



GWADAR

Integrated Development Vision



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Table of Contents

Abbreviations and Acronyms	iii
Executive Summary	v
1 Background	1
1.1 Introduction	1
1.2 Location and Prospects	2
1.3 Rationale	2
1.4 Integrated Development Vision (IDV)	4
2 Gwadar: Salient Features	5
2.1 Introduction	5
2.2 Topography	5
2.3 Area	6
2.4 Climate	6
2.5 Administrative setup	6
2.6 Natural Resources	7
2.7 Environment	7
2.8 Economy	8
2.9 Development in Gwadar	8
3 The Vision - Social Sectors	10
3.1 Population	10
3.2 Gender	14
3.3 Education	16
3.4 Water	20
3.5 Poverty	22
3.6 Health	24
3.7 Municipal Services	27
4 The Vision - Green Sectors	30
4.1 Agriculture	30
4.2 Livestock and Pastures	31
4.3 Biodiversity: Species, Protected Areas and Wetlands	32
5 The Vision - Making the Best of Opportunities	36
5.1 Fisheries and related Infrastructure	36
5.2 Tourism	39
5.3 Diversification of Jobs	42
5.4 Planning and Managing Development Initiatives	43
6 The Vision - Tackling land and Governance Issues	46
6.1 Land - Use and Planning	46
6.2 Governance	47
6.3 The People	48
6.4 Macro Landscape	49
7 The Vision - Institutional Resource Pool	51
7.1 Local Component of Resource Pool	51
7.2 Provincial Component of the Pool	56
7.3 Federal Component of the Pool	59

7.4 Civil Society	61
7.5 Academia	62
8 The Vision - Complexities and Vulnerabilities	63
8.1 Social Change and Migration	64
8.2 Marginalization of Local People	65
8.3 Resettlement	65
8.4 Enforcement of Labour Laws	65
8.5 Tsunamis, Earthquakes and Sand dunes Movement	66
8.6 Cyclones and Floods	66
8.7 Inaccessibility and Remoteness	66
8.8 Climatic Change and Rising Sea Level	66
8.9 Strategic Interventions and Institutional Links	67
References	68

Abbreviations and Acronyms

BCDA	Balochistan Coastal Development Authority
BCS	Balochistan Conservation Strategy
BDA	Balochistan Development Authority
BLGO	Balochistan Local Government Ordinance 2001
BRDMP	Balochistan Rural Development and Drought Mitigation Project
CCB	Citizen Community Board
CSO	Civil Society Organization
DCO	District Coordination Officer
DCR	District Census Report
EDO	Executive District Officer
EEZ	Exclusive Economic Zone
EFZ	Export Free Zone
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
GDA	Gwadar Development Authority
GDEP	Gwadar District Education Plan
GoP	Government of Pakistan
GPA	Gwadar Port Authority
IDV	Integrated Development Vision
IUCN	International Union for the Conservation of Nature and Natural Resources
LGO	Local Government Ordinance
MCH	Mekran Coastal Highway

MSA	Maritime Security Agency
NCS	(Pakistan) National Conservation Strategy
PARC	Pakistan Agricultural Research Council
P&DD	Planning and Development Department
PEPA	Pakistan Environmental Protection Agency
PHED	Public Health Engineering Department
PRSP	Poverty Reduction Strategy Paper
PSDP	Public Sector Development Programme
SPDC	Social Policy and Development Centre
SPO	Strengthening Participatory Organization
TMA	Tehsil Municipal Administration
TMO	Tehsil Municipal Officer
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNICEF	United Nations International Children and Education Fund
WAPDA	Water and Power Development Authority
WCS	World Conservation Strategy

Executive Summary

The Gwadar IDV is the long-term development agenda of the District Government, Gwadar. The vision draws its inspiration from a unanimous resolution of the Zila Council, Gwadar, to prepare a long-term development agenda. The aim is to outline a long-term management plan for the change emerging as a result of investment in strategic mega-projects. With this IDV, the district government has demarcated the areas for investment to manage the transformation of the district from a marginalized rural society to an economically vibrant industrial and commercial community.

The process was guided by the Integrated Development Vision Committee of the district government, comprising elected representatives and public functionaries. Consultations at the sub-divisional and district levels were held to crystallize the vision. As the study incorporates the views of village elders, community members, elected representatives, civil society organizations, women from all four sub-divisions as well as government functionaries, it reflects the collective vision of the people in Gwadar.

For ease of reading and flow, the vision document is divided into eight chapters. The first two chapters give the background information about the district, the rationale and requirements of the new system of local government and highlight the salient features of the history and geography of Gwadar. The next six chapters examine and discuss the issues of various sectors of economy, explore the opportunities and outline the strategy for coherent planning besides providing an action plan with a framework for implementation to achieve the ultimate goal of a “better and safer environment for economic prosperity and social well-being of the people in Gwadar.”

