**REPUBLIC OF AZERBAIJAN** 

## NATIONAL FOREST PROGRAM

## (FOREST POLICY STATEMENT AND THE ACTION PLAN)

## 2015-2030

(Final Draft)

2013, Baku

### PREFACE

National Forestry Program (NFP) of Azerbaijan has been prepared for a 15 year period that covers the years from 2015 up to 2030. The preparation works started in 2012 and completed at the end of 2013. Apart from the state forestry service, it also refers a wide perspectives of different stakeholders including public institutions, academia, national and international expertise, NGOs on the management of country's forest resources.

The basic aims of the NFP are to promote sustainably meeting of the public expectations from the country's forests in a the long term, provide means to harmonize the forest management policies into the government policy instruments and rapid structural changes and, to identify the challenges and means for development of institutional and legal framework for national forest management.

The document of the Azerbaijan NFP is a product of collective efforts of the staff of the MENR and particularly Forest Department, many other national public institutions, academic society, representatives of NGOs and local communities and FAO specialists on NFP. In this regard, the technical and financial contribution of the two year FAO-financed TCP project (TCP/AZE/3303) is very much appreciated.

I hope that the Azerbaijan National Forestry Program will provide with clear and coherent recognition of the forestry challenges and disputes in our country and thus, to ensure the forestry sector as well as all the other stakeholders including public bodies, non-governmental organizations, private sector etc. to develop appropriate policies, strategic objectives and applicable actions in its life cycle and beyond.

I would like to thank to all the institutions, representatives and individuals who took part and provided with valuable information in any stage of the NFP for their time, efforts and their contribution.

Minister of Ecology and Natural Resources

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### **ABREVIATIONS**

MENR	:	Ministry of Ecology and Natural Resources, Azerbaijan Republic
FDD	:	Forestry Development Department of MENR
NGOs	:	Non-governmental organizations
FAO	:	Food and Agriculture Organization of the United Nations
SPPRSD	:	State Programme on Poverty Reduction and Sustainable Development in the Republic of Azerbaijan for 2008-2015
SFM	:	Sustainable forest management
NWFPs	:	Non wood forest products
ENPI FLEG	:	A EU financed Program on Forest Law Enforcement and Governance, Policy Improvement in European Neighbourhood Countries and Russia
NFP CITES		National Forest Program Convention on International Trade in Endangered Species of Wild Fauna and Flora

### EXECUTIVE SUMMARY

The government of Azerbaijan wishes to conserve and improve country's forest resources and strengthen the functions of forests with an increased importance over the country. The state forestry service seeks to ways on how the national forest management practices to harmonize easily and adaptable with the global forestry agenda towards the efforts for sustainable development of the country. For this purpose, the national forestry program of Azerbaijan was intended to be formulated in order to cope with the local, national and global demands into comprehensive sustainable land use programs, poverty reduction and the economic development strategies.

Degradation of forest resources and deforestation, insufficient meeting the needs and demands of the society for environmental, social and economic goods and services, inadequate stakeholders' participation and intersectoral collaboration in forestry practices are the main challenges of the Azerbaijan forestry.

Due to the worldwide expertise of FAO and its international status in development of best approaches for sustainable use of natural resources and forests, the Government of Azerbaijan provided with technical assistance for the preparation of the National Forestry Programme (NFP) through the project, "Support to Development of National Forestry Program and Forestry Legislation" (TCP/AZE/3303) implemented in 2012-2013.

Apart from the comprehensive discussions and a number of assessments made of the national forestry situation in country level, local level assessments in several regions (rayons) were also carried out in order to identify the needs and expectations of the local people as well as local institutions. Findings and outcomes of the local assessment studies are also used as significant input for identifying the NFP objectives and its action program.

To develop institutional capacities and mechanisms on forest management with a particular attention to the demands and future needs that contribute the overall sustainable development of the country; to ensure the forestry sector renew appropriate policies and strategies for the implementation of concrete actions on the ground for the effective protection and sustainable management of the country's forests; encourage all related stakeholders in cooperation and participation on all forest management practices; to contribute to the improvement of adaptation and linkages between forestry and other sectors; to strengthen the support for the rehabilitation and multi-functional uses forest resources management including improvement the life standards of the forest-dependent rural population and; to contribute to strengthening financial support, national and international, to the forestry activities are the major priority objectives of the National Forestry Programme of Azerbaijan.

As the first Azerbaijan's NFP, it was prepared by wide range of activities from the beginning up to end. Those include country-wide baseline surveys, training of the staff and other interested bodies on specific aspects of forest management, assessment of forestry situation in central and field levels. In this content, several workshops

and seminars were organized in a wide range of participation manner; reports of the national and international specialists as well as the views of all related stakeholders were intensively used in the preparation phases.

The NFP of Azerbaijan is strongly reiterates that development of Azerbaijan forestry requires vast participation of the related agencies and stakeholders, a comprehensive analysis and assessment of the current forestry situation, improvement of the national forest policies and strategies, an action plan for priority areas, strengthening institutional capacities and regulatory framework and finance mechanisms for their effective implementations.

The NFP also addresses a comprehensive and coherent forest-sector development within the overall context of sustainable development in connection with the other sectors of the national economy by taking into account improving environment and biodiversity conservation, climatic change adaptation and securing the interests and rights of the people while contributing to rural development and poverty alleviation.

The forestry challenges at all levels in Azerbaijan were widely discussed and identified in a number of workshops, assessments and reported by the forestry related institutions as well as different stakeholders. The problems were identified firstly and then the policy objectives and appropriate strategic priorities were elaborated.

The internationally approved sustainable forest management criteria and the general principles of the NFP were taken into account during the formulation of the NFP policy statement and strategies.

The national forest policy statements and strategic priorities for achieving policy objectives are the basic tools of the national forest program. Policy statements and strategic priority issues were categorized under nine major forestry challenges and then several policy objectives under each challenge and the appropriate strategic priorities which capture all forestry related challenges and problem solving means.

Priority issues identified by the related stakeholders during the assessment stages were transformed into a policy statement, action program and elaborated accordingly.

Plan of action for implementation (actions, expected results, indicators, resources, implementation period, and main responsible agencies), taking into account the priority of the actions, capacities for financing, implementation and steering are also elaborated and an action plan for 2014-2020 was prepared.

The Action plan needs to be implemented in a participatory way, defining roles and responsibilities of different stakeholders (including those of other sectors) and identifying investment estimates.

Monitoring system which should accompany the action plan was also discussed. However, the identification and decision on the appropriate and acceptable monitoring tools and mechanisms remained the consideration of the Ministry of Ecology and Natural Resources.

In order to the timely implement of the action program, the financing strategy should be developed in close collaboration with the financial sector.

### 1. INTRODUCTION

Azerbaijan is the largest country in the Caucasus region bounded by Caspian Sea to the east, Russia to the north, Georgia to the northwest, Armenia to the west, and Iran to the south while having a short borderline with Turkey to the southwest. Azerbaijan, with its strategic geopolitical location, is located at the crossroads of several civilizations over the centuries. Due to its diverse climate, the country is home to rich and diverse fauna and flora.

Azerbaijan is also home to a vast variety of landscapes. Over half of Azerbaijan's land mass consists of mountain ridges and plateaus which rise up to 400–2200 meters. The rest of Azerbaijan's terrain consists of plains and lowlands. The Greater Caucasus protects the country from direct influences of cold air masses coming from the north. That leads to the formation of subtropical climate on most foothills and plains of the country.

The following major objectives are considered to be achieved by the Azerbaijan National Forestry Programme to;

- Contribute to the establishment of appropriate institutional capacities and mechanisms on the management of the forests by giving particular attention to the changes of demands and future needs that contribute the overall sustainable development of the country,
- Ensure the forestry sector improve and develop appropriate policies and strategies for the implementation of concrete actions on the ground for the effective protection and sustainable management of the country's forests,
- Encourage all related stakeholders to get close cooperation with the sector, pay more attention and actively participate with providing facilities on all forest management practices from the planning and implementation, supervision, monitoring up to evaluation stages,
- Contribute to the improvement of adaptation and linkages between forestry and other sectors,
- Contribute to strengthen the support for the rehabilitation of multiple use of forests by improving the multi-functional and participative forest resources management, and improvement of the life standards in the forest villages in or in the vicinity of the forests where poverty and dependency on the forests are the reality and,
- Contribute to strengthening financial support, national and international, to the forestry activities.

