

# [Water supply policies and difficulties environmental sciences essay](https://assignbuster.com/water-supply-policies-and-difficulties-environmental-sciences-essay/)

## Introduction

## Policies

A policy is a set of rules or guidelines and decisions to achieve rational outcomes. In Pakistan there are many policies like water policy, forest policy and foreign policy etc. These policies have some goals and objectives. To achieve the goals some guidelines are also present. Here we discussed two policy of different countries.

## Environmental policies

Environmental policy is a step which is taken by the government to prevent or reduce the danger effects on natural resources which is done by the human activities.

## REVIEW OF INTERNATIONAL POLICIES

## 1. Drinking Water Policy

## 1. 1 India

## Current Situation

India’s huge rising population is causing a stress on natural resources. The water sources are polluted by compost and agronomic runoff. The World Bank estimates that in India 21% of infectious diseases is due to unsafe drinking water. In India, daily 1, 600 deaths are due to diarrhea alone. Hygienedoes also continue to be a problem in India. In order to decrease the amount of illness spread through drinking-water, hygiene must be improved simultaneously. Organization and improvement of water resources need to be over seen by national perspectives.

## Goals and Objectives

There must be equity of water resources. The approach to the managing of drought and floods has to be synchronized and directed at the national level. There must be communal justice in respect to water supply. Encourage resource management and conservation. In keeping with the objectives of the International Drinking Water Supply and Sanitation Decade Program (1981-1991), sufficient drinking water services have to be delivered to the whole population in urban as well as rural areas. Promotion of improvement and innovation of new techniques to eradicate the pollution of superficial and ground water resources. Ensure to improve water quality and to improve the recycling and re- use of water.

## National Water Policy 1987

## Policy Guidelines

The resources of wateraccessible to the country should be carried within the category of useable resources to the probable extent. The water resources should be well-preserved and the accessibility increased by measures for maximizing retaining and minimizing losses. Proper organizations should be made for the expansion and supervision of a river basin. Water must be available to water shortage areas by transmission from other areas comprising transfers from one river basin to another. Re-use and recycling of water ought to be an essential part of water resource development. Promote an integrated and multi-disciplinary methodology to the planning, approval and implementation and maintenance of projects, including catchment treatment, natural and ecological aspects and restoration of affected areas. Ensure a systematic monitoring of systems and essential recovery and advancement programs should be in progress. Misuse of ground water resources should be so controlled. Development of ground water recharge projects in order to enhance the existing supplies. Over use of ground water should be avoided. In the planning, water supplysignificances should be generally as follows: Drinking waterIrrigationHydro-powerNavigationIndustrialSufficient drinking water services should be provided to the whole population which also includes urban and rural areas by 1991. Drinking water provisions to the individuals and animals should be the first concern on any accessible water. There should be a combination of water-use and land-use policies. Irrigation planning should be cost-effective. Surface water and ground water should be oftensupervised for excellence of quality. A program should be commended for perfections in water quality. The yield of utilization in all the varied uses of water should be upgraded and anconsciousnessthat water is a scarce resource should be elevated. Conservation knowledge should be endorsed through teaching, guideline, incentives and impediments. There should be water zoning of the country and the economic activities should be directed and controlled. 1

## 1. 2 Nepal

Water is the most important resources for all living thing. Nepal faces many problems and issues related to water resources. The major problem was the alternating flood and water scarcity. So the government of Nepal decided to set some goals and guidelines. So it was decided that some important measures will be taken to manage the water resources.

## Objectives

Ground water and surface water resources should be managed. There should be equitable supply of water. Resources should be conserved for the future use. The water delivering system should be sustained.

## National water policy of Nepal

There are some guidelines which are set by the government of Nepal. Due to sanitation problems, every year 45000 children die. When the quality of sanitation was improved it was seen that the morbidity rate was also reduced. Suitable supply of water to the community was another problem. Five year plan 1956-1961 was planned in Nepal and then after that many different programs were launched. The main focus was to improve the quality of water.

