Decentralization of Environmental Governance in Pakistan and its Impact on Sustainable Development

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Abstract

Environmental governance is a key instrument towards sustainable development that requires full information, sound decision-making procedures, implementation of rules and their execution according to internationally accepted standards. While Pakistan has made progress in devising legislations and laws to manage major environmental issues, it is still not as close to its target of achieving sustainable development despite several decades of efforts at environmental regulation and governance. This paper evaluates the post-18th Amendment scenario regarding the achievement of sustainable environment through better environmental governance in Pakistan. The country is facing serious environmental challenges of ever-increasing environmental pollution, losing fertile lands, depleting fragile water resources and poor human development. Pakistan ranks 161 among 192 countries regarding its Human Development Index (HDI) because of its dismal performance in the fields of education, health, and income. In 2022, Pakistan’s Environmental Performance Index (EPI) ranking was 176th among 180 countries with a score of 24.6. Despite decentralization efforts, Pakistan has failed to achieve considerable improvement in environmental governance and management. To address these issues, there is a need to review the pros and cons of the 18th Amendment in the constitution of Pakistan objectively and modify it if needed. To facilitate inter-provincial and inter-sectoral coordination, different institutions, and statutory bodies relevant to environmental governance formed after the 18th Amendment should be made functional to devise comprehensive and collaborative strategies for sustainable development.

Key Words: 18th Amendment, Decentralization, Environmental Governance, Sustainable Development.

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Introduction

In recent times, Pakistan’s environmental issues have become serious enough to threaten its economy, human life and settlements, infrastructure, and food security etc. The continuous deterioration of the environment and degradation of natural resources in Pakistan have received significant attention and there is already sizable literature that discusses the degree of success in its plans for achieving environmental sustainability.\(^1\) In this debate, different perspectives and views have been presented and discussed.\(^2\) Among these, however, the most widely accepted view is that sustainable development can be achieved by effective and proper management of Pakistan’s natural resources.\(^3\) This ‘effective management’ is mainly dependent upon sound environmental governance.

Sound environmental governance is imperative to achieve the aim of sustainable development. In a study investigating the factors affecting the Environmental Performance Index (EPI) in some Organization of the Petroleum Exporting Countries (OPEC) countries, environmental governance was identified as the prime factor with positive influence on EPI rankings.\(^4\) Its main components are the provision of complete and accurate information; formulation of protocols for decision-making; and implementation of rules according to the best global and national standards. Since environmental management and governance are mainly dependent both on the quality of the environmental legislation and on its implementation, environmental legislation is considered a vital factor to achieve sustainable development. To acknowledge and strive for its significance, several countries have included environmental provisions in their constitutions. Today a vast majority of the world’s national constitutions have different categories of environmental provisions.\(^5\) According to Boyd, no other social value ‘has achieved such a broad level of constitutional recognition in such a short period of time.’\(^6\)

Pakistan has devised laws to contain and manage major environmental issues. It is, however, still not even close to its target of sustainable development despite several decades of efforts at environmental regulation and governance. A major transition in the energy governance occurred in 2010 when the Constitution of Pakistan (Eighteenth Amendment) Act\(^7\) was passed by the national parliament and the matters related to environment devolved to the exclusive jurisdiction of provinces. This paper aims to assess the post-18th Amendment scenario in Pakistan regarding achievement of sustainable environmental development in the country. It analyzes whether the expectations of this amendment to improve environmental management in Pakistan have been met and if not, why. For
this purpose, the performance and standing of Pakistan against some globally-employed parameters of environmental development are used. Further, it examines post-18th Amendment challenges particularly the overlap in authority and lack of cooperation among federal and provincial governments. Finally, some recommendations are made to find solutions for better legal and institutional frameworks that will facilitate the quest for environmentally sustainable development in Pakistan.

