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Legal Analysis of Right to Environment through Legislative and Judicial Discourse

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Abstract: *Climate change is a great threat to Pakistan owing to its weak economic condition. Floods and storms are the consequences of rising temperatures and extreme temperatures. Rising temperature and resultant heat have raised concerns regarding food, water, and security. At the same time, water-stressed conditions have decreased agricultural yield. This research investigates all these factors that have threatened the existence of people by causing high health risks that lead to climate change-induced migration. On the basis of elaborate scrutiny of the threatened environment, its reasons, and laws enacted in this regard, researchers here chalk out certain recommendations to protect and preserve the environment.*

Key Words: Climate Change, Environment, Agriculture, Floods, Temperature

Introduction

Climate change is a recent concern among environmentalists due to severe floods and droughts in Pakistan. There have been dramatic changes in climate over the past few decades. Environmental protection is at the heart of constitutional rights and environmental legislation must respond to the most pressing issue of climate change. Basic human rights such as the right to life (article 9) and the right to dignity (article 14) include the right to a clean and healthy environment within them. It has to be realized that climate change is not a myth but a reality. The majority of scientists and experts refer to sufficient evidence regarding climate change. It's a piece of common knowledge that altering the natural environment increases greenhouse gases and leads to an increase in the temperature and ultimately cause climate change. The hydrosphere, cryosphere, the land surface, and the atmosphere combine to formulate the climate system. Pakistan is already on the verge of a climate threat and its impact is being felt and experienced by the citizens. In the last few years, floods have had a devastating impact on economic and social conditions. The plight of forest and tree lines is being discussed in different forums by the concerned well-aware individuals. A report in

Dawn newspaper dated 1.05.2017 exposes the timber mafia which, in collaboration with the influential people, continues the felling of trees leading to apocalypse in the form of land sliding and this was the very reason for the land sliding in Attabad lake. Moreover, it has been reported that five houses have been damaged and thirty-five evacuated due to land sliding. It is also stated that NDMA (National Disaster Management Authority) has proclaimed that a mountain is developing cracks in Nagar district and has begun to sink, putting 380 houses in Miacher village in danger. Similarly, *Pakistan today* (21.3.2017) reports that Pakistan loses 2.1% of forests every year. Furthermore, in *The Nation*, a research study by the Asian Development Bank was evaluated and it stated that Pakistan lost 840,000 hectares of forest between 1990 – 2010 also the forest area in Pakistan was reported to be 1.9% which is quite lower than the 5% as recommended by National Forest Policy. Due to Pakistan's geographical and geological situation, Pakistan faces certain climate change threats that threaten survival here and lead to concerns for food, water, and energy security. The rising temperature and resultant heat are leading to water-stressed conditions causing decreased agricultural production. This ultimately raises the concerns of the population,

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causing high health risks, leading to climate change-induced migration. These extreme weather changes, along with monsoon rains, cause floods and droughts. The floods have become the reason for increased siltation in dams. The recession of Hindu Kush-Karakoram-Himalayan (HKH) glaciers has caused water inflows in the Indus river. The saline water in the Indus delta is not only affecting the coastal agriculture but also for the mangroves and breeding areas of fish.

Research Objectives

This article is meant to bring into the limelight the drawbacks of deforestation causing climate change in Pakistan. It is acknowledged that at National as well as international levels, efforts have been made in legal jurisprudence to protect the environment. However, unfortunately owing to certain flaws in the laws, their implementation and lack of administrative machinery have hindered the expected outcome. The researcher here aims to highlight focus areas that require attention. To achieve this aim, relevant laws and cases are discussed here that are pivotal to protecting and preserving the environment.

Research Question

This research addresses the following questions:

1. What are the laws in Pakistan to plant, protect and preserve the environment?
2. What are the reasons behind climate change-induced migrations from Pakistan?
3. How political leaders and governments can facilitate the protection of the environment?

Research Hypothesis

The research hypothesis is Government can play an effective role in planting, preserving, and protecting the environment.

Research Methodology

The research methodology is meant to streamline and provide the correct direction to the researcher. The researcher here uses a qualitative method of research to provide an in-depth analysis of the existing laws, newspaper articles and available documents regarding climate change. The researcher makes use of descriptive and analytical approaches by analyzing articles, journals, books, and surveys.

