make arrangements for training the local people in all timber-harvesting operations and enable them to take on small timber harvesting contracts on the pattern successfully demonstrated in the Kalam and Kaghan projects.
- e. In order to ensure regeneration of the forests, timber harvesting should be undertaken only after a regeneration plan has been approved and funds ensured for its implementation.
- f. Provincial Governments and forest owners shall provide necessary resources to rehabilitate the degraded forests. In this regard the initiative of establishing Forest Development Fund taken by NWFP and Gilgit- Baltistan Forest Departments may be adopted in other provinces including AJK.
- g. Local communities will be actively involved in management of forest resources. In doing so the Forest Department should assume the role of providing advisory services.
- h. Existing pressure on national forests will be reduced through promotion of commercial plantations by private sector.

4.1.2 Establishing Protected Areas

The role of Protected Areas in conserving ecological characters of representative samples of important ecosystems is well recognized. Therefore, the Provincial Governments will be encouraged to create and effectively manage Protected Areas networks falling in their geographical boundaries. Federal Government will provide grants out of poverty alleviation programmes to rural communities, dependent on such forests for firewood and fodder; for growing these commodities on their village lands through participatory approaches and enhance their incomes through promotion of ecotourism and other such ventures. Appropriate institutional mechanisms will be devised for collaborative management of protected forests with the local communities in order to give them due stakes in the endeavor.

4.2 Mangrove Forests

Mangrove forests are vital for protecting coastal belt and as habitat for fish nurseries and shrimp, which are a source of food and export earnings. These forests are threatened by marine pollution, scarcity of fresh-water flowing down the Indus delta, and over-use by the local

communities for fuel wood and fodder. In order to ensure protection of these forests, proper arrangements shall be made for containing marine pollution, allowing sufficient water to flow down the Indus River and evolving an incentive-based system for sustainable management of these forests.

4.3 Riverine Forests

Riverine forests are pitiable remnants of the extensive woodlands that once fringed rivers of Pakistan. These forests shall be managed primarily for maintenance of their environmental and biodiversity functions, and secondarily for meeting the needs of the public and wood-based industries. As the existence of these forests is primarily dependent on availability of inundation water from the Indus River System, this fact will have to be kept in view while planning Indus water storage and distribution system. In case where inundation water is insufficient, plantations would be established through development projects by the respective governments.

4.4 Preservation of Relict and Unique Forests

Relict forests and their associated biodiversity are an invaluable cultural heritage of Pakistan, which once covered the mountains of Balochistan, Gilgit-Baltistan and plains of Punjab and Sindh. Native tree species, having strong cultural and social values, shall be preserved and promoted. It shall, therefore, be the policy of Government to preserve these forests and associated biodiversity primarily for research, education, maintenance of local environment, and controlled eco-tourism; in partnership with rural communities by providing them their minimum subsistence needs from the forests, along with appropriate incentives in return for their active participation in the regeneration and protection of the forests. Such forests include Juniper forests of Ziarat, Chilghoza forests in Sulaiman Range, and Spruce forests of Naltar in Gilgit-Baltistan.

4.4.1 Juniper Forests

The juniper forests of Balochistan are unique in having survived as remnants of once extensive forests covering its high mountains against overwhelming odds, such as heavy uncontrolled grazing and removal of wood by the local communities for use as fuel and timber. Besides their scientific significance they also harbor a unique biodiversity, protect watersheds of the apple growing tracts, and have great scenic beauty for promoting eco-tourism.

The Provincial Government shall take appropriate measures for conservation and sustainable management of these forests with the involvement of local communities. This shall be achieved by providing them incentives for enhancing their livelihoods and thus reduce their dependence on the forests for consumptive uses.

4.4.2 Chilghoza Forests

The chilghoza forests of Balochistan and South Waziristan comprise the largest pure stands of chilghoza pine in the country. Their survival is being threatened by the unsustainable demands of the residents of about a hundred remote villages for timber, fuel wood, grazing, and edible pine nuts. To save these forests from extinction, the Provincial Government shall launch appropriate development schemes, on the same lines as for the juniper forests. Cultivation of

chilghoza pine orchards will also be promoted, in order to relieve pressure on limited natural forests.