Despite the open-ended and country driven character of the NFP, the globally agreed principles are also taking into accounts for developing the program. Particularly;

- National sovereignty and country leadership,
- Consistency within and integration beyond the forest sector and,
- Participation and partnership.

At the same time, the seven criteria of the sustainable forest management which are globally agreed and being applied over the world, are significantly regarded as guiding tools and referred during the formulation of the policy objectives and strategic priorities of the NFP.

Apart from the comprehensive discussions and a number of assessments made of the national forestry situation in country level, local level assessments in several regions were also carried out in order to identify the needs and expectations of the local people as well as local institutions. Findings and outcomes of the local assessment studies are also used as significant input for identifying the NFP objectives and its action program.

Taking into account the experiences from other countries where the NFF has prepared and implemented and, information gained from the international practices as well as the related publications of the FAO the following processes were also maintained and tools-material used in the formulation of NFP;

**1. Data providing an in-depth analysis.** Assessment of the current situation through comprehensive analysis of the forestry sector of Azerbaijan, review and elaborate of the forestry sector, problems and opportunities, interrelations with other sectors, national and international reports, consultancies and interviews, workshops, seminars, at central and field levels,

**2. Assessments and elaborating of existing knowledge** to identify the policy objectives and strategies. Policy formulation and planning including strategic priorities and policy objectives and actions provided by forestry sector itself as well as by the other stakeholders for formulation of the NFP which includes;

- A national forest statement including the political commitment to sustainable forest development,
- Targets, strategies and priority objectives for the forest sector for SFM,
- Action plan for activities identified to be implemented in mid and long-term in all aspects of the national forestry agenda,

**3. Formulation of the NFP.** The National Forestry Program (NFP) of Azerbaijan was prepared in accordance with the results and findings of above assessments for a 15 year period (2015-2030),

**4. Government commitments for implementation.** The implementation of the action programs identified in the NFP is the basic commitments of national government. Those are including, facilitating the implementation, providing action plans, clear indications of priority actions, timing, investment estimates and actors involved etc., political, legal and institutional reforms, both within and outside the forest sector, information and knowledge management systems, national and international partnership arrangements and joint activities etc.,

**5. Monitoring and evaluation of the program,** including valuation of the forestry sector's contribution to the country's economy, to poverty reduction and to sustainable development in general and the impacts of the challenges and results of the targeted policy objectives and the actions in particular.

### 1.1 Physical environment and demographic conditions of the country

Azerbaijan has a total area of 8.6 million hectares, of which an estimated 4.4 million ha (52 percent of total land area) is used for agricultural purposes. Only about 1.77 million ha (20 percent of total land area) is under cultivation, with another 2.3 million ha (26 percent) used as rangelands and grazing areas. The country's water systems are continually changing under the influence of natural forces and human introduced industrial activities. The Kura and Aras are the most popular rivers in Azerbaijan; they run through the Kura-Aras Lowland and flow into the Caspian Sea.

There are 106 species of mammals, 97 species of fish, 363 species of birds, 10 species of amphibians and 52 species of reptiles which have been recorded and classified. Azerbaijan's flora consists of more than 4,500 species of higher plants.

The total population in Azerbaijan is around 9.4 million, out of which 51.4% are urban and 48.6% are rural, is the most densely populated among the Southern Caucasian republics. Some 80% of the population is concentrated in valleys and low lands, where industrial centres are located, farming is more convenient and irrigation more developed, while around 20% live in mountainous and forested areas.

Azerbaijan is a middle-income country with a gross national income per capita of US\$ 3,660 in 2008, mainly due to its richness in mineral resources, basically oil and gas which contribute approximately 54% of GDP. Azerbaijan experienced impressive GDP growth in recent years coupled with very significant poverty reduction. However, agriculture remains a major pillar of Azerbaijan's economy, contributing substantially to its GDP providing significant employment in rural areas.

### 1.2 National development policies and strategies

The "State Program on Poverty Reduction and Sustainable Development in the Republic of Azerbaijan for 2008-2015" (SPPRSD) is the principal instrument for addressing the main development challenges of the government of Azerbaijan. The strategic objectives particularly diversification of the revenue sources for the population, improving the ecological situation and ensuring sustainable management of the environment and continuing institutional reforms and improving public administration of the SPPRSD address the development of forestry sector directly or indirectly.

The Order of the President of the Azerbaijan Republic ( $N_{2}$  1152, 2003), establishes the "**National Program for Sustainable Socio-Economic Development in the Republic of Azerbaijan, 18 February 2003**"" on environmental matters. In this program, the "Forest Reserves" is mentioned saying that particularly the Republic of Azerbaijan includes sparsely wooded areas so that the national program offers a series of public measures such as the restoration and protection of forests, planting of new forests and sustainable management of forests etc.

The "National Strategy and Action Plan on Protection of Biological Diversity and Sustainable Use" was approved by Presidential Decree (No. 1368) in 2006. It aims to eradicate poverty, ensure regulation of environmental balance, achieve sustainable development and secure access of future generation to genetic resources through conservation and sustainable use of biodiversity (NBSAP 2006). It also focuses on sustainable management of natural resources and covers activities aiming conservation and sustainable use of forests and involvement of communities in forest management.

The **National Energy Action Plan/Azerbaijan** addresses the utilization of renewable energy sources and energy savings techniques and, enhance co-operation on environmental issues. The plan also mentions the implement

provisions under the UN Framework Convention on Climate Change and the Kyoto Protocol which was ratified in 1995 and 2000 respectively by the Azerbaijan Government.

The **Law on Specially Protected Natural Areas** (2000) and the Law on the **Protection of Plants** (1996) determines the legal basis of the organization and preservation of protected natural areas and objects in Azerbaijan with responsibilities for the sanitary control and use of chemical, biological and other forms of plant protection.

The **Law on Wildlife**, 1999, defines the animal world, property rights over fauna and legal relationships between actors. It also describes issues of State inventory and monitoring, and economic and punitive regulations.

State **Program on Renewable and Alternative Sources of Energy (2004)** for 2008–2015 and Concrete Action Plan for 2010-2020 for alternative sources were approved in 2004. Activities including studies on potential alternative renewable energy sources and capacity building measures, were launched only in 2008–2009. Nevertheless, this is an important milestone, considering that the energy sector is the main source of pollution and greenhouse gases in Azerbaijan. The Program expresses the intention to offer incentives for investments in renewable energy, although detailed incentives had not been elaborated.

In April 1997, **State Commission on Climate Change** was established by the President's Decree. The Ministry of Ecology and Natural Resources (MENR) has the responsibility for formulating and implementing environment policy, developing protection measures, monitoring, implementation of environmental legislation and imposing sanctions, and administering a pollution permit system. Climate change-related functions were subsequently added in recent years.

The **National Environmental Action Plan** was prepared in 1998, in which priority projects on environmental issues were identified and the development of a relevant legislative base to European standards including improved governance on environment protection and implementation of priority projects were elaborated.

The **National Programme on the Rehabilitation and Expansion of Forests** adopted in2003 and covered the period of 2003-2008. Through the Program 59,184 hectares of were restored, including tree-planting on 22,855 hectares and undertaking of climate change mitigation measures in the forestry sector.

### 2. THE FORESTS AND FORESTRY INSTITUTIONS IN AZERBAIJAN

# 2.1 Forest and tree resources and their ecological, economic and social roles in the sustainable development of the country

Forests are considered to be one of the most valuable natural resources of Azerbaijan that integrate soil, water, trees, bushes, vegetation, wildlife, and microorganisms which mutually affect each other from biological viewpoint in the course of development. In Azerbaijan, the total area assigned for forestry (state forest fund area) is about 1213,7 thousand ha of which .1021 thousand ha is currently covered by forest vegetation, corresponding 11.8% of the country area.

Azerbaijan is a low forest cover country where the existing forests are unevenly distributed that almost 85% of them are common in mountainous and hilly regions and 15% in the plains.

In accordance with the economic and ecological value, location and functions as well as in terms of protection viewpoint, the country's forest resources are rated as *first group forests*. They are divided into seven protective categories as such; Forest reserves, Resort forests, particularly valuable forest areas, Forest green areas in cities and other populated areas, Wild fruit forests, State protective forest belts and, other forests.

All forests of country are publicly owned and managed by the state in accordance with the provisions of the Forest Code and the Law on Environmental Protection. Azerbaijani forests assigned to the first group of forests. They are transferred to the permanent use of forestry enterprises for the intended purpose for the development of forestry.

Forestry Development Department under the Ministry of Ecology and Natural Resources (MENR) is the main government agency responsible for management of the forest lands and resources while the forests under the protected areas are managed by the Department of Biodiversity and Protected Natural Areas.