Current Situation of Trees and Forest

Forests are a key to maintaining a healthy environment. Unfortunately, deforestation has led to

the extinction of forests and the ultimate rise of deadly diseases. A research report in 2010 professes that in Pakistan, the deforestation rate is from 0.2% - to 0.5% which is quite high and is a cause of a 4 - 6% decrease in annual wood biomass. Moreover, natural forests have decreased at a rate of 27000 hectares per annum, reducing forest area from 3.59 million to 3.32 million. The depletion of natural resources indicates that forests will be consumed in a few years and then humanity will have to face the consequences for it. According to the report, Pakistan has been labeled a "Forest Poor Country." *The Express Tribune* also reported that Gilgit Baltistan lost 50% of the forest cover in mere 20 years. Owing to the vested interests of influential individuals and corporations, the deforestation rate in Pakistan is at its peak in the region. According to World Wide fund, 99,711 acres have been deforested to use for non-forest purposes in Punjab province only which is the highest in Pakistan, and from 1947, 151,500 acres have been deforested overall in Pakistan (25.06.2010).

It has been shown in the report that deforestation increased from 2000 to 2009 and only 5.63% of Pakistan's landmass is now covered with forest. There are multiple tangible as well as intangible benefits of the forests. Production of oxygen, ecosystem synergism, scenic beauty, and watershed value are few to mention. Forests also play role in the ecosystem they conserve biodiversity, sequester carbon from the atmosphere, protect upstream watersheds and provide the landscape beauty. Moreover, forests play important role in biodiversity conservation. Most of them have economic and medicinal use which are still to be explored by mankind. Furthermore, forests possess 40% of Carbon in the ecosystem. Therefore, they are a source of consuming carbon dioxide and also for providing oxygen. With an everyday increase in the population, the demand for clean water is also increasing. Earlier, in Pakistan, there was no deficiency of water but lately, there has been a need to buy water due to the lessening of forests in watersheds. Plant covers and forests are required to filter rainwater and avoid runoff. When water slows down during runoff to the streams, then it gets absorbed in the soil into the storage tanks. Moreover, the water absorbed by the roots can be used by leaves for transpiration and to continue the cycle of rain. Therefore, forests facilitate the provision of drinking water and help in stopping it from getting mixed with salted ocean water. The salted water takes a long time to enter again into the hydrological cycle. Pakistan is an agricultural country and soil is the main constituent needed to grow fruits and vegetation. Due to the lack of forests, the soil gets washed away in rainstorms thus leading to a decrease

in the amount of soil and impacting agriculture. However, rich soil is required to transfer nutrients to the food plants. Forests also play a significant role in the conservation of biodiverse creatures. They contain 60 - 90% of the species which can prove valuable for medicinal uses. Along with these, there are many other important benefits of forests, for instance, maintaining air temperature through evaporation, generating oxygen and storing carbon dioxide to keep the air clean, protection of wildlife, provision of wood for furniture, decreasing noise and air pollution, and also adds to the aesthetic pleasures of the scenery.

Applicable Laws on Trees and Forests

Pakistan's Supreme court interprets the right to life to include legal as well as natural rights within the ambit of Article 9. In "Ms. SHEHLA ZIA and others v. WAPDA" the court explained that the right to a clean environment is within the umbrella of the right to life. The 5th principle of the IUCN World Declaration reflects that fundamental rights must be interpreted dynamically and progressively. It is stated that the environment must always be favored and protected whenever matters are ambiguous before the courts or in administrative agencies. It is clearly stated that:

"Actions shall not be undertaken when their potential adverse impact on the environment is disproportionate or excessive about the benefits derived therefrom."

"Maple Leaf Cement Factory Limited v. EPA; PLD 2018 Lahore 255 (Para 19; Page-268)" and "Shweta Wagh v. Municipal Corporation (Bombay High Court), 2019 (Para 15; Pages 4 and 5)" have been decided based on this aforementioned principle.

According to the Precautionary Principle

"Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

"M.C. Mehta v. Union of India; AIR 1997 SC 734 (At Para 26; Page 760)" and "Shehla Zia v. WAPDA; PLD 1994 SC 693 (Para 8; Pages 708, 709)." have recognized this principle.