## Water supply policies and difficulties

The ninth five year plan (1997-2002) set a target of 100% coverage of water supply in urban areas. The government has also realized that it cannot be done only by their efforts. The local people should also participate to achieve sustainable water system through Community based Organization and Water Users Groups etc. Multilateral agencies like World Bank, Asian Development Board, bilateral projects, International and National non government Organization are working to achieve this goal. Many projects are working in Nepal to resolving the same problem. Infectious diseases like cholera, typhoid, dysenteryetc are spreading due to contamination of drinking water. Water quality may deteriorate. Water sources are becoming polluted due to unsanitary disposal of waste in Nepal. This all is happening due to rapid population of growth and anthropogenic activities, The level of microbiological contamination has also increased in the streams, lakes and rivers. This is due to the improper disposal of human waste and agricultural practices. Water quality problems have huge impacts on human health. Water table draws down every year in Terai region which is a major problem. Terai tube well system which is associated with many problems is due to the poor design of well. There is lack of proper monitoring system. No guidelines or actions are mentioned in the policy to maintain this system.

## Ambitious target and challenges

To provide sustainable water to population, both the quantity and quality of drinking water the authorities concerned all these problems. The development of sanitation and water sector was the main focus of government. Tenth plan period (2003-2007) was planned. The target was to supply 85% water to rural and 100% to urban areas. This target was not achieved in all of the fiveyear plans. This plan do not account for the poor quality of water so as a result at the end of that plan the aim did not came upon its destination. The goal was not achieved properly. Treatment of water at the community level to improve the quality of water seems not to be economically feasible. There is a need of effective quality of water monitoring system and sustainable supply of water in Nepal. Some research work is required in this sector and the systems which were started should be focused again. Community based requirements are identified. The research can be based on modern technology. Finite Element Method and Artificial Neural Network can be used to visualize the present situation and for forecasting the future contamination. Good quality water supply is one of the major requirements to sustain human life. Without safe water supply human can suffer from various diseases. The concern of the government and local people should not only the availability of adequate water but also the quality of water. There should be coordination between institution of drinking water supply and sanitation. Priority should be given to Community Based Sanitary Surveillance. The role of NGO and PPP should be given preference. At the regional and district level Water Quality Resource centers should be established. In urban areas good quality water supplies should be encouraged because there is high need of water. In Terai and Mountains regions of Nepal there should be access of good quality water, Health impacts and sustainable water system immediately because to achieve the goal of drinking water at community level is a long way and it will take a lot of time.

## 1. 3Pakistan

Supply of safe drinking water is the major thing that Government is focusing. So the government after some consideration and consult with some members makes a policy which is known as national drinking water policy.

## GOALS AND OBJECTIVES

The goal of this policy is to improve the quality of water and to ensure that there is an equitable supply of water in both urban and rural areas. This was done to reduce the incidence of morbidity and mortality. The main objectives of the policy are: To check that all the resources of water are conserved. To ensure that there is safe supply of water to the whole population by 2025. Participation of community should v= be encouraged. Water should be treated. Mass communication and public awareness programs should be enhance. Promote some technologies which are not expensive and the local people can afford it easily.

## POLICY GUIDELINES

The policy guidelines are as followsTo increase the water supply system by building new one ones and rehabilitating old ones. Water resources are very important so they should be protected. Water should be treated to remove all the contaminants which are present in it. Suitable technologies should be enhancing so that the local people can afford them easily. Women and children should participate because they used water freely. Mass awareness programs should be done. Water policy should be checked either its guidelines are implemented or not. Some new plans should be done. Laboratories should be made for the treatment of water.

