Situation Analysis: Balochistan

Incorporating Gender in Disaster Risk Management

This report has been prepared by the Gender and Child Cell (GCC) within the Provincial Disaster Management Authority of Balochistan (PDMA Balochistan). The GCC was established with the support of UN Women, the United Nations Entity for Gender Equality and the Empowerment of Women, with the aim of incorporating gender in disaster risk reduction (DRR) efforts in the province. The report presents an analysis of the current situation of disaster risk management (DRM) in the province, with an emphasis on the gender-sensitivity or gender-awareness of institutions, processes and efforts.
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Development Profile

Geographical Features

Balochistan is the largest province of Pakistan, covering 347,190 square kilometres (km) and comprising 44 percent of the country’s total land mass. It is situated in the southwest of the country. It shares international borders with Iran and Afghanistan and has a coastline on the Arabian Sea.

Physically, Balochistan is an extensive plateau of rough terrain with several basins between rugged mountain ranges, and significant tracts of desert. Valley floors and piedmont plains comprise only 15 percent of the landscape, which is dominated by the highlands. The province lies in an active seismic zone.

The climate of the region is generally arid—in some areas, average annual rainfall is as little as 50 millimetres (mm)—and summers can be extremely hot, making some regions prone to drought. The desert areas also experience occasional sandstorms.

The province is traversed by several rivers, but few are perennial or have significant flow except after rainfall. Stream gradients are high and the rate of runoff is very rapid. River flow is thus typified by spring runoff and occasional flash floods.

Earthquakes, droughts and floods comprise the major natural factors that have led to disasters in the province in the past.

Demographic Profile

The inhospitable terrain and climate of the province make for a small and clustered population. Balochistan’s population was estimated at 6.6 million in the 1998 census, or about 5 percent of the national population. Quetta was the most heavily populated district in 1998, with a little over 750,000 people. Projections based on the inter-censal growth rate per district indicate that the current population is close to 8.8 million. The population is racially, ethnically and linguistically diverse, and a tribal and patriarchal culture prevails.

The province consists of 30 districts.

Districts of Balochistan

| 1. Awaran      | 16. Qilla Saifullah |
| 2. Barkhan     | 17. Lasbela        |
| 3. Bolan       | 18. Loralai        |
| 4. Chaghi      | 19. Mastung        |
| 5. Dera Bugti  | 20. Musakhel       |

Economic and Human Development

Balochistan is rich in natural resources, such as coal, copper, barites, sulphur, marble, iron ore, quartzite and limestone, as well as solar and wind energy potential. It is the second major supplier of natural gas in Pakistan. Some of its copper and gold reserves are comparable to the second and third largest such reserves in the world. The regional situation of the province is also significant. It lies at the junction of the Greater Middle East, South Asia, Southwest Asia and Central Asia. With a coastline reaching the Strait of Hormuz, it offers the shortest route from the sea to Central Asia.

However, the province has not attracted public or private investment in proportion to its potential wealth due to lack of physical, institutional and regulatory infrastructure. This is attributed to both internal political troubles and to the negative influence of foreign vested interests. With hardly any industry, the bulk of the province’s population is dependent on agriculture and livestock for livelihoods, which are constrained by limited water resources. In the few districts that have access to the age-old ‘karez’ (underground conduit) irrigation network, there is limited crop agriculture. Livestock rearing is carried out mostly on the mountainous dry grasslands.

Studies conducted to determine Pakistan’s standing in terms of the human development index (HDI) have revealed the existence of wide variations in life expectancy, literacy and standards of living across provinces as well as districts, and have found Balochistan to have the lowest levels of human development in the country. According to the Pakistan National Human Development Report 2003, “there is considerable variation across provinces with respect to literacy rates which vary from 51 per cent in Sindh to 36 per cent in Balochistan. Among the districts, Jhelum [in Punjab] has the highest HDI rank at 0.703 and Dera Bugti [in

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2 The HDI is the best-known measure of development and has three basic dimensions: (i) a long healthy life, as measured by life expectancy at birth; (ii) knowledge, as measured by the adult literacy rate; and (iii) a decent standard of living, as measured by GDP (gross domestic product) per capita.
Balochistan has the lowest at 0.285. Data indicates large disparities in terms of human development between the districts of Pakistan.\(^3\)

According to the Pakistan Integrated Household Survey 2001–02, Balochistan has the most poor (48 percent of the province’s population) and the worst level of rural poverty (51 percent). Another study found that rural poverty in Balochistan increased by over 14 percent between 1999 and 2005.\(^4\) In contrast, poverty in urban Punjab dropped by nearly 4 percent over the same period to 20.6 percent.

