Environmental Stress and Human Security in Northern Pakistan

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"The growth in unsustainable livelihoods is a product of external forces, population pressures, environmental stresses, and weak institutions...variables that render people vulnerable..."

Introduction

Located in the heart of the planet's most dramatic confluence of mountain ranges, Pakistan's North-West Frontier Province (NWFP) faces challenges that are unprecedented in its turbulent history. How its people address these challenges is a matter of regional and even global concern. In particular, any intensification of the existing levels of violence and conflict would be alarming given that the NWFP is surrounded by:

- Afghanistan to the north and west, which is reeling from decades of invasion, war, political extremism, and economic collapse;
- the conflict-prone valleys of Kashmir and Jammu to the east, disputed territories that have soured India-Pakistan relations since 1947; and
- the rest of Pakistan to the south, comprised of three provinces (Punjab, Sind, and Baluchistan), each of which is confronted with serious political and economic problems.

These countries in turn lie on the borders of China, Russia, and Iran; countries confronting their own political and economic uncertainties. The proliferation of nuclear weapons, population pressures, economic problems, and group identity conflicts plague much of this part of the world. Insofar as regional instabilities have global implications what happens here should be of interest to all.

The situation in the NWFP is also of interest because it mirrors challenges evident or emerging in other vulnerable and volatile regions. In each of these regions one finds a similar set of interconnected variables that are damaging the environment and causing the steady deterioration of sustainable livelihoods, thereby creating conditions that are difficult to change and highly conducive to intractable poverty, infectious disease, and multiple forms of insecurity and violence.

History and Geopolitics

The most prominent topographical features of the NWFP are the high peaks of the Hindukush and Himalayas that define the northern part of the province. These mountain ranges give way to the fertile Peshawar valley, irrigated by the Kabul and Indus Rivers. Still further south, the province terminates in a series of alluvial and semi-arid plains that run on into Punjab and Baluchistan (see Figure 1).
The majority of the 17 million people living in the NWFP are poor and uneducated (see Table 1). Half of the population is Pashtun; another six million Pashtun live across the border in Afghanistan. In the words of the political leader Imran Khan, his people "are one of the world's great warrior races." Martial values shape the culture; everyone is well armed; and violence is an accepted way of restoring honor and resolving disputes.

Table 1. Basic Data

<table>
<thead>
<tr>
<th></th>
<th>NWFP</th>
<th>Pakistan</th>
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<tbody>
<tr>
<td>Total Area (sq. miles)</td>
<td>74,521</td>
<td>803,940</td>
</tr>
<tr>
<td>Population (millions, 1998 est.)</td>
<td>16.5</td>
<td>135.1</td>
</tr>
<tr>
<td>Literacy Rate</td>
<td>17%</td>
<td>36.4%</td>
</tr>
<tr>
<td>Population Growth (1996 est.)</td>
<td>3.2%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Per Capita Income (1996 est.)</td>
<td>US $200</td>
<td>US $470</td>
</tr>
<tr>
<td>Pop. Living in Poverty (1996 est.)</td>
<td>20%</td>
<td>34%</td>
</tr>
</tbody>
</table>
Unemployment (1996 est.) | Unavailable | 16%
---|---|---
Refugees (millions, 1999 est.) | 1.6 | 2.0
Forest Cover | 6 - 23% | 5%
Grazing Land | 23% | 6%
Arable Land | 19% | 27%


The legacies of the past weigh heavily on this region (see Table 2). The British arrived with hopes of creating a buffer state that would keep Russia out of Afghanistan. Britain's "Great Game" began with the first Afghan War (1838-42) and continued for over a century. When the British discovered that the Pashtun were virtually impossible to defeat in battle, they focused on intensifying discord among feuding clans in an effort to weaken resistance. For example, in 1901 the British introduced arbitrary divisions into the region by rewarding some clans with the semi-autonomous Tribal Areas. These regions currently border Afghanistan.

**Table 2. Key Dates in Pakistan's History**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1940</td>
<td>Lahore Resolution calling for an independent Islamic state</td>
</tr>
<tr>
<td>1947</td>
<td>Independence and partitioning of sub-continent</td>
</tr>
<tr>
<td>1951</td>
<td>Prime Minister Liaqat Ali Khan assassinated</td>
</tr>
<tr>
<td>1956</td>
<td>Proclamation of Republic; first constitution drafted</td>
</tr>
<tr>
<td>1958</td>
<td>Military coup</td>
</tr>
<tr>
<td>1960</td>
<td>First elected President</td>
</tr>
<tr>
<td>1965</td>
<td>India-Pakistan War</td>
</tr>
<tr>
<td>1969</td>
<td>Military coup</td>
</tr>
<tr>
<td>1971</td>
<td>India-Pakistan War; East Pakistan secedes to become Bangladesh</td>
</tr>
<tr>
<td>1973</td>
<td>Constitution adopted</td>
</tr>
<tr>
<td>1977</td>
<td>Military coup</td>
</tr>
<tr>
<td>1985</td>
<td>Elections</td>
</tr>
<tr>
<td>1998</td>
<td>Testing of five nuclear devices</td>
</tr>
<tr>
<td>1999</td>
<td>Fighting intensifies in Kashmir and Jammu; military coup</td>
</tr>
<tr>
<td>2000</td>
<td>Government launches aggressive anti-corruption campaign</td>
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</tbody>
</table>