After its purchase from the Sultanate of Oman in 1958, Gwadar became a part of the then Mekran District. The territory was given the status of a separate district in 1977 and happens to be the largest coastal district in the country, with a population of 185,498 as recorded in the 1998 census or 227,984 as estimated in 2005. The district is administratively divided into four tehsils and one sub-tehsil. Since 2001, the district has 13 union councils that form the grassroots basis of the local government system. Gwadar and Pasni tehsils have four union councils each while Jiwani and Ormara comprise two union



councils each. The Suntsar Sub-tehsil has one union.

According to the 1998 census and subsequent population growth estimates, Gwadar is sparsely populated with a density of between 14 to 15 people per square kilometre. The population is increasing at an estimated annual rate of 2.99 percent. The dominant activity thus far has been fishing and its allied occupations. The population census in 1998 estimates that 54 percent of the population lives in the urban areas. Average household size in the district is 5.5 persons. More than 80 percent of the dwellings are single-room units. Women comprise 46 percent of the total population of the district. The youthfulness of the district is evident from the fact that people below the age of 15 comprise 46 percent of the total population.

This statistic is a warning signal of growing pressure on education and health services in the years ahead. An overall literacy rate of 25.47 percent for the total population with 6.38 percent for females represents a major obstacle to development. Given there are 265 schools in the district, these figures highlight 'access issues'. The utilization rate of schools is extremely low: some 6 percent of the schools have no students. Enrolment in 205 primary schools ranges between 16 and 35 students. Only 5 percent of the schools have more than 100 students. A single college and a higher secondary school cater to the demand for intermediate level education in the district.

Gwadar's primary and secondary healthcare facilities are inadequate and ineffective due to lack of trained healthcare personnel, medicines and equipment. The unhygienic urban environment, growing pollution, poor sanitation and substandard drinking water are major causes of ill-health while scattered settlements and lack of transportation facilities contribute to poor healthcare. The primary healthcare infrastructure of the district comprises 11 civil dispensaries, 18 Basic Health Units and 3 Rural Health Centres. The District Headquarters Hospital at Gwadar is the secondary healthcare outlet. Most primary health care facilities in the rural areas are without doctors and medical staff. The task of servicing the national programme for family planning and primary health care in the district is performed by 60 Lady Health Workers. The absence of suitable government residential accommodation is a major cause of non-functional healthcare outlets.

Scarcity of clean drinking water is probably the biggest problem facing the district. People have traditionally depended on rainfall, non-perennial rivers and wells to meet their potable water needs. Presently, two storage dams constructed by the irrigation department are a major source of water for the population. The supply lines and distribution system is the PHED's responsibility. Managing the

large and complex network of supply lines and power stations is a daunting task which keeps the department busy.

One of the most remote districts of Balochistan, Gwadar must overcome major shortcomings in its physical and social infrastructure. Extreme poverty may not be a major issue for people in the coastal areas of the district, unlike the less fortunate living in the inaccessible areas with extremely limited agriculture and livestock assets. They are most vulnerable to economic shocks as they lack alternative means of livelihood.

The decision to construct a major seaport at Gwadar has triggered major development interventions in the district, forcing administrators and the people to cope with the complex phenomenon of rapid change in every sector of life. Gwadar is in transition from a marginalized backwater to an urbanized economy with access to world markets. The influx of people from other parts of the province and the country is an inevitable ingredient of the change. Skills and technique would be the basic requirement of future jobs. The ongoing change has attracted many investors. Selling and buying of land is the most profitable activity that is impacting local sensitivities. Though change is bringing new problems and challenges to Gwadar, it is also providing opportunities for economic growth in the form of new jobs.

The long Arabian Sea coastline is a definite plus for Gwadar, offering tremendous opportunity for growth. The scientific development of marine fisheries, which already provides livelihood to more than 70 percent of the total population in the district, could be a key component of rapid economic growth. Marine aquaculture along the coastline could also provide employment to local people. The MCH has linked Gwadar and reduced travel time to Karachi, which is a major market for Gwadar's fish products. The completion of the Khuzdar-Rattodero Road will link Gwadar to the national highway, resulting in a big boost to the transport sector. Harnessing of wind power through the use of wind mills along the coastline could provide pollution-free energy to the district, especially to people living in the neglected interior, with the surplus, if any, going to the national grid.

Critical components of municipal services, as contemplated in the BLGO 2001, including water supply, sewerage, storm water drainage, sanitation, solid waste management and fire-fighting, have been examined to ascertain the existing strengths and weaknesses of the municipal administration in the four tehsils of the district.

With a total arable area of 30,517 hectares, agriculture is a marginal activity in the district owing to lack of water for irrigation and suitable soils. Livestock rearing predominates in the

hinterland areas but the sector is faced with major obstacles due to water and fodder shortages.

Governance deals with the relationship between planning, development, integration, mainstreaming and substantiality. The important task of managing the change underway in and around Gwadar with its focus on development has generated a complex set of duties and obligations for managers and administrators at the local and provincial levels. The local government is faced with a huge responsibility of effectively performing its functions and discharging its mandate. The municipal governments in all tehsils are now obliged to perform expanded functions but they are handicapped by their lack of capacity in terms of human and financial resources.

Legally, the responsibility for the management, control and operation of departments and functions outlined in the BLGO 2001 has devolved on the district government. Coordination, human resource management, finance, planning and accounts offices have been created at the district level to handle emerging administrative and management components. This becomes particularly daunting due to lack of resources.