Another important principle is The Sustainable Development Principle which is also mentioned in Rio Declaration. It has now become a component of the PEPA (Punjab Protection of Environment Act 1997). Section 2(xlii) of PEPA defines "sustainable development as development that meets the needs of the present generation without compromising the ability of the future generations to meet their needs."

The Forest Act, 1927

This Act regulates the laws related to the protection of forests area in Punjab. Section 2(c) incorporates "a reserved forest, protected forest, unclassed forest, and village forest and includes wasteland or rangeland" in the definition of forest. Accordingly, it is elaborated that the Punjab government under sections 3 and 4 can issue a notification with declaring any "forest land" or "wasteland" as a "reserved forest." Furthermore, any wasteland that is not a part of a reserved or protected forest can be declared an "unclassed forest" by the provincial government under Section 28-A. Also, Section 28 empowers the provincial government to assign the rights of reserved forest to any village community which then becomes a "village forest." This allows the village community to use the products of the forest other than timber for the protection and the improvement of the forest and the provisions of reserved forest are also equally applicable to the village forest.

The Punjab Plantation and Maintenance of Trees Act, 1974 (the "Trees Act")

To prioritize the public interest and provide plantation of more trees and their maintenance, The Tree Act has been enacted. Land as per the definition of Section 2(c) of the Trees Act is the "land which is not occupied as the site of any building in a town or village and is occupied or has been let for agricultural purposes or purposes subservient to agriculture or pasture, and includes the sites of buildings and other structures on such land". the "occupier" is defined as "a person in actual physical possession of the land and shall also include an owner" in Section 2d.

Section 3 of the Tree Act demands that the occupier to plant three trees per acre according to the prescribed manner. In case of section 3 is violated, Section 4 imposes the penalty of rupee one per tree.

The Parks and Horticulture Authority Act 2012 (the "PHA Act")

The PHA Act emphasizes establishing the Parks and Horticulture Authority ("PHA"). It is among the duties of PHA to establish and maintain green belts, public parks, and other green areas, regulate the installation of billboards, manage the parks, organize shows regarding horticulture and aviculture, develop botanical gardens, protect trees, promote gardening, to raise awareness regarding horticulture, and to formulate committees to perform such functions (Section 4).

Punjab Environmental Protection Act, 1997 ("PEPA")

PEPA serves to protect the environment, conserve it and work for its improvement. According to Section 12, any construction which may cause adverse environmental effects must not be initiated Section 2(f).

Lahore Development Authority Act, 1975 (the "LDA Act")

Lahore Development Authority has been authorized under Section 20 of this act to keep a check on environmental pollution and to eliminate or relocate the sources which become the cause of pollution. This Act also empowers LDA to work for the beautification of the Lahore Division (section 21). LDA is therefore also authorized under section 35 to punish for causing harm to the environment.

Punjab Development of Cities Act, 1976

Much like LDA, Section 4 has formulated Multan and Faisalabad Development Authorities to improve the environment and relocate the sources of environmental pollution (Section 4). Similarly, section 20 empowers them to take all necessary measures for the beautification of the area and to punish in case of an offense (Section 34).

Punjab Local Government Act, 2019

The functions of Municipal Corporation, Metropolitan corporation, and municipal committee have been described in this Act. These organizations must look after environmental health and the development of parks and landscapes. Also, Section 150 (l) (j) makes it the responsibility of the local government to maintain the greenbelts and flowers along the roadside.

Punjab Village Forest Rules, 2013

It is prohibited to cut the wood or other forest produce from the village forest under rule 4b. Similarly, Rule 5 also refrains people from cutting or harming any tree in the village forest. These rules are formulated by the Village forest committee under rules 3 and 4.

The National Forest Policy, 2015

The basic aim of this policy is afforestation by bringing more trees from all sections of society on communal lands as well as on guard forests. This policy also aims to the conservation of the existing forests and curb deforestation. Moreover, it aims to follow international

standards by following legal reforms and scientific planning.