**Dynamics of Human Rights, Environmental Legislation, and Governance**

As the realization of negative impacts of environmental issues is growing, the fundamental right to life is frequently linked with the right to clean and healthy environment. The right to a clean and healthy environment is an individual as well as a collective basic human right. This category of rights has been termed as the ‘Third Generation Human Rights’ along with other rights such as rights of indigenous communities and solidarity rights. At international level, the first acknowledgment of human right to healthy environment was mentioned in International Convent on Economic, Social, and Cultural Rights (1966). Later, the Stockholm Declaration (1972) and Rio Declaration (1992) admitted that all humans have the basic right to live in a healthy and clean environment. Pakistan is a signatory to several international law instruments concerning protection of environment and combating climate change. These include the Convention on Biological Diversity (CBD), United Nations Framework Convention on Climate Change (UNFCCC), Kyoto Protocol (KP), and Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, inter alia.8

In Pakistan’s constitution, there are no specific clauses mentioning provision of clean and healthy environment as a basic human right. However, the Supreme Court of Pakistan categorically declared environmental degradation as a violation of fundamental human rights in its landmark judgment (*Shehla Zia v. WAPDA*)9 in 1994. The apex court termed the right to a clean and healthy environment as part of the fundamental human rights to life and dignity as mentioned in Articles 9 and 14 of the constitution.10

This decision led to a series of subsequent litigations and active jurisprudence through various cases, including: the Salt Miners Case 1994;11 the Lahore Clean Air Commission 2003;12 the Lahore Canal Road Mediation Committee 2011;13 Islamabad Environmental Commission 2015;14 Leghari v.
Along with this judicial activism, there has been considerable progress in environmental legislation. Like other developing countries, Pakistan has enacted extensive and comprehensive legislations and statutes to manage its issues of environmental management and resource conservation. In Pakistan, there are more than fifty laws and acts (federal and provincial) covering protection of environment, discovery, extraction and use of natural resources, conservation of biodiversity and ecosystems, and pollution control etc. This progress in environmental legislation can be attributed to demand of international treaties and conventions and growing acceptance of importance of environmental management for protecting national security and development. However, their proper and effective implementation is a serious governance issue, which gets a review in the following passages.

Environmental Governance in Pakistan

According to its Constitution, the Islamic Republic of Pakistan is a federal republic (Article 1.1). This governmental structure devised by the constitution has two tier system of government, with (1) a federal government comprising of the President, Parliament (National Assembly & Senate), Prime Minister and Supreme Court as parts of the legislature, executive, and judicial pillars of the state; and (2) provincial governments with each having its own governor, provincial assembly, chief minister, and provincial high court. Before 2010 (the pre-18th Amendment period), the environment was among the subjects of the concurrent list of the constitution and both tiers of government had authority over environmental matters and could legislate over them. However, in that period, most of the environment-related legislations and policies were formulated by the federal government. Some notable examples include the establishment of Pakistan Ministry of Environment (MoE) in 1975; promulgation of Pakistan’s first major environmental legislation in 1983 – Pakistan Environmental Protection Ordinance (PEPO) with simultaneous establishment of two national level organizations (Pakistan Environmental Protection Council (PEPC) and Pakistan Environmental Protection Agency (PEPA); approval of the National Environmental Quality Standard (NEQS) in 1993 for controlling industrial pollution; replacement of PEPO with the PEPA in 1997 as a comprehensive environmental legislation to enhance government legal powers to control environmental degradation and empowering common man to approach the courts for any violation of
environmental laws; and formation of National Environmental Policy (NEP) in 2005.

**Eighteenth Amendment Act and Environmental Legislation**

In 2010, the Constitution of Pakistan, underwent landmark changes after the approval of the 18th Amendment Act causing amendment, substitution, addition, or deletion in 102 clauses of the constitution. An outstanding change among these amendments was the abolishment of the Concurrent Legislative List (CLL). The list contained items including environmental pollution and ecology for legislation by both the federal and the provincial governments, however, the federal legislation used to have precedence over the provincial laws in cases of conflict. The 18th Amendment freed the federal government of its liabilities from 43 departments in 18 ministries including the environment in 2011-2012. Interestingly, environment and ecology were not included in the newly prepared Federal Legislative List (FLL). These changes provided authority to provincial governments to make laws for environmental management and conservation of their natural resources. After 18th Amendment, all the provinces enacted laws for the protection of environment. The provinces of Punjab and Balochistan passed their environmental protection laws in 2012, while Khyber Pakhtunkhwa and Sindh legislated in 2014. The environmental protection agencies in the federal capital Islamabad, four provinces, and the administrative area Gilgit Baltistan (GB) were empowered to make and implement their own environmental impact assessment regulations and guidelines.