The scale of land transactions, particularly in Gwadar and adjacent areas, is a contentious issue for the government. The settlement process presently underway in the district is a tedious, complex task. Management of the situation requires extraordinary focus for obviating future conflicts.

The Vision analyses the issues faced in each sector and provides strategic interventions, categorised into short, medium, and long term, to help address them. Institutional links like the lead role and the support role responsibilities within the government system are also provided with each intervention.

Population, housing, gender, education, health, water supply and poverty alleviation have been grouped under "Social Sectors" and described in Chapter-3 while Chapter-4 deals with agriculture, livestock and pastures, and biodiversity grouped under "Green Sectors". Following this, Chapters 5 and 6 of the document discuss the issues and map out strategies for the fisheries, tourism, job diversification, planning and management of development initiatives, and land and governance sectors. Chapter-7 gives a detailed treatment to the issues of the institutional resource pool at the local, provincial, and federal level, the civil society, and academia and proposes strategic interventions to address them. Chapter-8 deals with some complexities and vulnerabilities that the district is faced with like migration, resettlement, marginalization of local communities, enforcement of labour laws, natural disasters, climate change, etc. and proposes strategic interventions.

Social Sectors

Population: Considering that Pakistan's national policy to address the population problem needs enforcement at the local level the strategies proposed are geared to improve: population control through advocacy, administrative capacity of unions, regulatory framework for building control, policy reforms, district housing policy, district health and education human resources, and the credit line for assisting poor communities in better housing.

Housing: In conformity with the decisions of the global community, efforts have to be made to provide opportunities for women, eliminating violence and discrimination against them and improving their status, health and economic welfare through equal access to economic opportunities, land, credit, education, and healthcare services. The interventions proposed in the gender field are attuned to bringing about a positive change in every area and population segment of the district.

Education: The Vision identifies core issues in the education sector in the district that include extremely poor literacy rate, the non-availability of teachers and their low commitment to the profession and their students, and the location of schools in relation to access and transport. The Vision, accordingly, identifies strategic interventions to address these, which include encouraging private sector involvement, creating diverse vocational trainings, policy reforms, separating of management and teaching cadres, teacher trainings, improved data management etc.

Water Supply: Water supply is the most critical problem of Gwadar district. The Vision proposed numerous interventions aiming at improving the provision of clean drinking water to the population. These include studies to assess the magnitude of the problem and possibility of tapping groundwater, introduction of water charges, checking illegal connections, advocacy in water conservation, installing filtration and desalination plants, construction of water storage dams, improved water governance, etc.

Poverty Alleviation: Poverty alleviation issues are proposed to be addressed through human resource development in project preparation and budgeting, encouraging foreign investment, improved loaning schemes, increased allocations for health, education and water supply sectors, developing private-public partnerships, strengthening local institutions, establishing fisher-folk cooperatives, etc.

Health: In the health sector the Vision requires the government to improve primary healthcare facilities, enforce regulatory regime to curb private practice, quackery and sale of spurious drugs, activate deployment of mobile teams in remote areas,

provide incentives to physicians to work in difficult areas, run advocacy campaigns, and periodically send mobile medical teams to remote areas.

Green Sectors:

Agriculture: Being a marginalized sector due to shortage of irrigation water, this sector would require extraordinary effort to enhance cropped area, improve yields and introduce crop varieties suited to local environment. The Vision requires the government to improve and validate statistics, build the capacity of the department and improve its efficiency, upgrade knowledge and farming practices, introduce farming cooperatives, undertake land reforms, and formulate a district level agriculture policy.

Livestock and Pasture: In order to address the issues related to the animal health and the overgrazing in the small pasture area in the district the Vision identifies interventions such as: strengthening of veterinary services, rangeland survey to determine carrying capacity, addressing animal husbandry issues including feed, fodder and water, gender participation, private sector involvement, monitoring sector performance, and improving animal breeds.

Biodiversity: Recognizing that biodiversity is being increasingly threatened in the district due to pressures imposed by human activities, the Vision proposes interventions which include: review of processes adopted to address biodiversity, undertaking of a comprehensive assessment survey of wetlands, forest, and protected areas, review of statutory and regulatory frameworks, promoting EIA culture for development projects, developing concrete proposals for donor support, increased resource allocation, data compilation of fauna and flora, defining the roles and responsibilities, awareness raising, studies on economic values, alternate sources of energy, partnerships with civil society, and designating protected areas.

Governance:

Governance issues are addressed by focusing on a strategy that is compatible with ongoing devolution and decentralization and emphasizes interventions to articulate roles, assign responsibility and specify types of activities for each tier of government. The aim is to strengthen the union entity in the short term, multi-year planning and maintenance of law and order in the medium term and providing an enabling environment to equip local government to play an effective role in law enforcement. In the short-term, this strategy emphasizes investigating into land transactions in and around Gwadar for safeguarding the interests of local people and protecting their livelihood, identity and proprietary rights. In the medium-term, the strategy requires the district government to focus on change management, preparation of a master plan for

resettlement of the population dislocated as a result of land acquisition for mega-projects, enforcement of building control laws, reinforcing the storage dams against exceptionally heavy rains and floods and investment for improving living standards around the port city. In the long-term, the strategy proposes regulation of incoming migration, engaging opinion leaders in a meaningful partnership and improving the communication network.