State inventory of the forest fund is kept in order to organize management, conservation and protection, systematic monitoring of the quantitative and qualitative changes, providing reliable information on the forest resources of state authorities, local self-government, and the relevant physical and legal persons.

Within the principle of multi-purpose use of country's forest resources, several categories of protection in accordance with the value, location and the functions were performed. They are distributed as follows: water-conservation-69.2 thousands hectares, safety-636.9 thousand hectares, hygiene and health-102.8 thousand hectares and special purpose-54.8 thousand hectares.

Rules defined by the Law of Azerbaijan Republic "**On Land Reform**", forest and non-forest areas not covered with forest vegetation, for the purpose of their recovery, can be transferred to natural and legal persons on a contractual basis. Forest fund's land must be used mainly for maintenance and expansion (recovery, bookmark forests, etc.) of forestry. Forest fund's land is used by forest authorities and other state and non-state enterprises, institutions and organizations to which they have been assigned for the implementation of their statutory activities.

According to the Land Code the Forest fund's land is used for meeting industrial and other needs of enterprises, institutions and organizations, which in accordance with legislation harvesting wood and other forest materials or carrying out other work (construction of buildings and other structures, roads, carrying out electrical lines, etc.). Forest fund's land can be leased in order to restore forests in the manner prescribed by the Forest Code of the Azerbaijan Republic.

Another critical matter of the management and protection of the Azerbaijan's forest resources is the occupied forests in Nagorno-Karabakh region which is an important conflict between Azerbaijan and Armenia. According to the reports recently provided, some 261 thousands Ha of forest lands are still under occupation and being degraded and diminishing of biodiversity has reached a critical stage.

### 2.2 Stakeholders of forestry sector

Natural and legal persons and associations can participate in the management, protection and regeneration of forests in accordance with the legislation of the Azerbaijan Republic.

However, since all forest fund land is owned by the state in Azerbaijan, private forestry and the public participation in forest management is not the issue of the national forestry debate.

Powers of local authorities in the use, conservation and protection of forest fund and reproduction of forests are determined in accordance with the Constitution of the Republic of Azerbaijan and the relevant legislation of the Azerbaijan Republic. Transfer of the right of use of forest sites (land) is legalized by amending the agreement, the logging permit, the order or the ticket.

Trees and shrub vegetation located on land owned by private and legal persons belong to them by right of ownership, unless otherwise provided by legislation and may be disposed of.

The local governments should be able to own forest resources and manage them in order to introduce social programs for the construction of housing, providing low-income families with wood needed for heating and cooking. However, the shortage of gas and wood for heating is quite evident in rural areas.

### 2.3 Forestry institutions and financing

The country's forests are owned by the state, and perform water conservation, soil protection and climateregulating functions. Azerbaijani forests assigned to the first group of forests. They are transferred to the permanent use of forestry enterprises for the intended purposes.

The basic principle of forest management in Azerbaijan is a continuous use of forests. Management of forests is based on the exclusive state ownership right on the forest land and placed on them of the forests. Forest enterprises carry out the whole process of reproduction and use of forest resources.

Forest management is carried out in accordance with the Forest Code and the Law on Environmental Protection by the Ministry of Ecology and Natural Resources of Azerbaijan Republic (MENR). Some

adequate and effective measures for the conservation and restoration of forests throughout the country have been taken by the Ministry in recent years.

Forests of the State Forest Fund and former collective farm forests close to rural settlements have become a source of fuel wood. Republic of Azerbaijan intended to the revise the management of forest resources after independence.

Until the full nationalization of forests in the former Soviet Azerbaijan, forests located near the villages, historically were mainly community forest. After the introduction of the system of collective farms (kolkhoz) community forests were transferred to long-term and gratuitous use by those formations.

The Ministry of Ecology and Natural Resources (MENR) was established on 23 May 2001, with responsibility for formulating and implementing environment policy, developing environmental protection measures, screening projects for potential adverse environmental impacts and monitoring.

The forest policy of the country is managed by the Forestry Development Department, under the Ministry of Ecology and Natural Resources. The department takes care of the protection and preservation of forests, restoration and planting of forests, preparation of planting stocks, storage of forest trees and bushes, preservation of forests and other forestry actions, which includes the efficient and purposeful utilization of forest reserves and related spheres of agriculture. It also works on the improvement of the protection of species of animals in the forests, ensuring biodiversity, the establishment of cultural, scientific and recreational complexes throughout nature, as well as the protection and expansion of the gene pool in the growth of forest seed.

The Forestry Department has five Divisions at the headquarters and, 33 forest protection and rehabilitation enterprises, 6 forest nurseries and 2 regional afforestation enterprises in the field level. The forest Research Institute is and associated unit of the Forestry Department. The work of Department is based on and guided by the Constitution of Azerbaijan Republic, the laws of Azerbaijan Republic and the international agreements to which Azerbaijan Republic is a party, the decrees and orders of the President of Azerbaijan Republic, The forest Code of Azerbaijan Republic, the decisions and orders of the Cabinet of Ministers of Azerbaijan Republic, the Statute, regulation, orders and instructions of the Ministry, and other normative legal acts in the field.

The financial support of department's activity is realized from the budget of Azerbaijan Republic as well as from other sources provided in the legislation.

There is only one research institution, Forestry Scientific-Research Institute under the MENR, dealing with forestry in Azerbaijan.

State Land and Mapping Committee was founded upon Decree of the President of the Republic of Azerbaijan in 2001. The Committee is the central executive power body implementing land cadastre, land monitoring, geodesy, topography, mapping, gravimetric, land reform, formation of fruitful use of land resources, restoration and increase of land productivity, regulation of land-citizen relations, setting territorial units, state control on geodesy and cartography.

The role of the State Land Committee in forest policy is making proposal within its own authority with regard to the determination of loses in agriculture and forestry and then it gives proposals to the Cabinet of Ministers of Azerbaijan Republic.

### 2.4 Legal framework

The **Forest Code** of the Azerbaijan Republic approved by the Law of the Azerbaijan Republic  $\mathbb{N}$  692-IQD dated 22 June 1997and afterwards Decree of the President of the Azerbaijan Republic  $\mathbb{N}$  693 of 30 March 1998 on the application of the Forest Code, approved by the Law of 30 December 1997 is the top legal framework for forestry. It sets out the legal basis for regulation of forest relations, management, conservation, protection and reproduction of forests, increase their environmental and resource potential on the territory of the Azerbaijan Republic.

State management in the field of use, conservation and protection of forest resources and forest reproduction is carried out by the relevant executive authority of the Azerbaijan Republic. This refers mainly to the Cabinet of Ministers and the Ministry of Ecology and Natural Resources.

All forests and forest lands not covered with forest vegetation (forest and non-forest land) form a forest fund of the Azerbaijan Republic

Non-forest lands include lands designated for forestry (land occupied with cuttings, roads, agricultural lands, and other lands), and other lands located within the boundaries of forest resources (land occupied by swamps, rock streams, and other inconvenient for land use).

Forest Fund of the Azerbaijan Republic consists of mountainous and lowland forests. In accordance with the economic and ecological value, location, and the performed functions the country's forest resources rated as the first group forests and in terms of protection they are divided into the following categories: Forest reserves, Resort forests, Particularly valuable forest areas, Forest green areas in cities and other populated areas, Wild fruit forests, State protective forest belts and Other forests.

Rules defined by the Law of Azerbaijan Republic "**On Land Reform**", forest and non-forest areas not covered with forest vegetation, for the purpose of their recovery, can be transferred to natural and legal persons on a contractual basis, under the conditions specified by the Forest Code, for a period of one to ten years.

Relationships in the use, protection and reproduction of forests, forest funds' land (forest relations) are regulated by the relevant rules of forest and land legislation of the Azerbaijan Republic.

The "Forest Areas Leases for Short-Term (up to one year) Use Regulation" was approved by the Resolution of the Cabinet of Ministers,  $N \ge 230$  in 1998. The regulation governs leases of forest land on a short-term basis. Individuals and legal entities regardless of ownership and legal form for the purchase of the above right must apply to the Ministry of Ecology. Rights of forest users during the use of forest fund are governed by the Forest Code.

Powers of local authorities in the use, conservation and protection of forest fund and reproduction of forests are determined in accordance with the Constitution of the Republic of Azerbaijan and the relevant legislation of the Azerbaijan Republic.