The most devastating consequence of underdevelopment in any society is a high death rate, and Balochistan has the highest infant and maternal mortality ratio in South Asia. The infant mortality rate (IMR) in the province is 130 deaths per 1,000 live births; in comparison, Pakistan’s national average IMR is 70, while the average in the Democratic Republic of Congo is 126. According to the Ministry of Health, one of the major reasons for maternal mortality is hunger and malnutrition, which affects 34 percent of pregnant women.\(^5\)

Only 18.3 percent of the male population and a mere 7 percent of the female population of the province is literate. Standards of living can be gauged from the fact that only 25 percent of Balochistan’s population has access to electricity, compared to 75 percent of the national population.

**Disaster Risk Profile**

Balochistan is exposed to a number of natural hazards, including droughts; earthquakes; floods, flash floods and dyke or dam failures; landslides and cyclones. In the past, these hazards have resulted in some major disasters, such as the Ziarat earthquake of 1998 and the floods of 2010.

Historically, Balochistan has faced the highest disaster risk from tsunami droughts, earthquakes and floods. Drought is an insidious hazard of nature that originates from a deficiency of precipitation over an extended period of time, usually a season or more, which results in a water shortage for some activity, group, or environmental sectors.\(^6\) The main reason for droughts in Balochistan is lack of rainfall. Over the last decade, the Nushki, Kharan, Washuk, Panjgure, Kech, Gawader and Awaran districts have suffered severe drought. Killah Abdullah, Chaghi, and Pishin are also vulnerable.

The 1945 earthquake led to the formation of four small islands off the Makran Coast. The earthquake measuring 8.6 on the Richter scale that hit Balochistan on the 28\(^{th}\) November, at 05:26 PST, did cause a tsunami in the Arabian Sea. It was centred 97.6 km SSW of Pasni in Balochistan. The quake triggered a huge tsunami that caused great damage to the entire

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Makran coastal region. The tsunami reached a height of 40 feet in some Makran fishing ports and killed more than 4,000 people. This was the last major tsunami–generating earthquake in the Arabian Sea.

In recent times, the most severe drought to afflict the province occurred in 1997–2002. This was regarded as one of the worst droughts in the history of Balochistan. As food prices rose in the affected areas, widespread malnutrition set in, followed by disease—particularly tuberculosis and hepatitis—which affected thousands of local communities, especially women and children. The drought also led to the incidence of Crimean Congo Haemorrhagic Fever (CCHF), which took several lives. Fodder fell short, affecting livestock-rearing, an important rural livelihood source. In the severely affected areas, 80 percent of livestock perished completely. In addition, nearly 80 percent of orchards—another important livelihood source—were destroyed. The drought led to widespread migration of people from affected areas.

Heavy costs were incurred by the government in relief works in the affected areas: 22 out of the 28 districts had sought assistance in water and food. According to the Ministry of Finance, the drought cost PKR 25 billion to the national exchequer in 2000–2002 and was a major factor in slowing down the country’s economic growth to 2.6 percent.

Balochistan has also been struck by some of the deadliest earthquakes in South Asian history. The most recent major event was a magnitude 7.9 earthquake which occurred on 16 April 2013 in Mashkel. The event resulted in 13 death 52 injured 2250 houses and shops have been reported damaged. Another major event was magnitude 6.4 earthquake which occurred on 29 October 2008 in Ziarat. The initial shock was followed 12 hours later by another magnitude 6.4 shock at a depth of 10 km. The event resulted in 300 confirmed deaths, while more than 1,500 people were injured and 120,000 were rendered homeless. All districts of the province are exposed to the risk of earthquakes, although some, such as Kalat, Quetta and Ziarat, are more prone.

In the southern parts of Balochistan, flash floods arising from heavy monsoon rainfall are a common occurrence. Their damage can be extensive. Check dams and delay action dams overflow or may even collapse, causing severe flooding in nearby communities. Floods can cause large numbers of deaths by drowning as well as by starvation and disease among communities that find themselves marooned for extensive durations. Floods wreak havoc on transportation and communication infrastructure; groundwater resources; and orchards, fields and livestock.

The floods of 2007 and later 2010, 2011 and 2012 have been particularly severe. In the last three years (2010–2012), many areas of Pakistan, including some districts of Balochistan, have been inundated every monsoon season. Heavy rainfall resulted in unregulated river flow patterns. River spans widened and new areas were eroded.