The strategy requires the creation of a comprehensive mechanism to monitor and evaluate the performance of local government. As the final intervention, the strategy calls for the creation of an institutional nucleus at the district level to represent the executive authority of the federation and province which could perform a coordination role.

The role and responsibility of institutions engaged in the development of Gwadar is also assessed. The critical areas of their mandates are flagged for attention at the appropriate level. At the local level, the strategy proposes the creation of linkages, institutional strengthening and capacity building as core areas for intervention by the local government.

The vision proposes that the district finance and planning departments should function as an IDV implementation cell under the overall supervision of the DCO. As the next step, the need for a review and reporting mechanism to keep the IDV under continuous review is highlighted for sustained pursuit and follow-up. The Vision suggests development of indicators to assess implementation, monitor progress and evaluate impact. Finally, the action plan touches on resource mobilization to implement the strategy and proposes the creation of a Gwadar fund for integrated development.

That said, the Gwadar IDV is by no means an immutable, definitive action plan. Instead, it requires periodic review to accommodate lessons learned during implementation. Gwadar is unique in the sense that it is the focus of attention at a critical stage. Investment in the area has started at a time when the administrative system in the country is witnessing rapid change and the situation in the region remains volatile owing to major conflicts.

This scenario calls for maximum flexibility to address trends emanating from policy shifts at the national and international levels. At the same time, the strategy and action plan defines the roles and responsibilities for various tiers of government to help institutions focus on areas relevant to their mandates to obviate duplication, resource wastage and jurisdictional conflicts that could hinder the development process in Gwadar.

1 BACKGROUND

1.1 Introduction

Gwadar District is at the threshold of rapid change on account of huge investments in the development of a deep seaport, the construction of the MCH and plans for the establishment of an EFZ. The upcoming Gwadar Port could provide the shortest and most cost-effective access to landlocked Afghanistan, the Central Asian Republics and the Xinjiang region of the Peoples Republic of China.

The emerging communication infrastructure is expected to link Gwadar to other parts of the country and beyond. Already, the remote and neglected fishing villages of Gwadar have been linked to Karachi and the rest of the country through the MCH which was constructed in 2004. The MCH has provided access and greater mobility to communities along the coast. The MCH has also made it possible to expand and develop port business by increasing the volume of transit trade and cargo handling.

The town and district in particular and the country as a whole will benefit from these developments. Urbanization, increased trade and commerce, industrialization, diversification of the local economy and fresh employment opportunities are some of the benefits for Gwadar district in the foreseeable future. At the same time, management of this colossal change remains a major concern.

Located strategically about 400 kilometres from the choke point of the Straits of Hormuz, Gwadar Port is adjacent to the entrance of the Persian Gulf which is the main route for shipping and tankers carrying oil to most parts of the world. It has the potential to serve as the transit trade terminal for other ports in the region. Gwadar is emerging as the third deep seaport of Pakistan after Karachi and Port Qasim. As such, it has considerable economic and strategic significance, not only on account of its proximity to the Gulf but also because it is located away from Pakistan's traditional confrontation sea zone.



1.2 Location and Prospects

Gwadar borders Iran and until recently most of its trade, all undocumented, was with Iran. The MCH has linked Gwadar to Pakistani markets through Karachi, though it is still quite far from Quetta, the provincial capital. Gwadar's isolation is in the process of ending with the ongoing developments aimed at its economic integration with the country. This peripheral district is one of the most strategically located in the country and has recently gained prominence owing to the government's policy to develop it on a priority basis. The strategic and economic importance of so many destinations in the region and beyond is now evaluated and calculated in terms of their distance from Gwadar.

These prospects have generated a keen interest in the urban centres of Pakistan to buy real estate in Gwadar and have brought a rush of realtors to the district. These agents portray Gwadar as the Dubai or Singapore of Pakistan in the offing and the prices of land have catapulted to unprecedented highs.

The newly created GDA has prepared a master plan with zoning for residential, industrial and commercial areas. The master plan is pivoted on the prevention principle, which postulates that preventing damage to the environment is much easier and less costly than trying to repair damage after it has occurred. The goal is to try and prevent the type of damage to the environment that has already occurred in all major cities of Pakistan through unplanned growth, crowded slums, congested roads, unsanitary living conditions and polluted air and water.

The effort in planning and zoning of Gwadar has the potential to transform it into a well-planned city. But going by past experience in other cities, it is going to be an uphill task requiring strict adherence and enforcement of zoning laws. The current level of investment in the real estate in the district indicates that the developments will exceed the limits of Gwadar Tehsil in the near future. The urban, industrial and commercial development in Gwadar will have a far-reaching impact on issues relating to the best use of natural resources, the environment, poverty alleviation, equality of opportunity and sustainable economic development.