Forests and forest lands are not subject to privatization. Natural and legal persons are only the users of forests which can be granted with the right of use of forest fund. Persons found guilty of violating forest laws are subject to disciplinary, administrative, civil and criminal liability in accordance with the legislation of the Azerbaijan Republic.

People involved in administrative and criminal liability for unauthorized occupation of forest areas, are obliged to release these areas in a timely manner.

### 3. MAJOR CHALLENGES AND DEVELOPMENT NEEDS FOR AZERBAIJAN FORESTS AND FORESTRY

The main challenges of the Azerbaijan forestry were identified in the various national and international forestry related documents, consultations and the reports of forestry experts. Those include particularly; degradation of forest resources and deforestation; shortages in meeting the needs and demands of the society for goods and other socio-economic as well as the other environmental services of the forests; inadequate stakeholders' participation and inter-sectoral collaboration in the forest management practices.

Currently, various factors have a direct impact on the state of the forests in Azerbaijan. Occupation of part of the state forests fund; deteriorates phytosanitary condition of the forests. Practice of animals overgrazing of on the pastures and forest lands increases the soil erosion. These issues together with the unsustainable use of the forest resources have been identified as pressing problems in the management of forests in Azerbaijan.

Forest Inventory is an essential and integral component of forest management. In Azerbaijan, the current methods for forest inventory are based on the ground-surveys and aerial photo interpretation.

Reforestation is one of the most important aspects of forestry. The size and speed of reforestation primarily determine the level of development and degree of intensity of forestry. Tree-planting work in the country started from the eighteenth century.

The challenges and the emerging development needs for Azerbaijan forestry was further elaborated at different levels and of different perspectives during NFP preparation stages. The following forestry related concerns were highlighted as the basic challenges of the national forestry agenda to be elaborated during the implementation of NFP and beyond:

# 3.1 Development of policy and legislation frameworks, strengthening institutional structures and capacities of forestry

Recently, the Ministry of Ecology and Natural Resources of Azerbaijan Republic (MENR), has taken some measures for the conservation and restoration of forests throughout the country. Due to the unrealistic and inadequate structure, the measures taken by the Ministry are not sufficiently addressed the current and future needs and could not met the expectations of the society. For instance, financial allocation is low, decentralization and empowerment of field units is slowly going on, forest lands and forest fund lands are not clearly identified and registered etc.

The responsibilities and authorities of the units, both in the central organization and in the field, which are directly and/or indirectly dealing with the forestry issues, are not clear so that the situation often creates conflicts among these units. Furthermore, effective cooperation among these units (e.g. FD, Department of Biodiversity and Protected areas, Ecology Inspection Divisions) is not good enough.

Institutional capacities in forestry need to be developed and improved including particularly forest inventories, finance and legal framework, forestry cadastre and management plans, monitoring and assessment of forests etc.

The volume of the maintenance and sanitary logging in the forests is planned on the basis of the annual allowable logging site established by forest management. For each type of logging, the planned volume of harvested timber (for firewood and construction) based on the allocated funding. Enterprises analogically procure and sale non-timber forest products.

It should be noted that attention of companies of forestry sector to the production of non-timber forest products in recent years has increased. Accordingly, a number of enterprises established pilot industrial plantations (hazelnuts, walnuts, chestnuts, sea buckthorn, etc.). Unfortunately, the equipment and material of companies engaged in forestry in the field of harvesting of non-timber forest products do not meet modern requirements.

In Azerbaijan, forest management is carried out by the Department of Forest Development in the Ministry of Ecology and Natural Resources while the protected areas and forest biodiversity issues are dealt with by the department of National Parks and Biodiversity Davison at the same Ministry.

Forestry development is based on the principles of sound system of measures to ensure the timely reproduction and rational use of forest resources conservation and protection of forests.

Other than the FD in the central organization, there are 36 forest companies, 6 nurseries and one 4 Research Institute of Forestry in the state forestry service in Azerbaijan. Recommendations on preparation of work regarding introduction is implemented by research institute of forestry. The Institute together with the Department of Forest Development introduces the recommendations to subordinate enterprises (forest enterprises and nurseries). All controls for the process of introduction to the production should accordingly be done by the sectors of the Forest Development Departments.

### 3.2 Strengthening public awareness and stakeholders' participation for sustainable forest management

In all cases, forest resources make a profound contribution to economic development of the state, regions, and local forest-dependent communities.

All forests in Azerbaijan are under the state property and perform particularly water conservation, soil protection, and climate-regulating functions.

Through generations forests used to be not only a source of living and recreation, but also respected with other many functions including protection of the environment.

According to studies and research conducted by respective state agencies as well as within internationallyfunded environmental projects, Azerbaijan forest management has an inadequate public awareness and stakeholders' participation both in national and also local levels in addition to the a number other critical problems.

Solution to these problems currently is a primary focus of the political leadership and international organizations. The "National Program on restoration and expansion of forests in the Azerbaijani Republic" has been adopted for the period 2003-2008 and contributed partially to the improvement of the situation At the same time awareness about forests and forestry matters was raised among the local executive authorities, municipalities, and local forest-dependent communities.

It is realized that the MENR as the key Ministry responsible for the forests across the nation must do more to explain the general public why forests are so important for the well-being of the country.

A communication strategy is strictly needed to improve communication of the Ministry of Ecology and Natural Resources with the key stakeholders and broader audience in the forestry realm in Azerbaijan since forests comprise diverse interests of a wide variety of stakeholders. In this respect, well-established communication from the key governmental agency provides transparency, set up mechanisms for the effective stakeholders' participation and ensures adequate response to their concerns. To this end, the following communication objectives are considered to be elaborated and strengthened:

- To increase knowledge on vital role of the forests in preservation of biodiversity and other environmental assets when managed respectively;
- To raise public awareness on ongoing and upcoming governmental initiatives aimed to tackle existing problems and issues in the Azerbaijani forest sector;
- To effectively address the current threats to Azerbaijani forests through the wide variety of outreach techniques;
- To streamline cooperation and communication between the key stakeholders;
- To promote better understanding of the challenges of climate change;
- To promote benefits of public involvement in the forest management and;
- To increase the use of sustainably produced wood and other forest products as climate friendly materials and renewable energy sources.

In this regard, an extensive work and activities in the area of raising of public awareness on ecological problems and sustainable forest management as well as on prevention of illegal logging in the forests which were comprehensively addressed by the framework program of the ENPI FLEG must also be regularly followed up.

### 3.3 Strengthening inter-sectoral linkages of forestry

Linkages and complementarities of forestry with the other the national, sectoral and regional development processes e.g. poverty reduction, agriculture, energy, tourism etc., plans and programs are weak and, integrated approaches of the sector with other sectors is not enough.

State forest management units, particularly the FD of the MENR affects very often the plans, activities and the decisions of the State Land and State Mapping Committee. As a government policy of the Azerbaijan Republic, expansion of the forested area is an important target. Although this is very good and the country strictly needs such, it obviously requires some land other than forested land and forest fund land. It is therefore, the forestry sector has to establish good linkages with those Committees in order to create appropriate lands for afforestation.

The rules of the "Land Reform" should also be carefully looked over by the Ministry of Ecology and Natural Resources in order to prevent existing forested land which might be considered to be used for different purposes other than forestry as well as to provide additional areas for forestry purposes.

Linkages on the legislative tools on the powers of local authorities on the use, conservation and protection of forest fund and reproduction of forests are also important for promoting forestry related knowledge and more interest of the local public bodies in the forestry matter.

Forests and forest lands are not subject to privatization. However, private initiatives and investments in new forest establishment and privately owned new plantation are crucial and need to promote.

Likewise, interrelations and close cooperation with the energy sector including the gasification, agriculture, tourism, education particularly high education etc. are not also required levels.

The attention of enterprises of forestry sector especially to the non-timber forest products in recent years has increased. Unfortunately, the equipment and material of such enterprises engaged do not meet modern requirements.

Pursuing a policy of integration into the international community, over the past few years the Republic of Azerbaijan has signed and ratified dozens of international and bilateral conventions, treaties and agreements, including those related to the protection of the environment. Those are particularly The Convention on the Protection of the World Cultural and Natural Heritage, CITES, Bern Convention, Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention), Convention on Biological Diversity, The Kyoto Protocol to the UN Framework Convention on Climate Change, Basel Convention, Ramsar Convention, Bonn Convention etc.

However, actively participation to the related events of these conventions and follow up of the progresses of such conventions including decisions, findings and obligations etc. is not appropriate level so that harmonization and adaptation is very slow.