Although the bulk of Balochistan lies outside the Indus Basin, the floods of August 2010 severely affected the four eastern districts bordering Sindh and southern Punjab. Balochistan suffered about 7 percent of the total losses attributed to the flood, estimated at Rs. 855 billion or 5.8 percent of fiscal year 2009–10 GDP (gross domestic product). About 12.9 percent of pre-flood educational facilities, 14 percent of total housing stock, and 2 percent of health facilities in the affected districts were damaged. Damage to agriculture and livestock was
extensive: Balochistan’s share in the total damage to the agriculture sector was estimated at 8 percent.\(^7\)

A report on the impact of the floods on Pakistan’s progress towards the millennium development goals (MDGs) painted a dire picture for Balochistan.\(^8\) The report estimated that just over 28,000 schoolchildren, or 3 percent of all schoolchildren in the province, had been affected by damage to educational institutions, and went on to extrapolate that the floods would lead to a reduction of 4.9 percentage points in the net enrolment rate in Balochistan, as the opportunity cost of keeping children in school continues to rise in the post-flood scenario. The report further projected that the impact on the education sector would translate into negative impacts on gender parity indices, as girls are more likely to be kept away from schooling if a family suffers loss of livelihoods.

In the wake of the devastating floods, the Provincial Disaster Management Authority (PDMA) Balochistan, in coordination with the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), undertook a flood risk mapping exercise that found 12 out of the 30 districts to be most vulnerable to the risk of floods and flash floods. These districts include Nasirabad, Jaffarabad, Jhal Magsi, Sibi, Bolan, Qilla Saifullah, Zhob, Loralai, Sherani, Ziarat, Kalat, Quetta, Musakhel, and Awaran.

### Impact of Disasters on Women and Girls

In the wake of the floods of 2010, the Government of Pakistan, World Bank and Asian Development Bank (ADB) compiled a preliminary damage and needs assessment report (DNA), which found that the vulnerability of women and children had increased in the flood affected districts of Balochistan.\(^9\)

**Shelter and Protection.** According to the DNA, the loss of houses during Flood 2010 made women and children vulnerable to gender based violence in Balochistan. Disaster emergencies often force large numbers of people to resort to makeshift shelters akin to those of the most destitute in society. The loss of shelter can be life-threatening if it means exposure to extreme conditions such as intense cold or heat. It can be traumatic when accompanied by a loss of possessions. It can be humiliating due to loss of privacy, especially for women, whose privacy is traditionally equated with their honour. Loss of shelter almost always implies loss of protection from other people, especially for women and children. On the other hand, there is evidence that, in the aftermath of disasters, the incidence of violence against women actually increases.

The physical security of women and children is compromised both prior to entrance into an emergency camp, and during their stay there. Lack of physical protection for women in organized settlements of displaced people is therefore of particular concern.

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\(^9\) ADB, Government of Pakistan and World Bank, op. cit.
Health and Water, Sanitation and Hygiene (WASH) Issues. According to the DNA, acute respiratory infections (ARI) and skin infections represented major health risks in districts affected by the floods of 2010. Women were at high risk due to disruption in the provision of pre- and postnatal care.

Latrines, safe bathing places and clean drinking water are not only essential for maintaining sound health following disasters, but they also provide further protection to women and children against assault as well as accusations about transgressions against purdah (the traditional practice of segregating men and women who are not close relations), which would arise if women and children had to use fields in the absence of facilities. This risk can eventually lead to grave injustices such as karo kari (honour killing).

Even in the absence of disaster, clean water supplies are at a premium in much of the less developed world. Women are more generally responsible for water acquisition, and more often work with water in cooking and doing laundry. Consequently, they are more vulnerable to water-borne diseases and are also transmitters of these diseases. This risk increases after disasters such as floods and earthquakes because water contamination is one of the most immediate effects of such events; it may originate from seawater infiltration, animal carcasses, or simply poor sanitation, especially under crowded conditions.

Food Security. One of the immediate results of disasters can be collapse of food production systems, leading to serious food shortages, inadequate nutritional levels and ultimately famine. Conditions of hunger and famine exacerbate the already marginalized section of displaced people. This is particularly true for women, their dependent children, and other vulnerable groups including the elderly, the disabled, orphans and widows, for whom severe food insecurity affects overall survival and long-term development. Even where food aid is available, fair distribution to those who need it most is almost impossible to ensure.

Psychological Stress. In families where male members are absent, post-disaster conditions may force unbearably heavy responsibilities on women. Women who become primary breadwinners also have to play the socializing roles of both mother and father in providing material and emotional support to children, as well as to elderly or feeble relatives who are part of their households. Barely able to cope with the harsh demands of their changed environment, especially when they are displaced, usually resourceful women may break down when both material and emotional support for them is lacking and mental health support services are not provided.