## 2. Forest Policy

## Russia

The following principles shall underlie the forest legislation: Sustainable forest management, biological diversity conservation in forests, and enhancement of their potential. Maintenance of habitat-forming, water-conservation, protection, sanitation, recreation and other beneficial functions of forests. Use of forests by taking into account the length of their cultivation. Use of forests in such a way to satisfy society needs for forests and forest resources. Ensured the protection of forests. When forests are used, protected and renewed the participation of citizens and civil society is necessary. Division of forests according to their designation and establishment of the forest. Forest use by public authorities and local self-governance bodies. To pay for forest use.

## Classification of Forests

Forests shall be classified into protection forests, production forests and reserve forests.

## Development of forest

The main goal of forest development should be the forest industry development. Forests shall be developed in accordance with their designation and beneficial functions. Development of production forests shall be aimed at sustainable, maximum efficient production of high-quality wood, other forest resources, and products of their processing while preserving their beneficial functions. Development of protection forests shall be aimed at preserving their habitat forming, protection, sanitation, recreation and other beneficial functions while using them provided that their use is compatible with the designation of protection forests and their beneficial functions. Forest development based on an integrated approach shall include: a) Forest use arrangementb) Forest protection and renewal activitiesc) Activities to protect and use wildlife and water bodies.

## Forest Uses

The following forest uses shall be permitted: Wood and resin harvesting, Harvesting and collection of non-timber forest resources and medicinal plant, hunting, agriculture, research, recreational and training activities, Cultivation of forest fruit, development of mineral resource deposits Construction, reconstruction, and operation of power transmission lines, communication lines, roads, pipelines and other linear utilities, Processing of wood and other forest resources and Religious activities;

## Wood Harvesting

Wood shall be harvested in production forests and protection forests. Dead, damaged and over-mature stands shall be the first to be made available for wood harvesting. It shall be prohibited to harvest wood in volumes exceeding the allowable cuts, as well as earlier than at the ages of cutting. A list of tree and shrub species which may not be harvested shall be established by the Government of the Russian Federation. Citizens and legal persons shall have the right to construct forest roads, forest terminals, other structures and facilities for purposes of wood harvesting.

## Forest Use for Farming

It shall be permitted to locate bee-hives and apiaries, install fences, sheds and other temporary structures within forest parcels made available for farming.

## Forest Renewal and Forestation

Removed, dead, and damaged forests shall be subject to renewal. Forest renewal shall be ensured through reforestation and forest tending. Forest renewal shall be ensured by the public authorities or local self-governance bodies within the limits of their powers.

## Contents of Forest Management Planning

Planning of forest districts and forest parks. Planning of production forests, protection forests and reserve forests. Field separation of the boundaries. Planning of forest protection and renewal activities.

## 2. 2CHINA

Forestry in China is an essential component of the world forestry. As thebiggest developing country with a long history of civilization, China hasexperienced a long time forest utilization and management.

## REVIEW ON FORESTRY POLICY IN CHINA

The main policy of the forest management in China is the Utilization and Exploitation of Forest. In 1949, the Chinese Government has given priority to tree planting and forest conservation aiming at improvement of timbersupplies and ecological rehabilitation. From 1950’s to 1970’s the prevalent policy on forests emphasized sustained yielding and timber was basis of most policy making. China conducts the " Massa forestation Campaign" and several huge programs of forestation across all parts of the country. In December 1981 the Congress formulated the National Compulsory Tree planting Campaign . It was an obligation for everycitizen to plant 3-5 trees . There were 20 billion trees planted after the campaigning 1998 China decided to establish 20 million hector of timber plantation so as to relief the national forest from the pressure of the timber consumption need its economic prosperity. At present this area reached over 3. 5 million hector and is called fast-growing and high-yielding plantation. In 1989 the program is targeted to establish 20 million hectors of forests within 30-40 years to improve the ecological environment for 18. 8% population and 33% of the country land. Over 5. 5 million ha of plantation were already planted. The program stretches as long as 18, 000 km of coastal line and is planned to increase 3. 56 million ha of plantation by the year of 2010. It has completed over 1. 6 million ha of plantation. The plan is to build up shelterbelts to protect 918 plain counties with 15% of China's total land, 45% of its cultivated land and 50% of its population. Desert and decertified land occupies a third of China's total land, The National program to combat Desertification (1991-2000) is planned to control 6. 66 million ha of decertified land.