### 3.4 Development of forest planning and monitoring

Resolution of the Cabinet of Ministers of the Republic of Azerbaijan (2000) has approved some basic rules for the forest cadastre including -the list of indicators for the national forest cadastre- rules on the state forest cadastre and -methods of economic evaluation of forests. The state forest cadastre contains information about registration, environmental, economic, quantitative and qualitative characteristics of the forest fund. Data from state forest cadastre are used in the management of forests and in transferring forest land to other status.

According to the Land Code the Forest fund's land is used for meeting industrial and other needs of enterprises, institutions and organizations, which in accordance with legislation harvesting wood and other forest materials or carrying out other work (construction of buildings and other structures, roads, carrying out electrical lines, etc. etc.). Forest fund's land can be leased in order to restore forests in the manner prescribed by the Forest Code of the Azerbaijan Republic.

However, forest based inventory and data being used for planning and management of the country's forests is generally out of date. The state forestry sector has some difficulties on accessing to modern inventory tools and techniques to provide with reliable and up-to-date data for an appropriate and applicable planning and management of forest resources. Inventories for accurate data on forest resources, periodic validation and updating of existing figures are also being carried out in very low standards with old-fashioned and out of date methodologies in Azerbaijan.

Furthermore, Azerbaijan forestry sector also strictly need qualified and experienced personal resources at all levels. The institutional capacity of the Ministry as well as the FD for forest based cadastral surveys and management planning, monitoring and assessment of forests is need to be strengthened.

The official registration of the forest resources and forest fund land based on the timely inventories and actual data should also be provided and inconsistencies on forest resources should be cleared up.

# 3.5 Prevention of illegal logging and other destructive interventions, strengthening protection and conservation of forests

More effective forest protection measures including mainly against illegal logging, overgrazing and other damages, and negative effects of the picnic-based tourism activities in or around forested areas, fighting against

wildfires, conservation of *Tugai* and mountain forest ecosystems with their biodiversity etc. are among the main challenges of the Ministry of Ecology and Natural Resources in Azerbaijan.

The Resolution of the Cabinet of Ministers of the Republic of Azerbaijan ( $N_{2}$  78, 2000) approved the "Rules on protection of the forest fund and reproduction of forests". The rules define the purpose of protection of forest resources from fires, illegal logging, violations of the rules of use of forest fund and from other harmful actions forests, disease, etc. The resolution also defines rules of the authority of the Ministry of Ecology and the local forestry as well as officials on conservation, protection and restoration of forests.

Although a number of directions for achieving the conservation of forest areas are envisaged such as measures for prevention of illegal logging and timber procurement, establishment of operational stations, chemical firefighting tools in order to prevent forest fires, evaluation of phytosanitary condition of forests, measures for protection against diseases and pests, training of highly skilled personnel etc., such measures for protection of forest resources and their ecological functions are not successful and variety of human-induced harmful effects are still exist.

In this regard, the institutional capacity of forestry organization and good governance in central and field levels should be strengthened and roles and contributions of local administrations for forest protection should be revised and enforced. Human-induced harmful effects and damages on forest resources, in particular on illegal logging, over-grazing, recreation and tourism pressures on forested areas should be eliminated through comprehensively prepared measures.

### 3.6 Improvement of existing forests and expansion of forest areas

Because Azerbaijan is a low forest cover country and quiet poor in terms of forested land, expansion of the forested areas through afforestation and new plantation is among the major forestry priorities of the Azerbaijan government as well as the MENR. The target of the Ministry, declared unofficially by authorities is to increase forest area from 11 percent up to 20 percent of the country's land as a mid-term goal. This declaration reflects the willingness of the state forestry sector although the target seems unrealistic unless new suitable (quality and quantity) land is allocated for the afforestation and tree plantation purposes.

The Resolution of the Cabinet of Ministers of the Republic of Azerbaijan ( $N_{2}$  78, 2000) approved the "Rules on protection of the forest fund and reproduction of forests". The rules define the purpose of forest reproduction is to afforest bare lands, improve forest species composition. For the purposes of establishing forests and woodlands in treeless areas, preventing land erosion, establishing shelter belts and creating green areas around cities land utilized for other purposes, particularly if unsuitable for agriculture, may be transferred to the forest fund.

Terms of allocation, recovery and use of forest fund's land are set out in the Land Code, the Forest Code of the Azerbaijan Republic and other legislation.

Review of present status of forests, attraction and investment to the forest sector, preparation of projects on afforestation and preparation of measures aimed for reforestation are envisaged for achieving the main objectives for regeneration of forest areas and for the tree plantation. In order to implement of such measures the following tasks are particularly given to the Ministry of Ecology and Natural Resources:

- Restoration, conservation and ensuring of sustainability of natural forests;
- Plantation and the use of new forests;
- Efficient use of economic, environmental and social potential of the forests;
- Establishment of new processing plants of wild fruits and berries.
- Cultivation and processing of fast growing trees (acacia, poplar, etc.) with appropriate quality for subsequent use in the furniture and construction industries.
- Widely introduce and use international eexperieance in establiment and development of Model Forests applying provisions and recommendations of the ENPI-FLEG Program.

# 3.7 Strengthening sustainable use and utilization of forests, with special focus on securing environmental and protective functions as well as for meeting needs and demands of the society and local communities for social and economic services and benefits of the forests.

Forests cover only limited and inadequate percentage (11%) of the country area and even the significant parts of the existing forests are degraded and require restoration.

Economical use of all forest products (timber, fruit and berries, medicinal and industrial raw materials, etc.) is the most appropriate to conduct a comprehensive forest management in Azerbaijan, where only the large deficit of wood, but there are every opportunity to make full use of non-timber forest products.

Sustainable use of forest resources to contribute to a better satisfaction of the needs of society at large and rural population in particular is one of the major challenges of the state forestry objectives. However, majority of the forest areas are allocated for ecological and protective functions and services (e.g. soil and water conservation, air cleaning, other ecosystem services) while harvesting of wood especially fuel wood and other products is applying and permitting only on some suitable limited areas.

Despite the strict prohibition on wood harvesting in all regions of the country, illegal cuttings for fuel wood needs of the local people and for charcoal production is still available. Sanitary and improvement cuttings in suitable forest areas for meeting fuel wood needs of local people by legal ways should be reconsidered.

At the same time, undertaking research and assessment studies for valuation of the ecosystem services, protective functions and benefits of forests in collaboration with the research institutes, NGOs and related international programs are important challenges and emerging issues of the state forestry management. By doing this, the current conditions and development needs and capacities of NWFPs resources in the forest areas would be identified and harvest volumes within the capacity of the forests will be increased. The knowledge and capacities of the private sector, forestry enterprises and local communities in sustainable harvest, establishment of small-scale collection and processing facilities, storage and marketing of NWFPs would be built up.

Definition of forests with recreational value, calculation of allowable recreational impact and on that basis determine the conditions and the recreational potential for tourism as well as education programs and controls for appropriate use of the recreation and tourism sites by people in forest areas are also need to be developed. Thus, the portion of the revenue of the local people from the tourism and recreation activities in forest areas may increase and then the attention of the local people to protection of the forest around their homestead areas will be improved and strengthened.

The following directions are envisaged for achieving the main objectives regarding the use, conservation and regeneration of forest areas and for the development of forest sector:

- Taking of measures for prevention of illegally cut timber procurement,
- Review of present status of forests, attraction and investment to the forest sector, preparation of projects on afforestation,
- Preparation and implementation of measures aimed at reforestation,
- Creation of conditions for sustainable use of renewable resources (fruits and berries, medicinal and other plants),
- Establishment of operational stations, fire-fighting tools in order to prevent forest fires and cases of inflammation,
- Evaluation of phytosanitary condition of forests, conduction of periodical measures for protection against diseases and pests,
- Training of highly skilled personnel working in the forestry sector,
- Detailed survey to identify the capacity, areas, species, quality, values, harvesting methods, processing, marketing etc. of the raw material base of NWFP and assign these areas to forests,
- Diversification of income and improving living conditions of the local communities living within or near forest areas,
- Promoting usage of alternative energy sources for preventing/ decreasing illegal fuel wood cuttings from forests and increasing more efficient consumption of fuel wood through relevant measures (e.g. promoting house insulation, introduction of more efficient stoves, etc.),
- Promoting timber imports (e.g. decreasing custom duties) and usage of wide range of alternative construction materials and wood substitutes,

- Enhancement of sustainable management planning and implementations for pasture areas and livestock resources near or within forests,
- Introduce and use international experience in establishment and development of Model Forests based on the recommendations of the ENPI-FLEG Program,
- Enhancement of preventive and combating measures, public education and stakeholders involvement against forest fires,
- Increasing public knowledge and awareness about biological diversity values of forests, encourage stakeholders' participation and contributions for these purposes.