Despite the laudable environmental legislation and proactive environmental jurisprudence, environmental governance in Pakistan has many drawbacks, roadblocks, and loopholes. These include trivial enforcement, inadequate and delayed penalties, and delayed judicial and administrative decisions in the cases of non-compliance and violation. The affectees of non-compliance are not compensated. The shortage of competent human resource, lack of modern technology, lack of awareness among masses of their environmental rights and obligations, and avoidance to move judicial forums for their cumbersome and lengthy procedures are among the causes which create a whole culture where environmental concerns do not make a priority.
Environmental Governance and its Decentralization

As environmental crisis of the world deepens, the role and types of environmental governance are becoming increasingly debated. In the initial phase of environmental governance between the 1960s and 1980s, it was dominated by national and federal governments with a central ‘command and control’ approach for resolving environmental issues. For this purpose, national ministries and federal authorities were established which formulated national-level laws, regulations, and policies to mitigate environmental problems. Initially, this mode of governance yielded good results in short-term solutions of prevailing environmental issues. However, as the complexity of environmental issues unfolded, the centralized approach of governance was found insufficient in dealing with complex issues. Therefore, during and after the 1980s, the world witnessed a rapid adoption of decentralized environmental governance approach in many developed and developing countries. It included establishing or shifting of authority to autonomous provincial, state, or local governments with enhanced legislative and financial powers and responsibilities to deal with environmental problems.

The decentralization of environmental governance enhances efficient and transparent use of local natural resources, creates a better understanding of local environmental issues, and promotes local communities’ role in environmental management. On the other hand, weaknesses in administrative and technical capacities, insufficient financial resources, lack of political commitment to better environmental management among local ruling elite, and poor coordination between local and central policies may jeopardize the success of any decentralization effort. In addition, negative inter-state or inter-provincial competition for investments, industrial development etc., may reduce the effectiveness of decentralization. Therefore, despite large-scale attention and discussion around the globe, the research literature on centralization or decentralization of environmental governance is not clearly on one side. Consequently, the determination of role of different approaches of governance for environmental sustainability remains unresolved.

The State of Environment in Pakistan

Despite decades of environmental legislation and planning, Pakistan faces serious issues of environmental degradation such as pollution, habitat loss, deforestation, water and food insecurity, desertification, vanishing biodiversity, natural disasters, and climate change. Though data on
environmental issues in Pakistan is incomplete and unreliable, it is a common belief that Pakistan is undergoing serious environmental deterioration of all types such as environmental pollution, habitat loss, eradication of biodiversity, depletion of physical resources such as water and fertile lands, and jeopardizing its efforts towards sustainable development.

It is interesting fact that Pakistan is among the pioneer group of countries which ratified the Agenda for Sustainable Development and incorporated the Sustainable Development Goals (SDGs) into its own national development plans. However, due to various socio-political factors, natural disasters and ever-increasing population pressure, Pakistan’s efforts to achieve the goals of sustainable development have not been successful. Following is a brief account of some of its major sustainable development issues.

*Degradation of Natural Ecosystems and Resources*

All ecosystems—marine, terrestrial, aquatic—in Pakistan are undergoing degradation with serious environmental and economic consequences. Due to unplanned and ever-increasing urbanization, its fertile croplands are shrinking with threats to food security and economic stability. The per capita cropland in Pakistan declined from 0.46 hectares in 1981 to 0.131 hectares in 2021.25

Forest cover in Pakistan is very low (5.2 percent) according to global standards (20-30 percent) and it is further declining leading to loss of biodiversity, land degradation, soil erosion and livelihood issues for local communities. Pakistan’s coniferous forests are declining at the annual rate of 40000 hectares. Similarly, the 80 percent of riverine forests in Sindh have been destroyed and the mangrove forests have decreased from 600000 acres to 200000 acres in the last decade.26

*Environmental Ranking of Pakistan at Global Level*

The dismal rankings of Pakistan according to various international criteria for sustainable development—such as EPI, HDI, Sustainable Development Goals Indicators (SDGI)—reflect its poor state of environmental management and ineffective environmental governance.