The Forest Policy Statement, 1999 and the Punjab Forestry Sector (Forests, Watershed, Rangelands, and Wildlife) Policy, 1999

This Statement lays down the vital requirements to safeguard the environment. First of all, there is a need to make up for the existing deficiency. For this purpose, vegetation has to be increased and the focus should be on formulating programs according to the capability of the land. Moreover, with the help of on-farm water management and Joint Forest Management, irrigation water and land must be utilized as per their full potential. The efforts are to be made to rehabilitate these resource areas according to their capabilities. Biological drainage programs have to be adapted to plant suitable trees on the farms. It is also stated that efforts shall be done to curb desertification and areas must be utilized according to their potential. The needs of the rural communities must be met through proper scientific management and legal policy to cover the private and communal forests. Moreover, to ensure sustainable development, the watersheds must be streamlined. The carrying capacity of the land also has to be evaluated. With the help of JFM and Punjab forestry, maximum private investment shall be encouraged. There is a need to encourage large-scale afforestation through the Agroforestry system. Wildlife farming has to be encouraged in the private sectors, legislative measures shall be taken to enforce laws, biological diversity must be maintained, an awareness campaign must be run, recreational facilities must be managed for the public, efforts must be done to attain clean environment by fulfilling international standards, natural ecosystem must be preserved, screening and EIA will be mandatory to avoid environmental degradation, the marketing strategies will be worked upon, most importantly scarce forestry products must be introduced for efficient exploitation, research must be introduced in this discipline, the planning process shall be recognized and linked with P&D Department, the monitoring and evaluating system must be decentralized, and must be updated to be fruitful, the Punjab Forestry Research Institute, Faisalabad and Punjab Wildlife Research Institute, Faisalabad must be reorganized, upgraded and combined to work together to deliver products, with the increasing needs of wildlife management the financial inputs must be improved, enactments must be revised to manage natural resources and to manage the current challenges, inconsistencies should be removed, the forest policy has to be reviewed every five

years to keep it upgraded with the changing needs, the Punjab Forestry and Wildlife Research Institute is to be upgraded to cater human resource development, special attention is to be paid to the awareness campaign including political commitment to develop and conserve natural resources, Community Organization must be formulated to draw forest strategy, ecosystem reserves should be created to preserve flora and fauna, no forest land can be transferred in case of unavoidable circumstances equal area must be transferred to forestry sector. The government may seek international funding for the preservation of natural resources.

Policy on Controlling Smog, 2017

EPA must work with the board of revenue and forest department to identify the air mark state land and to identify suitable tree species for plantation (Policy of EPA, para7). The Environmental Protection Department must take needed measures to implement projects to green the industrial units (Paragraph 10). The coordination shall be monitored by the Environmental Protection Department and the Provincial Environmental Committee will manage the implementation of the policy. (Paragraph 11).

Punjab Environment Policy, 2015

The goal of the policy as described in Paragraph 3, is to create a clean environment in Punjab to provide quality life to the citizens. The objectives of conservation, improvement, and protection of the environment are further elaborated in Paragraph 4 of the Policy. Moreover, it is recognized in Paragraph No. 7.2 desertification is a form of land degradation and therefore, the land is losing wildlife, becoming arid and decreasing vegetation. In Punjab, to manage natural forests and increase tree cover Paragraph 7.9 of this Policy lays down certain principles which include formulating and implementing the Punjab forest Policy, carrying out legal reforms, and reforms in the institutions to promote good governance. These measures will serve to enhance forest cover to safeguard biodiversity and provide food security.

Paragraph 7.10 provides for the protection and sustenance of biodiversity by creating new national parks, drafting policies to plant and conserve medicinal plants, greens belts, and low parks should be enhanced to improve biodiversity.

Paragraph 7.12 dictates the Government address the challenges of climate change and identify the areas of the ozone layer that have been affected by climate change. Paragraph 8.5 lays down the need to raise

awareness and run a massive campaign to educate the masses. For this purpose, it is guided that an Environment teacher must be recruited at schools and colleges, the subject of Environmental Sciences must be included in the syllabi, short courses must be introduced in the subject of Environment, Moreover M.Phil and Ph.D. programs must be initiated in the Universities, Institutions must also display the practical working by making plants barriers on the roadside and Environmental clubs must be established in all institutes.