4.4.3 Spruce Forests

Spruce forests in Naltar, District Gilgit in Gilgit-Baltistan being famous for their biodiversity shall be protected with the involvement of local communities. This would require provision of appropriate incentives by the Gilgit-Baltistan Administration for integrated resource management with all stakeholders so that adverse impact of human and livestock pressure on these forests is reduced.

5. Wildlife Management

Rapid depletion of forest, range and wetland resources have adversely affected wildlife habitats bringing many endemic animal and plant species on the verge of extinction. Pakistan's Biodiversity Action Plan (BAP 2000) provides a strategic framework for biodiversity conservation in the country. In order to effectively manage existing protected areas and encourage new conservation initiatives on privately owned lands, provincial wildlife departments shall be strengthened and Forest-Wildlife coordination be improved.

Federal Government shall assist provinces for implementation of international treaties/conventions i.e. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), CBD, Convention on Migratory Species (CMS) and Ramsar Convention in provincial territories for the protection and conservation of the threatened species of wildlife and their habitats. National Council for Conservation of Wildlife (NCCW) shall be strengthened for providing more effective advisory and coordination services. The capacity of Zoological Survey Department shall be enhanced for biodiversity assessment and to conduct regular surveys and research on wildlife species and habitats.

6. Rangelands and desert ecosystems

6.1 Sub-alpine and alpine rangelands and meadows

Sub alpine and alpine rangelands and meadows constitute one of the most productive but fragile ecosystems of the country. Over-grazing is not only depleting the productivity of these ecosystems but is also setting soil erosion causing their permanent degradation. Wildlife in these areas is in direct competition with livestock and many species particularly snow leopard, musk deer, Markhor Ibex and Urial have become threatened.

The Federal Government shall assist Provincial Governments in conservation and rehabilitation of these ecosystems by carrying out inventories on range condition, habitat restoration and preparation of conservation plans.

6.2 Semi-arid and arid rangelands

Semi-arid and arid rangelands in Pakistan cover about 30 percent of its total land area. Un-controlled over-grazing and uprooting the shrubs for fuel wood is converting these areas into deserts. Government of Pakistan shall provide financial assistance to Provincial Governments for

undertaking rehabilitation and management of such lands. It shall also provide facilities for education in Range Management and Wildlife Management.

6.3 Land degradation and Desertification

Pakistan is mainly a dryland country, where 65 to 75 percent of its land is arid and semi-arid. Two-third of its human population depends on arid lands to support their livelihood. The menace of land degradation and desertification is not only affecting rain-fed agriculture and pastoral systems, but also reducing productive potential of irrigated agro-ecosystems due to water logging and salinity. Sustainable Land Management (SLM) is now considered as a viable option to combat land degradation and desertification. Federal and Provincial Governments shall integrate SLM principles into sectoral policies, strategies and plans, as land degradation adversely affects natural resource based livelihood of the rural poor.

Federal Government shall support provincial governments to combat desertification as recommended under Poverty Reduction Strategy Paper (PRSP), National Action Programme (NAP) and aligning Pakistan's NAP with 10-Year Strategic Plan of the United Nations Convention to Combat Desertification (UNCCD). A National Desertification Control Fund as envisaged under NAP and UNCCD shall be established to ensure continued financial sustainability for SLM interventions at grassroots level. Appropriate incentives shall be designed to enlist the participation of local communities in sustainable management of land resources.

6.4 Incentives for implementation of the Policy

The traditional management of forests is not yielding plausible results. There is a need to devise more result-oriented incentives for the officials as well as the custodian communities to protect and increase this valuable resource. Appropriate incentives shall be designed to enlist the participation of local communities in sustainable management of land resources. These incentives may include certificates, rewards, awards, etc.