The world EPI rankings are jointly issued by the Yale Center for Environmental Law and Policy (YCELP) and the Center for International Earth Science Information Network (CIESIN) at the Columbia University.
The EPI assesses countries on 40 different performance indicators and rank them according to their national efforts towards environmental health, to enhance ecosystem vitality and mitigate climate change. Pakistan’s EPI score was 72 points in 2012, ranking 120th among 132 countries and regions. As of 2022, Pakistan’s position has slipped to 176th among the 180 countries with a score of 24.6 on a scale of 0-100 (where 0 is worst and 100 best performing). Similarly, Pakistan lies at 159 out of 180 countries in HDI ranking and at 129 out of 166 countries in achieving SDGs.

**Uneven Economic Growth**

There are strong links between environmental degradation and slow economic progress. This is manifested in slowing down of annual economic growth in Pakistan in the recent past. In the 1980s, its annual economic growth was 6 percent and 4 percent in the 90s. In the first decade of the 21st century, it was below 5 percent and, in the recent years, it has usually fluctuated between 3-4 percent with a record lowest of -1.27 in 2020. This rate of economic growth is not sufficient to improve the living standards of a country with an annual population growth rate of 2.6 percent. The severe natural disasters (floods in 2010 and 2022) and earthquakes (2005, 2015) have further exacerbated its fragile economic status. At the same time, disparities in resource distribution, and shortcomings in socioeconomic justice system have deprived the country of achievement of social and economic development targets.

**Poor Human Development**

Human development indicators in Pakistan are among the lowest in the world. Even at the regional level, Pakistan lags in many sectors of human development. According to the last UN Human Development Report, Pakistan ranks 161 among 192 countries (decline of 7 slots from the previous year). Now, Pakistan is placed in the low human development category (HDI) countries because of its dismal performance in the fields of health, education, and income.

In Pakistan in 2020, the mortality rate for children under five is among the highest in the world (65.2/1000) surpassing the global rate of 37 deaths per 1000. The infant mortality rate in Pakistan is also very high (56.9/1000) as compared to the global average of 26.7/1000. The World Bank estimated in 2019 that 45 percent of newly born infants died every year in Pakistan due to diarrhea, which is also a common water pollution disease in Pakistan. In addition, large disparities occur between rich and poor sections of society. For
example, fewer than half a million (about 0.460 million) of Pakistan’s richest households own 20.3 percent of farm area and 16 percent of the country’s residential property. The gross per capita national income is just over USD 4,600.

The availability and quality of health and education services are also very poor in Pakistan. For example, there are only 6 hospital beds for 10,000 people and there is one doctor for every 1300 persons.\textsuperscript{35} In the education sector, the average Pakistani receives only eight years of schooling.

\textit{Environmental Pollution}

Water and air pollution have emerged as major environmental issues in Pakistan with multiple health, social and economic implications. Our surface and groundwater reservoirs are being depleted or polluted. The availability of clean water is decreasing rapidly, and Pakistan is at risk of facing ‘water famine’ within the next twenty years. Pakistan is at the third position among the countries facing acute water shortage (its per capita water availability shrunk from 5400 m\textsuperscript{3} in 1951 to 935 m\textsuperscript{3} in 2019).\textsuperscript{36}

Air pollution is another serious environmental issue threatening the provision of clean air in Pakistan. By considering air quality, two Pakistani mega-cities (Lahore and Karachi) are among the ten most polluted cities of the world. Pakistan’s PM2.5 concentration levels in 2021, on average, were recorded as 49.5 micrograms per cubic meter (µg/m), five times higher than the World Health Organization’s (WHO) recommended limits, with serious threats to human health.\textsuperscript{37} In 2019, more than 128000 deaths were attributed to poor air quality in Pakistan.\textsuperscript{38}