In general, organizations engaged in DRR initiatives in the country recognize women and girls to be the most vulnerable group and take special measures to involve them in local DRM efforts. However, sometimes, their interventions serve to increase the already heavy workloads of rural women, for example, when they have to volunteer in DRM committees. The appreciation of female vulnerability needs to be balanced by an understanding of and respect for the significant contributions women already make towards DRR in the course of their routine activities, notwithstanding their subordinated position in society. In particular, when social and economic patterns are disrupted by disaster, and affected communities become solely dependent on external assistance, women are observed intuitively taking up unconventional roles to remove distress from their families and community. However, their contribution is rarely recognized.
DRM Structure

DRM is a comprehensive approach for reducing the adverse impacts of disasters. It encompasses all actions taken before, during and after disasters, including activities concerning prevention, mitigation, preparedness, emergency response, recovery, rehabilitation and reconstruction.

It is essential to make a distinction between hazards and disasters, and to recognize that the effect of the former upon the latter is essentially a measure of the society’s vulnerability. Disasters are consequences of the ways societies structure themselves, economically and socially, the ways that societies and states interact, and the ways that relationships between decision-makers are sustained. They stem from the fact that certain communities or groups, especially the poor, are, for example, forced to settle in areas susceptible to the impact of a raging river.

It is in this broader context that the DRM structure in Balochistan should be assessed. Key institutions comprising the DRM machinery in Balochistan include the Provincial Disaster Management Commission, Balochistan (PDMC Balochistan); the Provincial Disaster Management Authority, Balochistan (PDMA Balochistan) and district disaster management authorities (DDMAs).

PDMA Balochistan was established in 2007 under the provisions of the National Disaster Management Ordinance, 2006 (which has since been enacted as the National Disaster Management Act, 2010). Under the Act, PDMA Balochistan is responsible for implementing DRM policies and plans in Balochistan.

Initially, the PDMA was assigned a small team consisting of a director-general, a director, a deputy director, three assistant directors, a relief officer and an accounts officer. Due to a high volume of work and in order to streamline efforts, the PDMA proposes to establish five wings including a Prevention Wing (Civil Defence); Search and Rescue Wing (1122 Service); Relief, Survey and Rehabilitation Wing; Administration/Planning Wing; and Monitoring and Evaluation Wing.

PDMA Balochistan has proposed that the existing Civil Defence department in the province be merged within the PDMA as a separate Prevention Wing. Under the proposed setup, the Civil Defence department would retain its institutional integrity and continue to perform all of its current functions; however, as the Prevention Wing of the PDMA, its capacity will be employed in additional disaster prevention responsibilities, specifically, the training and capacity building of communities as first responders to disasters.

Due to understaffing and limited capacity, PDMA Balochistan is currently not in a position to monitor and evaluate the DRM projects and programmes of humanitarian agencies and different international and national nongovernmental organisations (NGOs). This is why a Monitoring and Evaluation Wing is proposed to be added within the PDMA. It is envisaged that the wing will have technical expertise for evaluating the performance of nongovernmental stakeholders and vetting interventions for rehabilitation.

Although the district administrations have been declared district disaster management authorities, due to capacity issues, they are not sufficiently aware of DRM issues and their potential roles. As a first step in activating DDMAs, PDMA has proposed there is a need to
post a B-14-17 grade official as Incident Coordinator within the office of the Deputy Commissioner of each district. The responsibilities of Incident Coordinators would include data collection, cataloguing of available machinery and manpower, and assisting the deputy commissioner during all emergency situations.

**Role of NGOs**

Pakistan’s recent disasters have created widespread awareness on the need to strengthen DRM policies, programmes and institutions at the national, provincial and local levels. The United Nations, under the Joint UN DRM Programme in Pakistan, is providing important support to government priorities in DRM. This two-year programme seeks to strengthen policies, norms (such as rights-based and gender-sensitive approaches), institutional and coordination mechanisms; set up a reliable comprehensive knowledge, information and communication system; develop institutional capacities for required human resource development; and empower communities and other stakeholders in high-risk areas to prepare for, respond to and recover from disasters.

The Gender and Child Cell within PDMA Balochistan has been established and is functioning with the support of the UN. It is expected to make a significant contribution in strategic planning for gender- and child-sensitive DRM initiatives and approaches. As mentioned earlier, an initial risk assessment to identify the most-flood prone districts of the province was also conducted with the assistance of UNOCHA.