Experience shows that rapid development and private sector investment in trade and industry often result in environmental degradation unless

regulated by the government in accordance with environment protection laws and regulations. En route to becoming a modern port city with substantial industrial and commercial establishments, Gwadar genuinely needs to ensure enactment and implementation of strict zoning laws to protect it from the fate of other cities in Pakistan. Above all, it must protect its sea coast from the dumping of untreated sewage as well as other toxic wastes and pollutants that are already harming marine life and threatening the people's health and livelihood.¹

Achieving sustainable development is no easy task. Mere enactment of appropriate laws and regulations to safeguard the environment is only the first step. Dedicated efforts over the long term to apply and implement laws is the only way for the district and the province to achieve its economic goals without causing long-lasting damage to the natural resource base along the coastline. Rapid growth must not be allowed to outpace and overwhelm the environmental safeguard regime.

1.3 Rationale

Society has paid dearly for the unmonitored expansion of cities, ill-planned development interventions and abrupt transformation of rural settlements into urban centres. Dislocations and settlements have their own dynamics that need careful management. Historically, unchecked commercialization, industrialization and urbanization have heavy social and environmental costs.

Growing international concerns regarding widespread global environmental degradation and unsustainable use of natural resources prompted the international community to entrust the formulation of the WCS to IUCN, UNEP and UNDP. The WCS is a seminal document which recognizes and calls for addressing environmental problems on an urgent basis. The WCS is premised on the belief that environmental issues are systemic and addressing them requires long-term strategies, integrated action and participation of all countries and stakeholders.

Following the lead of the WCS, the GoP requested IUCN to formulate the NCS to promote sustainable development through wise use and conservation of natural resources. After the approval of the NCS in 1992, the Government of Balochistan prepared the BCS with technical assistance from IUCN in 2000.

1. In the words of the 60-year-old fisherman, "The new port construction has stolen our way of life. Where can we go now that there are no fish left near the coast and we don't have the capacity to fish in the deep sea? Who is this development meant for?" Cited in unpublished document by IUCN "A Situation Analysis Study of District Gwadar, Balochistan" IUCN, 2005 p. 46 (unpublished)



Fishing boats along Gwadar Town Coastline are common sight

The main objective of the BCS is to provide a framework or strategic plan for the conservation of the environment and sustainable use of the natural resources to confront the issues facing Balochistan in a comprehensive manner.² For this, the strategy recommends active participation of all relevant stakeholders in the province. The upcoming development interventions in Gwadar need to be undertaken in consonance with the principles furthered by the BCS to ensure that inevitable growth and development in Gwadar pre-empts a heavy toll on the lives of the people, especially the poor and the disadvantaged, apart from causing irreversible damage to the ecosystems in the province.

The issue has another dimension. The current reforms set in motion by BLGO 2001 have introduced a three-tiered system of governance at the district, tehsil and union level. Centralized decision making is giving way to decentralization and participatory planning and development processes. Local governments have a major role to play in providing an environment conducive to sustained development. Major functions in the social sector are now the responsibility and mandate of the district government while the municipal component of the social sector is entrusted to the tehsil and TMA.

As a result, local government is obliged to determine its priorities in consonance with the

larger national agenda for sustainable development. The current focus on Gwadar, with foreign and local investments increasing day by day, is indicative of the process of change. Management of the change is crucial for a smooth transformation of the area from a traditional tribal set-up to a modern port city with large urban settlements. The process of rapid development induced through incentives is often accompanied by lapses and oversight of regulatory mechanisms that lead to overexploitation of resources, environmental degradation and enhanced marginalization of poorer sections of the population.

District Government Gwadar has to play a decisive role in shaping the future of Gwadar as a modern port city and providing opportunities to the people to benefit from the ongoing change. The other local entities too have to comprehend their responsibilities emerging from new developments. Along with the district government they have to prepare plans well in time to manage the change. In view of scope and magnitude of the changes, a long-range view of the situation is required that must take cognizance of the reality that Gwadar Port, Gwadar Town and Gwadar District have different issues, needs and development requirements.

2. BCS pages 16-17



Consultative workshop on IDV development in progress in Gwadar

1.4 Integrated Development Vision (IDV)

The new system requires district administration to develop an IDV for the district to prepare plans and determine the timeframe for achievement of development goals approved by the Zila Council. Defining functions and powers of zila nazim, section 18 of BLGO 2001 states: “The functions and powers of the zila nazim shall be to (a) provide a vision for the district-wide development, leadership and direction for efficient functioning of the District Government; (b) develop with the assistance of the district administration strategies and a timeframe for accomplishment of the relevant goals approved by the zila council.”³ The District Mushavirat Committee comprising the zila nazim, naib zila nazim, tehsil/town nazimeen established under section 140 of the ordinance is tasked with “crystallizing the vision for integrated development of the district.”⁴

The Gwadar IDV is to date the most significant effort of the district government in this direction to define its strategy for sustainable development at this critical juncture. The vision looks beyond the normal tenure of a local government and provides a long-term development agenda for the district. In the ultimate analysis the basic purpose of the IDV is to apply the recommendations of the BCS at the district level for the welfare and larger interest of the people and ecosystems.