\textit{Biodiversity Loss}

Despite relatively being a small country, Pakistan has magnificent biodiversity due to its variety of landscapes ranging from marine, deserts, fertile plains, and high snow-covered mountains. Its biodiversity is undergoing rapid loss because of multiple factors such as habitat loss, unregulated urbanization, infrastructure development, pollution, illegal hunting, and deforestation. In the Himalayas, many species of mammals are threatened with extinction and included in the red list of the International Union for Conservation of Nature (IUCN).
Current natural disasters such as floods, droughts, and earthquakes have destroyed habitats and areas vital for the survival of wildlife. In addition, erratic weather patterns, flash floods, and landslides are having threatening impacts on the biodiversity of Pakistan.

**Climate Change**

In the present times, climate change has emerged as the biggest threat to mankind’s survival. Its negative impacts are being manifested in the form of an increase in the frequency and magnitude of natural disasters, crop losses, increase in vector-borne diseases and ecological changes etc. Due to continuously deteriorating socioeconomic conditions and its dependence on natural resources for its economic development and livelihood, Pakistan is 8th among the most vulnerable countries to climate change. Though Pakistan has taken some notable initiatives—such as the establishment of the Ministry of Climate Change and Environmental Coordination (MoCC&EC), and formulation of national climate change policy—at the federal level, there are no apparent positive results of these efforts. A serious drawback of this issue is the absence or weak participation by its provinces in its efforts to mitigate climate change impacts.

From the above account, it is evident that ever-deteriorating environmental conditions and climate change will further aggravate the economic, social, and security profile of Pakistan. For example, if proper remedial measures are not taken, these threats will reduce Gross Domestic Product (GDP) by 16-20 percent per year by 2050.\(^{39}\)

**Discussion and Conclusions**

Pakistan’s environmental problems are increasing continuously. Despite the decentralization of environmental governance, there is no apparent improvement in its efforts to mitigate environmental issues. After the enactment of the 18th constitutional amendment, it was expected that provinces would make concerted efforts to tackle their environmental issues effectively. However, after 13 years of its enactment, there is no considerable improvement in the performance of the Center and provinces in improving their environmental governance and management. The decentralization in 2010 has empowered provincial governments with enhanced autonomy to tackle their environmental issues but several impediments have prevented them from benefiting from decentralized environmental governance.
The abolishment of CLL provided additional legislative powers to the provinces. Now, the national parliament can legislate either on the subjects mentioned in the FLL or on other subjects on a demand by provincial government through its assembly. Now, the environment is not included in the FLL, and devolution did not provide any mechanism for coordination between the federal and provincial governments on various important issues including the implementation of international Multilateral Environmental Agreements (MEAs), inter-provincial transboundary management of pollutants and natural resources, and provision of technical and legal assistance to provinces from the federal government.

Due to various socioeconomic constraints, provincial Environmental Protection Acts (EPAs) are suffering from a shortage of qualified and technically competent manpower. These limitations have hindered the provincial EPAs from developing and implementing advanced policies and techniques to solve issues of environmental governance. Due to the absence of any mechanism for inter-provincial linkages, the provinces with insufficient capacities are unable to benefit from new and advanced technologies and continue to manage their environmental problems with outdated and obsolete policies and methods.

The results of the decentralization of environmental governance in Pakistan and its failure in meeting the expected objectives support the ‘unresolved’ state of general opinion about the success of the decentralization of environmental governance. There are controversial or divided views about the pros and cons of decentralized environmental governance. Its proponents believe that it can empower sub-national or local governments for better provision of public goods and services according to the public expectations because of their closer linkages with local communities. The sub-national governments can formulate locally effective legislations according to their local needs and economic landscapes, thus supporting higher compliance potential and improved environmental management.