## LEGISLATION AND GOVERNMENT ADMINISTRATION FOR FORESTS

Up till now, a series of legislative code related to forests has been already put into some are as follow. Many clauses in the Constitution P. C. R are about Forests which says:" the state protects and improves its living and ecological environment, prevents the pollution and other natural damage", " ensures the rational use of the natural resources, conserves those valuable species, prohibits any damage of the natural resources". Forests Act was adopted in 1981 and revised in 1998. It identifies theownership of forest resources including the land forested, regulates the rights, responsibility, obligations, limitations of the forests administrations at all levels. As the fundamental principle of sustainable forest management, publicparticipation is playing an increasingly important role in forestry and environmentdevelopment, and is vital to meet the basic principles of sustainable developmentequality, limitation, harmonious cooperation and social support to naturalresources management. But traditionally, the majority of Chinese people hadlittle right and awareness of participating processes of resource management. Sincethe founding of P. R. C, the land is owned by the state, or the collective, i. e., public. In 1981, a national policy of forest responsibility was adopted . Theresponsibilities, right and benefits of the local people were included in forest management of the state-owned forests. That marked the beginning of local communities' participation in state-owned forests. The policy includes: The demarcation of land for individual and group management. The description of benefit. Responsibilities concerning forest protection. Prohibition on forest clear cutting for farming.

## Pakistan

National forest policy provides a framework for sustainable management of forest and allied natural resources mainly, watersheds, range lands, wildlife andassociated biodiversity. The Pakistan government has formulated the national forest policy aimed to increase productivity of forests in order to meet requirements of wood, timber firewood, fodder and non-wood products besides promoting sustainable natural resources-based livelihoods. The policy also envisages lifting the ban on timber harvesting imposed in 1993. However, it recommended that the timber harvesting should only be resumed in well-stocked forests covered under updated and revised management plans. The report points out that the ban on commercial harvesting has disrupted forest management cycle depriving forest owners of their legitimate rights. In Pakistan there is very little forest.

## Provincial Forest departments

it is the responsibility of Provincial forest department to implement plan and execute the improvement of forest and watershed. Federal government should formulate the policy. At present the forestry sector is facing many challenges likemassive degradation of watersheds, pollution, deforestation, overuse of rangelands etc.

## Goal

The main goal of the policy is restoration, development, conservation and sustainable management of forest resources. It can ensure the proper ecosystem functioning, benefits and services for present and future generations of Pakistan.

## Objectives

The basic objectives are: Restoration and maintenance of natural forest. Increasing productivity of forest. Effective utilization of woody and non-woody products. Development of forest resources.

## Law enforcement

The enforcement of laws for protecting the forest is weak. So we should manage it. In 1927 the Hazara and Pakistan Forest Act and in 1936 provincial wildlife is weak. The acts are in effected. The policies are made but they are not implemented. Logging of trees is illegal so it should be stopped.

## Lack of national commitment

There is a lack of awareness related to forest and its environment with the public sector including up and down stream. There is lack of public private partner ship. The national resources should be conserved. Resources should be managed properly.

## Integration of sect oral policies

In past some policies are made but they were not implement. So these policies were ignored. So there is a need to focus on this section. New policies of forest should be introduced in order to protect and conserve the forest.

## Priming the action

Gov. should implement the policy by following stages. Preparation and implementation of a 10 year action plan. Provincial government should devise their own policies.

## Conclusion

Government has made some policies. These policies if implemented play a vital role for the development of our country. The government should set some department that either these policies are implemented or not. They should also focus that these policies should not affect the environment, economy and the local people. In Pakistan there are policies but some of their guidelines are not implementing properly. So we should focus on this thing.