The IDV is based on an analysis of resources combined with an overview of the current

situation and the emerging scenario. The vision provides a sector-by-sector strategy for coherent planning and integrated interventions so that development in the district is sustainable. It also includes a plan of action for implementing the strategy in the short-, medium- and long-term to pave the way for sustainable development.

In 2004, the Gwadar Zila Council unanimously passed a resolution for preparing an IDV for the district. As a sequel to this resolution, the district government constituted an Integrated Development Vision Committee comprising elected representatives and officers for guiding the process. The district government formulated the IDV with the participation of people from all walks of life and diverse communities. Accordingly, consultative workshops were held at each of the four tehsil headquarters in the district between June and July 2005. These workshops were attended by village elders, community members, elected representatives, civil society representatives and government officers. Women in all four tehsils also participated actively in these consultative workshops. The final consultative workshop was held at the district headquarter in July 2005. Participants of the district consultative workshop included former members of the local councils, politicians, district government officers, EDOs, civil society representatives and community members. The IDV incorporates the recommendations of the consultative workshops.

³ BLGO Section 18 (1)

⁴ BLGO Section 140 (4) a

2 GWADAR: SALIENT FEATURES

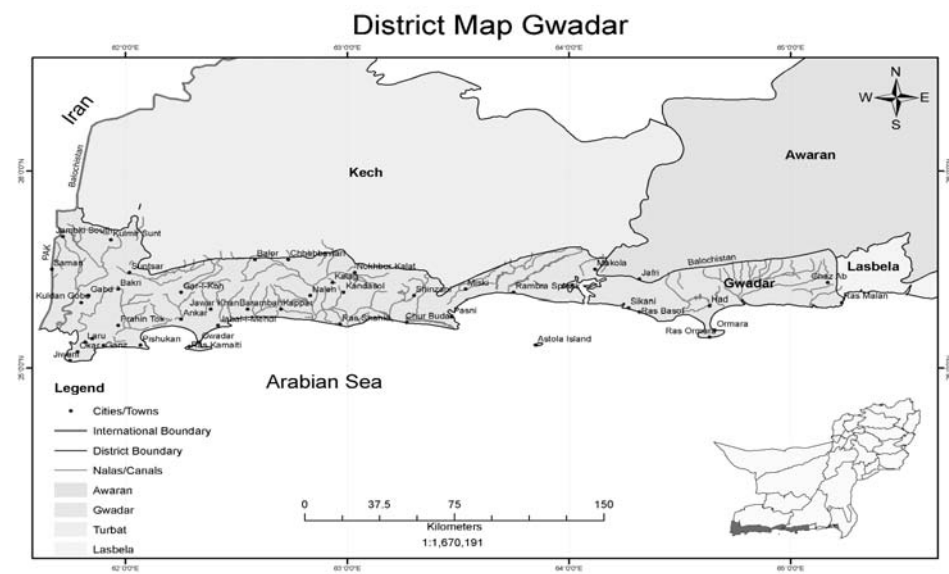
2.1 Introduction

The word Gwadar is derived from two Balochi words *guad* or *wind*, and *dar*, meaning *gate*, and literally means “gateway of winds”. At the time of Pakistan's creation, the area of Gwadar comprising Peshukan, Sur Bander Phuleri and Nigore was under the political control of the Sultan of Oman and an agent with 30 policemen known as *askaris* responsible for its administration. Gwadar's remote location and the administrative setup were responsible for its backwardness. The area was not only neglected and under-developed but also badly governed. Being a remote and neglected dependency of Oman, then an under-developed sheikhdom, it is hardly surprising that Gwadar established its first primary school in 1950. Social sector services and physical infrastructure, like the state authority, were non-existent. In 1958, the principality of Gwadar had a population of 20,000 and its total area was 777 square km. In September 1958, the Government of Pakistan purchased Gwadar from the then Sultan of Oman in return for 8.4 million dollars and a percentage of any oil ever found on Gwadar shores.⁵

Gwadar is the largest coastal district of Pakistan and located on its south western fringe. The district was created in 1977 with the bifurcation of the Mekran district into three districts of Kech, Panjgur and Gwadar. It is located between 25° 01' and 25° 45' north latitude and from 61° 37' to 65° 15' east longitude. The district is bounded on the north by Kech and Awaran, on the east by Lasbela, on the south by Arabian Sea and on the west by Iran.

2.2 Topography

Gwadar is a long sea-board district along the south of the Mekran Coast Range. The district's coastline stretches for 600 kilometres comprising 78 percent of the provincial coastline and 55 percent of the entire coastline of



5. The Weekly TIME, 22 September 1958.

Pakistan. In places, the coastline climbs to 300 metres above sea level with a few mountain peaks up to 1,000 metres above sea level. The coastline is deeply indented with bays, creeks and backwaters but its most characteristic feature is the frequent occurrence of promontories and peninsulas of white clay cliffs capped with coarse limestone.

The intermediate coast is low, with white high sand hills, low sand hills with bushes of grass or in some places a strip of very low sand with extensive salt water and mangrove swamps behind it. Near the sea, the rivers, which are mostly dry, become salt water creeks. There are a few good harbours in the district. The principal ports are Jiwani, Gwadar, Pasni and Ormara. A small uninhabited island named Astola is located about 20 kilometres off the coast and some 40 kilometres southeast of Pasni.