In recent years, in order to improve in the qualitative composition of forests only maintenance and sanitary logging of forests have been carried out. The average volume of maintenance and sanitary logging in Azerbaijan is gradually getting reduced since 1991.

### 3.8 Climate change adaptation

Forests are considered as the key resources for reducing the negative effects of the climate change and CO2 emission. Although their important functions on mitigation of such impacts, many scenarios being made by scientific and forecasting studies have shown that forests are the one of the most vulnerable ecosystems to climate change impacts. For that reason, possible climate change impacts on forests and measures for mitigation and adaptation are in the agenda of the global forestry debate.

The main sources of CO2 emissions in Azerbaijan are the energy and industrial sectors whilstCO2 emissions from the transport sector (aviation and vehicles) have shown the largest increases in recent years. Azerbaijan's mitigation efforts have focused on expanding the use of renewable energy sources and improving energy efficiency and are set out in the State Programme on the Use of Alternative and Renewable Energy Sources which was signed by the President of Azerbaijan in 2004. Mitigation efforts are also being implemented in the forestry sector through the National Programme on the Rehabilitation and Expansion of Forests (2003).

However, national climate change policy is still in its infancy. An Azerbaijan National Climate Change Action Plan has been developed but has not been financed. There is no national policy on climate change. The problems related to Azerbaijan's low progress in combat with a climate change are similar to ones of other countries of the Caucasus. Nevertheless, they are accelerated with relatively low financial incentives provided by international community for tacking climate change challenges.

However, there is still, *lack of national experts on climate change; absence of relevant* scientific assessments and surveys; lack of coordination and information-sharing between relevant projects and programs being implemented in the country and; awareness on climate change issues among decision makers, the private sector and the general public is relatively low.

Lack of gas and other sources of energy in rural regions have recently led to the widespread use of wood for fuel.

According to the PRECIS model, the average annual temperature increase in 2021-2050 will amount to 1.5°C - 1.60°C. Expected climate change can cause decrease of area of hardwood species approximately to 2-2.5%.

One of the most important impacts of climate change projected for Azerbaijan is the decline in the availability of surface water resources with negative effects on hydro-energy and water supply as well as agriculture which already accounts for the majority of water withdrawal.

Adaptation measures will need to include increased water use efficiency through micro-irrigation technology as well as demand-side conservation measures and possibly an increase of storage to address increased variability of water availability and shortfalls during high demand months.

According the plans of the Department of Forest Development of the Ministry of Ecology and Natural Resources the following measures considered as appropriate for climate change mitigation and adaptation in forest sector: - compliance of legislative acts on forest protection, -conduct reforestation measures and measures to stimulate natural regeneration, -complete ban on a cattle grazing in the forests, -the measures against forest pests and diseases and, -introduction of highly productive forest species to increase in forest cover.

### 3.9 Development of research and education

Scientific and forestry based research studies are one of the significant issues to be developed in the Azerbaijan state forestry sector. Every discipline of the country's forest management such as inventory and data assessment, planning, protection and conservation, regeneration techniques and methodologies including both natural and artificial, harvesting, rehabilitation and afforestation and so on needs to be revised and updating. Methodologies and techniques for doing those should be identified through scientific research studies which can provide with the most appropriate, economically effective and feasible ways and tools.

The only one Forestry Research Institute, based in Baku, under the MENR has not adequate resources including qualified staff, financial mechanism and equipment and material. The Institute does not have efficient networking facilities with the other national and international research communities and institutes either.

The forestry research unit should conduct with collaboration of MENR/FDD and with relevant institutions as well as with relevant international programs and institutions for its research programs and projects.

Forestry Research Institute needs to be developed firstly by reorganizing its unfavorable situation and then, new research units with adequate and experienced staff should be created in different regions of the country.

Forestry education in Azerbaijan has a number of difficulties due to lack of faculties, absence of facilities in service training and training of the middle level staff (especially in the field units). All experienced foresters and high level decision makers of forestry service are graduated from the faculties in different cities of Russian Federation. Therefore, new forestry faculties and schools such colleges with modern equipment, qualified staff and technologies are needed in national levels.

In this regard, promotion and strengthening forestry related education and training possibilities at all levels and, organize subject-specific courses and in-service trainings for forestry staff is strictly necessary and to be facilitated.

### 4. NATIONAL FOREST PROGRAMME (2015-2030)

This National Forest Program (NFP) contains a National Forest Policy Statement and an Action Plan for 2015-2020 period. Priority objectives and the strategies given under the Policy Statement and the activities under the Action Plan were elaborated based on the analysis of the current situation of the forestry in Azerbaijan, through various national stakeholders' workshops, experts' reports, and multi-stakeholder consultations.

### 4.1. FOREST POLICY STATEMENT

### 4.1.1 Priority Objectives of the National Forest Policy of Azerbaijan

Priority objectives (desired future) of the National Forest Policy of Azerbaijan are as follows.

- 1. Forest policy is well integrated with the national, regional and sectoral policies and is put high in the national development agenda.
- 2. Given the first priority to preservation of ecological and protective functions of forests, sustainable management and use of forest resources is contributing to a better satisfaction of the needs of society at large and rural population in particular.
- 3. Negative impacts on forests are reduced and forest resources and biodiversity are effectively protected and conserved.
- 4. Forest areas and tree cover are significantly expanded through afforestation on suitable lands and restoration of degraded forest areas.
- 5. Forests are managed in line with integrated multipurpose management plans, elaborated based on reliable information and modern methodologies for forest resource inventory, and assessment.
- 6. People of Azerbaijan are aware of the benefits of forests and actively involved in sustainable forest management.
- 7. Institutional capacity, financial mechanisms and regulatory (legal) framework for sustainable forest management are improved and strengthened.

- 8. Enhanced forest education and research is providing essential backstopping to sustainable forest management.
- 9. Climate change adaptation and mitigation concerns are integrated into forest management decisions and implementations.

### 4.1.2 Strategies (directions for action) to achieve the priority policy objectives

1. <u>Forest policy is well integrated with the national, regional and sectoral policies and is put high in the</u> national development agenda.

1.1 Linkages and complementarities of the forest policies with the other national, sectoral and regional development policies (e.g., poverty reduction, regional development, agriculture, tourism, energy, education, climate change adaptation, etc.) will be enhanced.

- 1.1.1 A coordination/advisory body, made up of high level representatives of key ministries, including the ministry of finance, will be established to coordinate national sectoral policies and international donors' activities that may have impact on forest development.
- 1.1.2 Functions and responsibilities of various ministries and agencies related to natural resource management will be analyzed and rationalised.
- 1.1.3 Integrated programs for conservation and use of forest and other natural resources will be introduced and supported.
- 2. <u>Given the first priority to preservation of ecological and protective functions of forests, sustainable</u> management and use of forest resources contributes to a better satisfaction of the needs of society at large and rural population in particular.
  - 2.1 Azerbaijan forests will be managed primarily for securing and enhancing their ecological and protective functions and benefits.
  - 2.1.1 Majority of the forest areas will be managed and used for ecological and protective functions and benefits (e.g. soil and water conservation, air cleaning, other ecosystem services), wood harvest and other productive uses will be implemented only on suitable limited forest areas.
  - 2.1.2 Research and assessment studies and awareness raising programs for valuation and enhancement of the protective functions and ecosystem services of the forests will be elaborated and supported.
  - 2.2 Sustainable management, improved use and trade of non-wood forest products' (NWFPs) resources will be contributing in food security and increased revenues for local people, private sector and forest financing.
  - 2.2.1 The inventory of NWFP production and harvesting capacities and potentials, complemented by research and economic studies will be implemented and used to promote sustainable use and trade of this resource.
  - 2.2.2 A regulatory framework focused on the NWFP production, processing and trade will be modernized.
  - 2.2.3 Special training will be organized for foresters and local population, including private sector, to promote ecologically, socially and economically sustainable use of NWFP resources.
  - 2.2.4 Establishment of small-scale collection and processing plants for NWFPs, by private sector or as family business, will be promoted.
  - 2.3 Meeting of energy needs of local population will be contributed through more efficient use of wood from sanitary and improvement fellings, creation of plantations of fast growing tree species and other relevant measures carefully defined through the local needs and capacities assessment.
  - 2.3.1 Technical norms and regulatory framework on sanitary fellings and forest condition improvement measures are (will be) updated based on the results of forest resource assessment.
  - 2.3.2 Within the capacities of the suitable forest areas, wood harvests and sales, through sanitary and improvement cuttings, will be increased.
  - 2.3.3 Planting of fast growing and other suitable trees by local people for meeting wood requirements will be promoted by relevant measures, including awareness raising, technical assistance and other economic incentives.