Government launches aggressive anti-corruption campaign

Unable to gain control over the Khyber Pass between Pakistan and Afganistan, the British turned their attention to cutting down the vast softwood forests of blue pine, fir, and spruce. They established a forestry service dedicated to logging, and a highly centralized political system propped up by bribery and military force. They allowed the local jirgas, or councils of elders, to manage routine affairs and resolve local conflicts. When the British left, northern clans were given the choice of independence or joining the new patchwork state of Pakistan. Those in the valleys of Kashmirt and Jammu elected to remain independent - and immediately became the targets of Indian and Pakistani expansion plans. The rest formed the NWFP.

Currently, the NWFP continues to be governed by a virtually omnipotent Political Agent (provincial governor) appointed by the central government in Islamabad, who continues to rule through force, but leaves many matters in the hands of local elders. Corruption is evident throughout the political system in the NWFP; violence is endemic; and in spite of visionary directors in some agencies, sustainable development practices are uncommon. For example, the forest service has had limited success in making the transition to sustainable forestry practices.

Recent external pressures have made it difficult to reform the legacy of corruption and exploitation. Following the Soviet invasion of Afghanistan in 1979, the NWFP became the staging ground for the first multinational jihad (Muslim holy war) since the Middle Ages. Majahidin (Islamic freedom fighters of a jihad) flocked to the capital city, Peshawar, from the Middle East, Africa, and Asia. The U.S. Central Intelligence Agency provided US$3 billion to support anti-Soviet forces. Virtually overnight, 3.5 million Afghan refugees crossed into northern Pakistan where they were settled into 384 camps, the majority of which were located on marginal lands in the NWFP. They brought weapons, livestock, and small amounts of gold, but lacked the knowledge to manage the fragile resource base on which they would now depend.

Throughout the 1980s, the quantity of small arms in the NWFP grew exponentially as the war raged on its borders, and drug trafficking became widespread as refugees struggled to survive, and holy warriors struggled to repel the Russians. The Taliban, which ran religious schools for Afghan refugees, became a significant political force, one that in the next decade would gain control over most of Afghanistan. During this period, the natural environment began to deteriorate even more rapidly under the added burdens placed on it.

An Expanding Crisis

The model presented below (see Figure 2) is not intended to be a comprehensive portrayal of all the variables and relationships in the NWFP that lead to conflict and violence, on the one hand, and cooperation and security, on the other. Rather, based on extensive interviewing and travel throughout this region, it seeks to highlight elements that appear to be most determinative of current vulnerabilities and threats to human security.
At the core of this model are reinforcing relationships among unsustainable livelihoods, the martial aspects of the culture, and the rate and intensity of violence and insecurity. The growth in unsustainable livelihoods is in turn a product of external forces, population pressures, environmental stresses, and weak institutions; variables that tend to be interactive. Because the variables that render people vulnerable and create conditions conducive to conflict and violence tend to reinforce each other, it is difficult to plot a course out of this situation without a high level of political resolve, considerable financial and technical resources, and strong local support for a range of interconnected goals.

To impart a sense of the challenges facing the NWFP, it is important to briefly describe the key variables.

**External forces** affect all aspects of the potential crisis and the factors leading to insecurity in the NWFP. These include the institutional legacies of the period of British colonialism, and the wide-ranging effects of the Soviet invasion into neighboring Afghanistan. More immediately, the ongoing rivalry with India over Kashmir is especially relevant because the NWFP serves as the staging ground for Pakistani involvement. The dire situation in Afghanistan is also significant. Many residents of the NWFP - including some 1.6 million refugees - have deep cultural ties to Afghanistan, as well as important commercial links that include drug trafficking and other illegal activities. Finally, endemic corruption, the drug trade, and political extremism, together with accusations related to training and funding terrorists, are among the issues that have given this region a very negative image in the Western world. Coupled with sanctions against Pakistan for nuclear weapons testing, the result is that little assistance of any kind is available for the NWFP.