2.3 Area

DCR 1981, the 1997 District Profile of Gwadar and Situation Analysis Study of Gwadar District (unpublished) undertaken in 2005 reported the total area of the district to be 15,216 square kilometres. According to the DCR 1998, the area of Gwadar District is 12,637 square kilometres. Table 1.18 titled 'Changes in the Boundary of Administrative Units between 1981-1998 Censuses'¹⁶ of the Population Census Report of Pakistan 1998 makes no mention of any change in the boundaries and area of Gwadar District. Similarly, there is no explanation in DCR 1998 about the new, reduced

area of the district. This change has important implications as budgetary resources are distributed on the basis of total area and total population of the district. The Interim Report of the Provincial Finance Commission 2004 also uses the same area of 12,637 square kilometres for calculation of the share of the financial resources for the district.

2.4 Climate

With its dry, hot climate, Gwadar is placed in the "warm summer and mild winter" temperature zone. The oceanic influence keeps summer temperatures lower and winter temperatures higher than hinterland areas. Winter lasts for three months from December to February and is pleasant except for occasional and brief cold spells. According to climatic data recorded in Pasni, May and June are the hottest months with a mean maximum temperature of around 35°C and December-January are the coldest months with a mean minimum temperature of around 13°C. The climate is arid with erratic rainfall. Most rainfall occurs between December and February at a monthly average rainfall of 20 mm. In the remaining nine months of the year, the highest rainfall is 12 mm in the month of August.

2.5 Administrative setup

Administratively the district is divided into four tehsils and one sub-tehsil that are: Jiwani, Gwadar, Pasni, Ormara and Suntsar, respectively. The district has 13 union councils. Jiwani and Ormara tehsils have two each while Gwadar and



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Aerial view of Gwadar Town

6. 1998 Gwadar DCR, Page 2. This does not rule out the rare monsoon rain storm or cyclone, which may cause heavy rains and devastating floods.

Pasni have four each. Sunstar sub-tehsil has one union council.

BLGO 2001 stipulates that there would be 13 union councils with a collective membership of 169 councillors to constitute the electoral college for the election of the zila nazim. The zila council draws its elected membership from the union councils and comprises 13 union nazimeen, four female members, one peasant/worker and one member from the minorities. The four tehsils have their respective TMAs headed by tehsil nazims. The sub-tehsil of Sunstar is integrated with Gwadar Tehsil in the municipal setup.

The entire district of Gwadar is one constituency for the Balochistan Provincial Assembly PB-51. The National Assembly constituency NA 272 Kech-cum-Gwadar is shared with Kech district.

2.6 Natural Resources

The district is richly endowed in natural resources. The greatest resource is the coastline and the sea that provides livelihood to a vast majority of the population. Fish is the most important natural resource from the sea. Salt is extracted from seawater in the district. Land is another important natural resource of the district. But as potable and irrigation water is scarce, vast tracts are uncultivable.

Wind is another important untapped source that can be utilized for generating electricity through windmills along the coast as sufficient wind energy is available in Gwadar to meet not only its own energy needs and also a substantial part of Karachi's shortfall. With petroleum prices climbing steadily, wind could become an economically feasible source of energy along Pakistan's coast.

The mineral resources in the district have yet to be fully surveyed. Pakistan Petroleum Limited has obtained an oil and gas exploration concession from GoP for two offshore exploration blocks.

Forest resources are meagre, apart from two sizeable areas of mangrove forests along the coast. Small scale mesquite plantation was carried out under the Natural Resource Management Project for sand-dune stabilization in a few areas. Limited rangeland and scattered trees are found in many areas of the district. Only a few types of trees are used for timber while others are for fuel wood.

Livestock is raised in the rural areas in small numbers. There are no big livestock farms in the

district. Agriculture is negligible except in areas irrigated with flash floods and a few tube wells.⁷

2.7 Environment

Gwadar is faced with a host of increasingly serious environmental problems. Being a coastal district where the sea provides livelihood to a vast majority of people also makes Gwadar vulnerable. "The southwest monsoon winds, submarine topography and coastal orientation combine to promote the upwellings that result in this coastal zone being one of the most productive in the world. There is a continual process of erosion and deposition along the coast".⁸ Erosion by sea is major problem in Gwadar and Pasni. The situation analysis of Gwadar district (unpublished) identifies environmental problems to include degradation of coastal and marine ecosystems, overexploitation of marine resources due to unrestricted use of purse seine nets or gujja, wire nets and bottom trawling that are threatening endangered marine species.

The coast is located on one of the busiest shipping lanes in the world where approximately 11,000 ships of around 12,000 million tonnes deadweight and 2,500 tankers carrying 33 million tonnes of oil pass annually. The winds expose the district coast to the threat of oil pollution. A major oil spill occurred in 1998 when R.V. Yashika carrying 5,000 tonnes of furnace oil was abandoned about 112 kilometres south of Pasni.