- 2.4 Suitable forest fund lands and resources will be allocated/leased to private persons or legal entities for rational and productive uses which would cause no harms or threatens on the sustainability of forest lands and ecosystems.
- 2.4.1 Relevant amendments will be introduced in the law and regulations. The law and procedures will secure that every lease specify which local uses are allowed, following consultation with the people and the lease holder.
- 2.5 The increasing demand of society for recreation will be satisfied through improved planning and management of the recreation areas, based on the assessment of forest recreational capacities and by supporting proper use of such areas by people.
- 2.5.1 Development of forest recreation and ecological tourism will supported by updated regulatory framework and guidelines.
- 2.5.2 Educational programs will be elaborated and supported to promote the proper use and appreciation of recreational areas in forests by the people in compliance with fire and contamination prevention and other applicable rules.
- 2.5.3 Local people's involvement in and revenue earnings from forest recreation and tourism sites will be promoted.
- 2.6 Hunting in the forest fund will be practiced exclusively on a sustainable basis, in compliance with an updated regulatory framework and by increasing the knowledge and awareness about sustainable hunting.
- 2.6.1 Relevant regulatory basis and institutional capacities will be established, including appropriate assessment and planning of the wildlife and hunting resources in forest lands, introduction of necessary amendments in the regulations and specialized training of responsible officials and hunters on sustainable hunting issues.

## 2.7 A certification system for sustainable forest management will be elaborated and introduced in collaboration with relevant stakeholders and institutions as well as international agencies.

- 2.7.1 In collaboration with a credited international agency, introduction of certification system in selected forest region, elaboration of national regulations and guidelines, building up institutional capacities for expansion of certification in other forest areas.
- 3. <u>Negative impacts on forests are reduced while forest resources and biodiversity are effectively protected</u> <u>and conserved.</u>
  - 3.1 Measures will be defined and taken to eliminate human-induced harmful effects and damages on forest resources, with particular attention on illegal logging, over-grazing, recreation and tourism pressures.
  - 3.1.1 Institutional capacities of the forestry organization, the roles and contributions of local administrations for forest protection and law enforcement will be strengthened.
  - 3.1.2 The regulatory framework on the access to forest land and resources and their sustainable use (including for fuel-wood harvesting, animal grazing, and recreation) will be updated.
  - 3.1.3 Alternative energy sources will be available for the rural population and their use will be supported.
  - 3.1.4 Mass felling and destruction of the forests in the Qarabag region, under Armenian occupation, will be prevented by international initiatives and other measures.
  - 3.1.5 Sustainable management of pasture areas and livestock resources near or within forests will be promoted and enhanced.
  - 3.1.6 Planning of sustainable resource management with a view to the addressing local needs and within the capacities of the suitable forest areas will be promoted based on the results of the forest resource assessment.
  - 3.1.7 Programs for diversification of income generation with the aim to improve living conditions for the rural forest dependent people and thus reducing their dependence on the resource will be elaborated and supported.
  - 3.1.8 Timber imports and wood substitutes use will be promoted by taking relevant measures (e.g. reducing custom duties).
  - 3.1.9 Programs and measures for decreasing wood consumption (e.g. introduction of more efficient stoves, house insulation, etc.) will be promoted.

- 3.1.10 Based on the ENFI-FLEG study's results in Azerbaijan and international experience, programs/projects for testing and adaptation of model forests under specific conditions of the country will be elaborated and supported.
- **3.2** Forests' health will be improved through enhancement and supporting of environmentally sound preventive and combating measures against pest and diseases and forest fires.
- 3.2.1 Environmentally sound preventive and combating measures and capacities will be strengthened against pests and diseases.
- 3.2.2 Preventive and combating measures, with special attention on public education, will be enhanced against forest fires.
- **3.3** Biological diversity of Azerbaijan forests will be conserved by elaboration and supporting of the measures and programs for these purposes.
- 3.3.1 Investigation and assessment of biological diversity of forests will be strengthened; biological diversity conservation areas will be expanded.
- 3.3.2 Programs aimed at the creation of public awareness about the importance of forest biodiversity conservation, especially aimed at young people and children will be elaborated and supported.

### 4. <u>Forest areas and tree cover are significantly expanded through afforestation on suitable lands and</u> <u>restoration of degraded forest areas.</u>

- 4.1 Forests on the forest fund lands will be improved and increased through restoration of the degraded forests and afforestation of suitable open forest fund lands.
- 4.1.1 Degraded forest will be restored and suitable open forest fund areas will be afforested with local species by using suitable regeneration, restoration and plantation methods, based on the site surveys undertaken and the projects prepared for these purposes.
- 4.2 Forest and tree cover of Azerbaijan will be significantly increased by establishment of multipurpose forest plantations and tree plantings on suitable lands outside forest fund (up to 20% of the country in the long run).
- 4.2.1 Under a National Afforestation Campaign, strongly supported by high levels (e.g. Presidential, Parliament, Ministerial) and based on the results of survey and land cadaster, additional suitable lands outside of the forest fund will be identified and allocated for afforestation purposes.
- 4.2.2 Under the same campaign, related government institutions, schools, NGOs, local communities and other stakeholders will be informed and encouraged for their involvement and contributions in afforestation and tree planting implementations
- 4.2.3 Technical norms/standards and regulatory framework, including financial mechanisms for promotion and regulation of afforestation and tree planting will be updated in collaboration with the related government institutions and other stakeholders.
- 4.2.4 Research studies will be conducted, norms and standards will be elaborated on the seed, nursery and plantation establishment and maintenance works.
- 4.2.5 Multipurpose tree plantations (e.g. fast growing tree plantations, windbreaks, beautification, erosion control, NWFP production plantations, etc.) will be established by the forestry organization as well as by the stakeholders (e.g. government agencies, local administrations, municipalities, farmers, NGOs, schools, private companies, etc.) on suitable state and private lands outside forest fund areas.
- **4.3** The needs of afforestation areas and tree plantations for increased quantities of high quality planting and sowing materials will be met through establishment of new modern forest/tree nurseries, seed sources and installations as well as by improvement of the existing ones.
- 4.3.1 Adequate quantities of high quality planting and sowing materials will be provided through establishment of new modern tree nurseries, seed sources and installations as well as by improvement of the existing ones.
- 5. <u>Forests are managed in line with participatory multipurpose management plans, elaborated based on</u> reliable information and modern methodologies for forest resource inventory, and assessment.

5.1 Forests will be regularly monitored and assessed, based on updated reliable information.

- 5.1.1 Institutional capacities and guidelines for forest inventory, monitoring and assessment will be developed, with the support provided through an international collaboration project.
- 5.1.2 Based on modern methods, forest inventories and assessments will be renewed; forest information basis and monitoring system will be established.
- 5.2 Forests will be managed according to multi-functional management plans, prepared by using updated data and information and with participation and contributions of local people and other stakeholders.
- 5.2.1 Institutional capacities, regulatory framework and technical norms/standards for multi-purpose management planning will be elaborated; involvement of local people and other stakeholders will be promoted by regulations and relevant training for concerned specialists.
- 5.2.2 Multi-functional management plans will be prepared for the forest lands and resources.

### 6. <u>People of Azerbaijan are aware of the benefits of forests and actively involved in sustainable forest</u> <u>management.</u>

## 6.1 Public awareness among all stakeholders about vital bio-ecological functions and important social, cultural and economic benefits of forests for sustainable development will be increased.

- 6.1.1 For this purpose necessary communication skills and awareness creation capacities and programs about the importance of forests will be elaborated and supported in forestry organization and related institutions.
- 6.1.2 Measures will be introduced to enhance participation and contributions of the relevant government institutions, local administrations, NGOs and other stakeholders in public information and awareness raising for conservation and development of forests and natural environment, their programs and projects will be promoted through supportive financial and institutional mechanisms and other measures.
- 6.1.3 Special attention will be given to the information for young people and children through innovative and attractive educational programs.
- 6.1.4 Special outreach programs will be elaborated (and implemented) to enhance public awareness through mass media.
- 6.1.5
  - 6.2 Participation and contribution of relevant government institutions, local administrations NGOs and other stakeholders in protection, care, rational use and expansion of forests will be enhanced.
  - Therights of local communities, municipalities, NGOs, private sector, other stakeholders in forest management decisions and implementations will be promoted and secured.
    - 6.2.1 Participatory forestry approaches and methodologies, suitable for Azerbaijan conditions, will be tested and developed.