**Population growth** has been fuelled by the influx of Afghan refugees, cultural preferences, and poverty. It is remarkably high, especially in urban areas such as Peshawar, where the population is young, uneducated, and largely underemployed. Infrastructure for sewage and waste treatment has not kept pace with this growth. The toll on the fragile alpine environment has been enormous. For example, fuel
wood consumption in the NWFP is ten times higher than elsewhere in the country - hence rapid population growth means rapid deforestation in a region where trees grow very slowly.

*Weak institutions* exist at all levels throughout the province. Those created by the British and sustained through bribery and force have persisted. Those introduced by the Pakistani government since 1947 have been equally inefficient and corrupt. Local institutions such as the *jirga* are not well suited to handling problems of the magnitude faced in the NWFP. Distrust of the legal system and disillusionment with politicians and civil servants are a common source of anger and frustration in the NWFP. For many people, the only way to resolve pressing conflicts - such as those related to property rights - is to take matters into one's own hands, an approach that often involves violence. Weak institutions make it extremely difficult to plan and build infrastructure or create jobs, and tend to encourage unsustainable practices.

*Environmental stress* in the NWFP is widespread and severe. Polluted water and air in Peshawar, water shortages in much of the south, unsustainable forestry in the north, and land scarcity everywhere are among the environmental problems plaguing the region. External pressures, population growth, and weak institutions simultaneously enable destructive practices, while making it very difficult to implement effective conservation management. This is a particularly frustrating state of affairs for local authorities and environmental specialists who have invested considerable time and effort in developing the *Sarhad Provincial Conservation Strategy* for the NWFP. Based on *Agenda 21* guidelines, this strategy is a well informed, highly sophisticated, and widely ignored blueprint for sustainable development.

*Insecure and/or unsustainable livelihoods* are the most obvious result of the interactions of the variables described above. Large numbers of men are unemployed throughout the region. Some seek casual labor in distant cities such as Karachi or venture abroad to work in Middle Eastern oil fields. Others engage in illegal activities. Many are compelled to use scarce resources for energy and irrigation at unsustainable rates. Poverty encourages large families. Idleness and uncertainty prompt some men to gravitate towards the platforms and promises of political extremists. Everywhere, there are growing signs of resentment toward the refugees, who constantly are being accused of working illegally and stealing.

*Martial culture* is not a necessary variable for linking environmental stress to violence and insecurity, but it is a prominent feature of the NWFP. Generally, the level of violence within the martial culture is kept in check by cultural restraint mechanisms; however, due to increasing environmental stress, institutional weakness, poverty, and employment insecurity (i.e., the conditions described above) and the current context of uncertainty and stress, these constraints are far less effective. Such cumulative pressures and insecurities lead to frustration and desperation. Cities and villages can and do erupt into mobs of angry, armed men. Calls to liberate Kashmir and Jammu reach receptive ears. Even nuclear tests rally great support; perhaps for the message of defiance they send across Pakistan's borders.

*Violence and insecurity* have long been features of the NWFP, but they are features that are being exaggerated by the negative forces outlined in this article. Given the volatile geopolitics of the region, this is not a condition that can be ignored without great risk. Today, the NWFP is trapped in a system
of reinforcing negative relationships. A failure in one area is quickly transmitted to others. The conditions for a large-scale disaster are in place.

**Hot Spots in the NWFP**

There are several hot spots in the NWFP, each of which has the potential to erupt into violence, sink further into poverty, push inhabitants into illegal or unsustainable livelihoods, or force people to migrate.

**Urban Centers:** Approximately 1.3 million people, including some 500,000 Afghan refugees, live in Peshawar, the main city in the NWFP. Once known as the 'city of flowers,' Peshawar's infrastructure has been overwhelmed by a growth rate of 4.6%. Raw sewage (only 1/3 of it is treated), industrial waste, fertilizers, and pesticides pour daily into the fresh water system. Approximately 40% of deaths are linked to water quality problems. Air pollution is also severe due to toxic vehicle and kiln emissions (brick kilns typically burn car tires), and some 60% of solid waste is not sent to landfills but accumulates in alleys and abandoned fields. Since 1979 Peshawar has served as a staging ground for the mujahidin, the hub of the Golden Crescent drug trade, and a bustling center for smuggled goods. High unemployment and growing resentment over the continuing presence of Afghan refugees add to the general instability.