On the other hand, its opponents claim that decentralized governance may result in variations in development objectives between local units and national governments thus leading to ‘race to the bottom’ phenomenon. In addition, to attract capital investments and promote industrial and commercial enterprises on a short-term basis, local governments may relax rules to attract industrial and commercial entrepreneurs to rapid economic development but higher environmental demerits. This shows the controversial nature of levels
of environmental governance for achieving environmentally sustainable development.

**Recommendations**

By considering the environmental outlook of Pakistan, it is presumed that it will face further serious environmental challenges threatening the sustainability of its already fragile socioeconomic status. To overcome this crisis, an integrated and collaborative effort by all stakeholders is needed. In this regard, there is a need to review and reform the existing environmental governance status of Pakistan to overcome issues of environmental management effectively.

*Enhanced Interest of Political Leadership*

Despite gravity of environmental crisis of Pakistan, the political leadership has not yet shown necessary political will and commitment to tackle it. Political parties have rarely included environmental issues in their manifestos and plans. Pakistan’s public opinion groups such as nongovernmental organizations (NGOs), professional organizations, trade unions and academia can take lead in pressurizing all political parties to include environmental topics in their respective manifestos and commit themselves for a safe environmental future for Pakistan.

*Need for Integrated National Approach*

Different federal and provincial institutions and forums (e.g. Pakistan Environment Protection Council) with mandate to deal with environmental subjects are not formally constituted or do not hold their meetings regularly. To strengthen inter-departmental and inter-provincial coordination, council of common interests may be mandated to deal with the issues of environmental conservation, sustainable development and inter-provincial collaboration.40

*Development of Technical Capacities*

Despite considerable legislation, there are serious issues in administrative and technical capacities of federal and provincial governments that need immediate attention. The institutional capacities of all levels of government need to develop, and implement respective environmental protection acts. A technically sound administration can foresee the issues that would require them to formulate new legislation. An integrated capacity-building program
for public service officials, judiciary, entrepreneurs, and elected representatives is required to improve their capacities and competencies. In this regard, universities, international NGOs, and environmental protection authorities can devise and conduct capacity-building training programs and courses.

**Better Legal Implementation Mechanism**

In Pakistan, legal penalties for non-compliance of national environmental quality standards (NEQs) and other regulations are very ‘soft’ and their implementation mechanisms are also weak. Pakistan like other countries such as Columbia and South Korea, among others, needs to reinforce its legal and regulatory mechanism to introduce ‘carrot and stick’ system for ensuring compliance of environmental laws and effective dealing with violating behavior and incidents.

**Implementation of Multilateral Agreements**

Pakistan is a signatory to many international agreements and MEAs. A drawback of decentralization after the 18th Amendment is that it lacks elaborate mechanism to involve provinces in the implementation of MEAs in a collaborative manner. All tiers of government are responsible for implementing these agreements and in this regard, federal ministry of climate change and Pakistan Environmental Protection Agency (PEPA) can take a leading collaborative role to ensure integrative implementation of MEAs in all sectors. The provincial EPAs may be involved in this endeavor for implementation at provincial and district levels.

**Empowerment of Local Governments**

For successful implementation of all environmental policies and regulations, the local governments need to be empowered. The various sections of the district-level governments must play their respective roles in implementing environmental regulations and managing the environment and natural resources in their jurisdictions.

In today’s world, environmental issues are multifaceted and complex with wide-ranging impacts. Their mitigation, therefore, needs multi-sectoral and comprehensive measures involving national, provincial, and international governments and organizations. At the national level, Pakistan needs a comprehensive umbrella act or legislation encompassing all major sectors of the environment, namely industry, agriculture, wildlife, biodiversity,
conservation, land use, forests, urban ecosystems, livelihood, marine resources, soil etc. and climate change. Similarly, provinces can formulate legislations in accordance with their geography, types of natural resources, and socioeconomic conditions. In this regard, the frameworks devised through 18th Amendment may be reviewed and modified to face the daunting challenges of sustainable development in Pakistan.

Notes


9 Shehla Zia and Others v. Wapda, [1994] PLD SC 693 (Pak.).

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16 Khayam and Ahmad, “Decentralization of Environment in Pakistan: Issues in Governance.”


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