Moreover, concept of pay-for-environmental services is lauded at all local, national and international forums. However, in Pakistan, there is little success as far as proper institutional and legal cover is concerned. Presently, owners, right holders and forest dependent communities do not find any incentives for the protection of forests and natural resources which ultimately benefits downstream communities. This aspect will be scrutinized in detail and an amicable mechanism will be evolved to the satisfaction of all the stakeholders.

7. Planting trees on farmlands

Farmers will be motivated to adopt farm forestry as a commercial enterprise for production of industrial wood, fuel wood and fodder. Provincial and local governments shall be encouraged to devise mechanisms of incentives for farmers for growing trees on farm lands, including exemption from water tax and provision of agricultural loans. Pakistan Forest Institute, Agricultural Colleges and Universities will be encouraged to develop specialized courses in agro-forestry.

8. Management of irrigated and linear plantations

Irrigated Plantations (IPs) are badly suffering from shortage of irrigation water. New improved irrigation and planting techniques shall be encouraged to rejuvenate IPs with fast growing local species propagated under state of the art silvicultural system. Production of non-wood products of IPs such as silk, honey and medicinal plants shall be enhanced to generate sources of livelihood for surrounding communities.

Existing linear plantations along canals, roads and railway tracks shall be protected and developed using new irrigation and protection technologies. At least 10 % of command area of new canals shall be allocated for raising plantations. Road side plantations shall become an integral component of all the projects of new highways and motorways.

9. Improving urban environment

Urban and amenity forestry shall be given due focus by city and district administrations in their development programmes. Maximum available blank lands in jurisdiction of city and district governments shall be brought under tree cover. New housing schemes shall allocate maximum areas for amenity planting and building by-laws shall essentially include open space for trees.

10. Promotion of indigenous tree species

Tree species of native origins, adapted to specific forest ecosystems, will be promoted. Special measures are, however, needed by the provincial governments to improve germplasm availability of species like *Fraxinus* (Sum), *Juniper* (Sanober), *Betula* (Bhuj), *Taxus* (Barni), *Abies* (Paldar), native *Acacia* (Babul/Kikar), *Ziziphus* (Ber), *Prosopis cineraria* (Jand/Kandy), *Tamarix* (Farosh/Lai), *Tecomella* (Lohiro), *Calligonum* (Phog), and *Dalbergia* (Shisham/Tahli) etc. This would be needed to enhance growth rate of native species and induce resilience to pests, diseases, pollution and climate change affects. Provincial governments will ensure that alien invasive species are not introduced and propagated.

11. Monitoring and Evaluation systems

In order to monitor the changes in forest cover, both on public and private lands, an effective monitoring and evaluation system is urgently needed for future policy, planning and implementation purposes. Government of Pakistan will provide necessary financial and technical assistance to provincial forest departments and Research & Development (R&D) institutions for establishing regular monitoring system based on Geographical Information System (GIS) and Remote Sensing.

V. Action Plan

A mechanism shall be devised to implement and review the National Forest Policy, including passing of any legislation by Federal Government and Provincial Governments in their respective jurisdiction and the provisions of fund etc. A synoptic action plan for implementation of National Forest Policy is given as under:

1. Responsibilities

1.1 Federal Level

At the Federal level, Ministry of Environment shall initiate following actions;

- Devising a detailed action plan with clear responsibilities of federal and provincial level agencies for effective and efficient implementation of the policy.
- Reporting annual progress of policy implementation to the Federal Forestry Board (FFB)

1.2 Provincial Level

In line with the provisions of this umbrella policy, respective Provincial Forest and Wildlife Departments including FATA, AJK and Gilgit-Baltistan shall initiate actions to achieve the goal and objectives envisaged in this policy.

2. Priming the actions

Government shall implement this policy through the following stages:

1. Preparation and implementation of a 10-Year Plan of Action (2010-2020)
 2. Integration of Plan of Action with PSDP and international grant assistance
 3. Provincial/territorial governments shall devise their own policies, legislation, programmes and plans of actions
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