The Gender Task Force (GTF) is functional in the province and provides advisory support to clusters on gender mainstreaming. It has trained and provided Gender Focal Points to each cluster to help the clusters with proposal screening as well as other gender mainstreaming activities. A Planning and Capacity Building Associate has also been designated by PDMA Balochistan to facilitate clusters in gender mainstreaming in their projects. In addition, GTF provides needs-based capacity building support to all clusters, including training sessions on the Inter-Agency Standing Committee (IASC) guidelines on gender, among others.

**Issues and Challenges**

In general, lack of resources and expertise hamper the quality and effectiveness of all DRM functions, including prevention, mitigation, preparedness, emergency response, recovery, rehabilitation and reconstruction efforts. The existing weaknesses in disaster risk assessment indicate the extent of the challenge. There is currently no dedicated disaster risk assessment unit or staff within the PDMA. Some assessment work is carried out but no specific methodologies or tools have been identified for systematic and continuous assessment. In general, risk assessment work is hampered by poor quality data; lack of resources and professional expertise for effective data collection and analysis; as well as a culture of generally low accountability.

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Available earthquake risk assessment studies in Balochistan are limited to a selected few localities within some affected districts. Such studies focus on hazard aspects and largely ignore local vulnerabilities. There is a need for more reliable data, especially building vulnerability information, disaggregated for rural and urban areas.

Regarding flood risks, a general Monsoon 2012 assessment was performed in consultation with UNOCHA.

High-quality satellite images and precise land-use and topographic maps are not available even at the Meteorological Department—current flood risk mappings are based on old topographic maps that do not take into account recent changes in land use patterns.

Unfortunately, no gender-disaggregated data for disaster risks in Balochistan is currently available. This is a significant gap because evidence from around the world has established that the vulnerability of women to violence increases in the wake of colossal disasters and that the increased risk is associated with gender inequality and the limited representation of women in disaster responses.

**Recommendations**

In order to minimize disaster risks and respond effectively to disasters, the following measures are proposed:

**DRM Policy.** Stakeholders, particularly concerned government institutions, should be facilitated in developing a focused, comprehensive and realistic policy for disaster risk reduction and management (DRR/DRM) in Balochistan that is synergistically tied to federal resources and systems, but at the same time responsive to local hazards and vulnerabilities. In particular, this policy should establish mechanisms for incorporating DRR/DRM concerns in broader development planning, management and implementation in the province. Such an approach would recognize the significant impact of disasters on various development sectors such as agriculture, housing, health, education and infrastructure, and pre-empt avoidable losses and setbacks by enforcing conscious integration of DRR into the development process. The policy should identify and call for necessary improvements in the legal and institutional framework. A high priority should be given to the physical and legal protection of women in disasters and emergencies. The policy should be developed through a broad-based participatory process that especially includes gender experts, women and representatives of organizations working on women’s issues in the province.

**Capacity Building of Government Institutions.** The capacity of PDMA Balochistan and DDMAs should be strengthened through assistance in establishment of a data collection and analysis system. Expert staff, including gender experts, should be recruited to develop data collection and analysis systems, conduct data analysis, and incorporate gender-sensitive approaches at all stages of risk assessment; monitoring and issuance of warnings; and pre- and post-disaster planning. The gender sensitization of PDMA staff is essential.

**Vulnerability Assessment.** The needs of women, girls, boys and men are different after emergencies, so special efforts must be made to assess the needs of each of these groups during and in the aftermath of disasters. It should be ensured that women and men are part of
the needs assessment process and that the vulnerability assessment covers all portions of the affected population.

**Preparedness and Response Planning.** Relevant government departments should be facilitated in developing sound disaster preparedness and response plans. Conscious consideration should be given to women’s needs and issues, particularly physical security and shelter, WASH facilities, food concerns, and psychological support, at the centre of all relief plans. Where needed, specific programs to counter the increase of violence against women after disasters should be undertaken.

**Empowering Women.** The long-term solution to the heightened vulnerability of women during and after disasters lies in empowering them. When women are empowered, their families are healthier and more children go to school. When women are economically empowered through, for example, education, livelihood skills training and microcredit facilities, agricultural productivity improves and incomes increase. Not only do communities generally become more resilient to disasters in this way, but gender perceptions change so that women are seen, and see themselves as, proactive contributors who are less vulnerable to violence. It is therefore important to take initiatives to promote the rights and empowerment of women. Girls’ education should be prioritised. The International Day of the Girl Child should be celebrated with a nationwide call for eradicating all forms of discrimination against girl children. During the post-disaster reconstruction phase, financial resources should be used to promote employment opportunities for displaced women, and the results followed up to identify and control possible problems.

Approved by

[Signature]

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