**Rural Areas:** Many central and northern districts and villages have relied on old growth forest to provide essential ecological services such as flood control, and commodities like fuel and building materials. Today extensive logging is causing hardship as well as widespread and often violent conflict over property rights (as much as 90% of forest rights are in dispute). Ineffective conflict resolution mechanisms, a sluggish economy, and ideological extremism further incite the large, young, and often unemployed citizenry to violence. To the south, tensions are growing around water scarcity and social injustice. Water allocation in Bannu, for example, is based on a system of entitlements established by the British in 1905. Today the irrigation infrastructure is choked with sediment and collapsing. The end result is that a minority has access to large quantities of water and controls much of the farmland. An increasingly restless majority experience chronic water shortages. The costs of building more efficient and just water distribution systems have so far been deemed exorbitant, although plans to build a new dam on the Kurram River are under review. Throughout the rural regions, population growth and environmental stress, together with inequitable social conditions recognized as unfair, corrupt and inflexible, could lead to a potentially violent crisis.

**Border Region/Tribal Area:** The 800 mile border between the NWFP and Afghanistan has historically been a volatile place. Today the legacies of British imperialism and the Afghan-Soviet War continue to haunt this region. The British set up inefficient irrigation systems and large-scale timber harvesting operations that have resulted in salinization, waterlogging, soil erosion, and flooding. In the wake of the Soviet invasion, millions of landmines on the Afghan side of the border, along with an economy that is in chaos, keep refugees from returning. To survive they cultivate poppy, produce heroin, and smuggle a wide range of goods. Meanwhile human sewage and industrial wastes dumped directly into the Kabul River take a further toll on the environment. Again, rapid population growth and environmental degradation, in an unstable social context, are creating high levels of human insecurity.
Refugee Camps: The approximately 200 refugee camps located throughout the NWFP must also be considered hot spots. The psychological stresses of living in such dire and inhumane conditions for two decades make these heavily armed camps a source of great concern. As many as 1.6 million individuals, many of whom were born and raised in the camps, continue to live as refugees. With little or no formal education and few livelihood options, they constitute a tremendous challenge to the future stability of the region.

Scenarios of the Future

How might the forms of human insecurity discussed above play out in the years ahead? At least four scenarios are plausible.

Implosion: If traditional livelihoods and social systems erode and alternatives do not develop rapidly enough to alleviate growing fear and anger, citizens might rise against authorities. Violence in one part of the province might trigger violence elsewhere leading to a general collapse of the economy.

Projection: Conversely, local fears and anxieties might be channelled into violence directed against the Afghan refugees or against India in Kashmir and Jammu. In either case the level of conflict could rapidly spiral into a major catastrophe.

Intervention: The outside world might decide to escalate its level of involvement in combating the drug trade or other criminal activities in the area. Intervention could be direct or, as has already happened on a smaller scale in the case of drug trafficking, Pakistan's national government might be pressured to apply force itself.

Adaptation: Innovative, committed, and forward looking groups in the NWFP, might succeed in efforts to improve resource management, promote sustainable development, build educational and other infrastructure, establish effective conflict resolution mechanisms, and address such thorny issues as property rights, refugees, illegal livelihoods, and disputes over Kashmir and Jammu. Various groups are already experimenting with reforestation and alternative energy sources such as mini-hydroelectric plants. They are setting up cooperatives to develop the fruit and nut industry, encourage tourism, and empower women. And they are encouraging dialogue and cooperation among religious elites, elders, landowners, refugees, and government officials. Peaceful change cannot be ruled out as a future scenario.

Conclusions and Recommendations

What steps might promote conditions conducive to adaptation and stability rather than violence and conflict? While there are rarely simple solutions to complex problems, several actions can be suggested as priorities:
For external parties:

• Promote policies and campaigns that highlight the harmful affects and inaccuracy of stereotypes and negative images of the region. They have little analytical value when they are stripped of historical context, and they are entirely misleading when they are used to characterize an entire population.

• Endorse and sponsor programs and policies that recognize the complexity of the issues - pressing problems in the NWFP are often linked to other problems, and must inevitably be addressed together.

• Resume some forms of development assistance to the region. Alleviating human insecurity must take precedence over political motivations and considerations.

For internal parties:

• Fight corruption and inefficiency in the political system by strengthening federal and local institutions while reducing the mandates of provincial institutions that have failed.

• Focus on the restoration and sustainable use of basic environmental goods and services.

• Foster sustainable livelihoods (a key first step is to search for a solution to the highly divisive issue of contested and unclear property rights).

• Promote regional stability.

As Pakistan enters the twenty-first century, its future, especially in the north, seems bleak. Solving the complex challenges it faces will require assistance from the North, and great internal resolve to reform corrupt political processes, bolster the economy, and inch forward carefully conceived, but generally ignored, plans for sustainable development.

References and Selected Readings


**Key Websites**


Source: http://www.gechs.org/aviso/10/index.html#cities

Accessed on 06/11/2009