### 6.2.2

- 7. <u>Institutional capacity, financial mechanisms and regulatory framework for sustainable forest</u> management are improved and strengthened.
  - 7.1 Public forestry administration responsible for the management of forest resources will be supported in its activities and functions through institutional strengthening, regular capacity development and modern technical equipment, forest financing will be strengthened through adequate state allocations and increased forest revenues.
  - 7.1.1 New technical departments or units (e.g. Non wood forest products, communication and public relation, climate change, collaboration with local population etc) will be established in order to ensure professional expertise and services that may be required for the achievement of strategic policy objectives. Professional staff in such departments will get necessary enhancement training.
  - 7.1.2 Knowledge and experiences, working conditions and motivation of forestry staff will be improved, modern equipment requirements will be provided for sustainable management of forests.
  - 7.1.3 The roles and functions between the state forestry administration, and other actors in the forestry sector, including other institutions, local administrations, private associations and other stakeholders, will be clearly defined and supported by relevant regulatory framework.

- 7.1.4 International cooperation in the forestry matters with the major international agencies and programs, in connection with global conventions, in regional and bilateral collaboration programs and projects will be enhanced.
- 7.1.5
- 7.2 Adequate finance resources will be allocated and generated for financing state forestry programs as well as for promoting participation and contribution of the other stakeholders for sustainable management of Azerbaijan forests.
- 7.2.1 Forest financing will be strengthened through adequate state allocations and increased forest revenues.
- **7.3** Forest legislation will be enhanced and provide an enabling regulatory framework for sustainable forest management and forest policy implementations.
- 7.3.1 Relevant amendments will be made in the Forest Code, secondary legislation as well as in the forest related other laws and regulations,
- 8. <u>Enhanced forest education and research are providing essential backstopping to sustainable forest</u> management.
  - 8.1 Scientific and applied research will provide essential guidance and support for forestry programs and implementations, research institutions' capacities will be supported and developed accordingly.
  - 8.1.1 Capacities and contributions of the forestry research institutions will be enhanced by provision of the qualified staff, modern equipment and facilities, and strengthened support for research programs and projects.
  - 8.1.2 Relevant research projects will be designed and conducted on the priority forestry problems and challenges, their results and recommendations will be efficiently disseminated, shared and benefited through enhancement of communication and collaboration between the research institutions, forestry administration and other stakeholders of forestry.
  - 8.2 Forestry education institutions will provide well educated graduates to serve for Azerbaijan forestry; knowledge and qualifications of the forestry staff will be further improved and built up through in-service training courses provided by the related training institutions.
  - 8.2.1 Forestry education will be enhanced by building up the capacities and programs of the current Forestry Department of Gence University as well as by supporting the establishment of a new forestry faculty and a forestry college (forestry technician school) equipped with modern equipment, professional staff and well-designed curricula.

### 9. <u>Climate change (CC) adaptation and mitigation concerns are integrated into forest management</u> <u>decisions and implementations</u>.

- 9.1 The knowledge and institutional capacities in relation to adaptation of forests' management to climate change will be enhanced.
- 9.1.1 The National Strategy on CC adaptation, including the strategies and priority measures for the adaptation of forest management to CC will be elaborated.
- 9.1.2 The knowledge and institutional capacities of the forestry organization and other related institutions on adaptation of forest management to CC will be enhanced, through undertaking scientific research and exchanging research results with relevant international institutions and programs
- 9.2 Contributions of Azerbaijan forests in climate change mitigation will be enhanced by increasing the areas, structures and carbon storage capacities of the forests.
- 9.2.1 Carbon storage volumes of the forests will be identified and monitored.
- 9.2.2 Carbon storage will be increased by rehabilitation and improvement of the existing forests and by expanding forest areas and tree plantings on suitable lands.

#### 9.3 Energy use efficiency (saving) in forest region communities will be supported and increased.

9.3.1 Energy saving measures in forest region communities (e.g. energy efficient stoves, house insulation, biogas, etc.) will be promoted and expanded.

### 4.2. ACTION PLAN (2015-2020)(for NFP implementations)

A detailed Short-term Action Plan (2015-2020), providing information about the concrete activities to be carried along with the defined strategies towards achievement of the priority policy objectives, is given in the corresponding priority objectives and strategies in Annex 1.

Information for each activity includes its description, implementation period/time, performance indicators, responsible and collaborating institutions/stakeholders and finance estimates.

It should be noted that this Action Plan is not restricted only to the activities to be undertaken by the state forestry organization, but also contains the actions to be undertaken by the other institutions and stakeholders and pertains to the integration of forest-relevant aspects into the planning of other sectors and stakeholders.

# 5. THE MAIN PRINCIPLES AND RECOMMENDATIONS FOR IMPLEMENTATION OF THE NATIONAL FORESTRY PROGRAM

### 5.1 Main principles for the program implementation

The implementation of the NFP is based on realistic and demand-oriented planning, putting special emphasis on the availability of corresponding financial and human resources. The implementation may concern such elements as policy revision, legal amendments, institutional reform or practical forestry measures so that a realistic chronology of implementation steps is needed.

Successful amendments/changes in frame work normative and institutional conditions are precondition for implementation of practical forestry measures.

For the successfully implementation of the program, a good coordination among the different public and private stakeholders should be realized by a coordination body in a participatory way. Partnerships between stakeholders for joint implementation are essential to increase efficiency and impact of implementation.

Furthermore, a number of more detailed action plans which adequately cover the NFP period should be prepared and necessary budget allocation provided accordingly by taking into consideration the actual situation and country-specific priority issues of forestry. For instance, action plans on afforestation and tree plantation, rehabilitation of degraded Tugai forest, inventory and management planning for NWFP are the major fields of forestry concern in the country.

The implementation phase also relates to obtaining funds, putting into practice the financing strategy, investment programs and projects, as well as the coordination and follow-up of activities.

### 5.2 Role and responsibilities of public institutions in the program implementation

The Forestry Development Department (FDD) of the Ministry of Environment and Natural Resources (MENR) are the top and key responsible unit for the implementation of the NFP while an efficient cooperation with the other departments is also necessary.

Legal and institutional reform may become necessary for the preceding policy formulation and strategic planning exercises depending on the outcomes provided. The next step is to work out regulations, in order to translate political will and laws into precise guidelines for action.

They should be clear and as simple as possible. They have to be communicated to the respective target group (e.g. informing local people of the legal procedures necessary to establish community forests) and very often they have to be supported.

To ensure that the improved laws and regulations are applied in the field, and beyond training and capacity building, a promotion and control system for law enforcement is needed, and incentives should be provided for, eventually including a revision of fiscal policies. Current law enforcement strategies tend to be more

participatory (based on active local community involvement); and more focused on information and early detection than on repression. This means that forest issues have to be included in ongoing reform processes of other sectors.

A very powerful information campaign needs to make the policy and legal changes visible to all stakeholders and the public. It should use tailor-made instruments and appropriate media to reach out to the various target groups. To develop the implementation capacity of national institutions and other key actors systematically, institutional reforms and capacity building are often implemented.

### 5.3 Expected results from the program implementation

One set of outputs will concern favorable framework conditions that will help to establish the enabling environment for sustainable forest development. They comprise some of the elements of the NFP process including laws and regulations which reflect the previously revised national forest policy.

Legal amendments in related sectors and regarding cross-cutting policy objectives which are favorable for the development of the forest sector and improved institutional set-up and capable human resources, mechanisms for dialogue and consensus building among all stakeholders.

Another set of outputs will consist of those related to field-level implementation and practical realizations (e.g. afforestation, forest management). Such outputs include afforested area, number of hectares under sustainable management, number of hectares under protection, monetary units of investment in forestry etc. These outputs will have to be documented, monitored and reported on.

Valuation of the contribution of forests to the country's economy, to poverty reduction and to sustainable development should also be evaluated and improved.

Increased law implementation (e.g. monitoring and reducing illegal logging) is another expected output of the process.

Concerning the stakeholders, the main output is increased capacities, not only in technical but also in organizational and management matters, and especially in participatory and inter-sectoral approaches.

Increased participation in and transparency of an NFP process will most probably result in more partnership agreements or other forms of cooperation between stakeholders.