National Climate Change Policy

The Government of Pakistan has taken serious actions to address the threat of climate change. The Ministry of

Climate Change has announced the National Climate Change Policy, 2012, and the Framework for Implementation of Climate Change Policy (2014-2030) but the policies have not been implemented in spirit. Moreover, there is no strategic action taken by the Government regarding the conservation of water or the maintenance of heat resilient crops. Lack of action in this regard may lead to immense economic loss. The goal of this policy is to lead Pakistan toward Climate resilience and mainstream climate change amid economic vulnerability. Pakistan's Climate change policy focuses on pursuing sustained economic growth, integrating climate change with other related national policies, ensuring water, food, and energy security, minimizing the risks and impacts of weather change, strengthening the process of decision making and coordination, facilitating effective use of financial opportunities, encouraging investment from the public as well as private sectors, raising awareness and promoting conservation of natural resources.

Pakistan is facing the challenge of climate change. Though Pakistan does not contribute much to the emission of greenhouse gas, it still suffers severe climate changes with which it doesn't have enough resources to deal with. To materialize the vision foreseen in Planning Commission's 2030 document, Pakistan has to first prepare to adapt to climate change. Nevertheless, Pakistan needs to devise a strategy and implement an adaptation policy properly to save its people from natural disasters.

Recommendations

For management, conservation, support, supply, protection, and safety of forests and trees in urban cities, recommendations are as follows,

1. Laws and rulings of the Superior courts should be made in writing and spirit with a view to planting, protecting, and preserving the environment.
2. Transparent efforts to expand forests and trees in urban areas should be made by government organizations to protect the environment.
3. There is a need to amend the requirement of Section 3 to plant three trees per acre and the fine of a mere one Rupee per tree also needs to be modified.
4. There is a need for accountability of the departments responsible for the protection of the environment. These departments must print an annual report outlining the forest area expansion, the urban tree planting campaign, and the measures they have taken as per law for the expansion of the forest area.
5. The competent authority should be responsible for punishing the officials involved for failure to perform their duties according to the relevant laws and disciplinary rules.
6. The Cooperatives Secretariat and the Cooperative Registry should issue housing associations and authorities guidance to plant trees according to the local laws and regulations.
7. Heavy fines and penalties of at least Rs 25,000/per tree should be imposed for the violation. The monitoring of trees is to be done through respective company officers company / and competent authorities.
8. The department must raise awareness through electronic and print media. This must include an easy procedure to submit a complaint of any violation of the Tree Cutting Act to the competent authority and the same will be dealt with strictly.
9. All agencies/companies, Secretary Forest, and other authorities must be responsible for defining urban afforestation mechanisms based on the planting policy of urban forests.
10. The department of the forest should appoint a specific officer to address the complaints of citizens regarding the plantation of trees in his locality or society and the same should be monitored by the competent authority.
11. All government and non-governmental authorities dealing with the urban housing

sector are required to develop and adopt inclusive policies on tree planting. These authorities should be guided by urban tree planting policy and develop their policy within the respective framework legislation. The concerned authorities should impose fines and penalties in cases of violation.

12. All educational and commercial institutions should be specifically responsible for growing trees in open / parking areas.

Conclusion

In Pakistan, climate change is expected to create major tensions in the coming years. Global warming is affecting the whole world and Pakistan has no preventive measures to fix it. Due to global warming, sea-level rise has been observed in Pakistan, leading to flooding in many areas in recent years. Rising temperatures have also caused droughts in other parts of the country. As a result of climate change, unseasonal rains make it difficult for crops to grow and most crops are destroyed before harvest. Farmers in Pakistan complain that it rains when crops don't need water at that time and when water is needed, water supply is reduced, damaging the growing number of crops, and farmers suffer great losses. Consequently, an imbalance between product supply and demand is created which leads to inflation leading to the suffering of the people. Climate change may lead to a new type of refugee in the coming years, the "climate refugee." A decline in food production and climate change are the outcomes of rising temperatures. Humans and animals are forced to migrate to places where food is available. This will create a huge problem for the humans who are already living there and also for the host government. Prompt action is needed by the governments to curb the issue of climate change. Everyone must pay attention and must act quickly so that Pakistan and its people are protected and have a better life. The climate is changing faster than expected. Government has a responsibility to act and raise awareness about climate change through media and educational campaigns. Policies along with practical steps should be taken to implement environmental protection laws in true letter and spirit to protect and preserve the environment for future generations.

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