Oil pollution already appears to be of some concern along the Gwadar and Pasni coastline. Sources of oil pollution include fishing boats, merchant vessels and oil tankers that clean bilge and tanks as they pass through the EEZ of Pakistan. The availability of oil and lubricants from Iran, at lower-than-market prices in Gwadar, has attracted a large number of fishing crafts that call at the fish harbour for fuel and are a cause of pollution.

Reports indicate that the mean sea level is slowly but steadily rising at varying rates in different areas of the world as a result of global warming. This may affect low lying areas such as Gwadar as well as lagoons and wetlands. The rise in the sea level may also affect the deep seaport and salinate fresh water reservoirs along the coast.

The BCS describes Mekran coast as one of the most seismically active regions in Pakistan, susceptible to earthquakes and tsunamis. The coast sits on a major subduction zone. Seismic records for the period between 1851 and 1990 indicate occurrence of 193 earthquakes measuring 4 and above on the Richter scale⁹.

7. In Balochistan, this system is named as sailaba and is widely spread throughout the province but well-established systems can be found in the districts of Barkhan, Mousa Khel, Loralai, Zhob, Bolan and Lasbela. The PARC is currently carrying out a national research project on "Water Management of Spate Irrigation Systems in Rod-Kohi Areas of Pakistan".

8. BCS Page 22

9. BCS Page 133

Winds are responsible for rough seas, dust, sandstorms, shifting dunes and coastal erosion. Wind erosion and shifting of sand dunes is assuming serious proportions. The limited mesquite plantation for sand dune stabilization by the forest department under the Balochistan Natural Resource Management Project has not been able to stem the problem.

The percentage of urban population in Gwadar has increased from 38.5 percent in 1981 to 54 percent in 1998. Since the inception of the Gwadar deep seaport project, the real estate business and volume of construction have increased manifold in Gwadar Town, attracting a large number of migrant workers. This has caused over-crowded conditions in urban neighbourhoods. The poor quality of drinking water, lack of sanitation, sewerage, and solid waste disposal problems have compounded the situation further. In recent years, vehicular traffic has increased in the district, particularly in Gwadar Town. Increased vehicle emissions are polluting the air in congested urban localities.

2.8 Economy

Statistics on Gwadar's economy, its total production and contribution by different sectors to production are either unavailable or are suspect. Population data by economic activities in DCRs 1981 and 1998 indicate little correspondence despite the fact that there was ostensibly no major change in the district in the interim period. The DCR 1998 shows a reduction in the total size of the workforce by 1,003 people from DCR 1981 despite a population increase of 73,113 people in the same period. Comparative statistics of DCRs 1981 and 1998 are given in Table 1. Inconsistencies in the demographic data

of the district were also pointed out in the Gwadar District Profile¹⁰.

The trend of economic activities in 1998 indicates that the largest proportion of the workforce is employed in fishing, followed by government service, construction, trade and transportation. Since 2003, a perceptible change in the economic activities of the district has taken place. Construction has emerged as the second largest economic activity after fishing. The population of Gwadar is increasing rapidly with migration from other areas to cater to emerging employment opportunities in the construction sector. These trends are indicative of changes in the economy, economic activities and employment patterns.

2.9 Development in Gwadar

The government's decision to construct a deep seaport and offer incentives for investment has led to rapid growth in the district. Gwadar has witnessed major changes in economic activities in recent years on account of a large influx of people that has increased demand for all civic necessities and services. Construction activities have increased considerably as has employment. The most important project in this sector was the construction of MCH that ended Gwadar's isolation and reinforced investor confidence. The establishment of GDA has provided impetus to the development of infrastructure and given direction to the development process and urbanization. The pace of planning and development in Gwadar is unparalleled in the history of any other town in Pakistan.

The most significant development is a boom in the real estate business accompanied by an escalation of prices. TMA Gwadar levied a 2 percent tax on land transactions in Gwadar Tehsil which has

Table 1: Employment by Sectors in DCRs 1981 and 1998

Sector-wise Employment	1981	Percent	1998	Percent
Agriculture and Fishing	21,126	67.1	13,347	44.0
Community, Social and Personal Services	1,978	6.3	6,596	21.2
Construction	1,920	6.1	4,928	16.2
Wholesale, Retail, Trade, Restaurants and Hotels	1,868	5.9	2,311	7.7
Transport, Storage and Communication	1,369	4.3	2,255	7.5
Manufacturing	1,363	4.3	528	1.6
Activities not Adequately Defined	1,568	5.0	296	1.0
Finance, Insurance, Real Estate and Business	97	0.3	122	0.4
Mining and Quarrying	128	0.4	49	0.2
Electricity, Gas and Water	89	0.3	71	0.2
Total	31506	100	30503	100.02

Sources: DCRs 1981 and 1998

10. Government of Balochistan, District Profile of Gwadar, Planning and Development Department, Quetta 1998. Chapter 2



Roads are one example of development projects underway

earned 30 million rupees in fiscal 2005. For its part, GDA has approved and issued No Objection Certificates for 38 residential, commercial and industrial schemes and four commercial and residential buildings. The Authority is undertaking development projects of access roads to the port and town. Planning is underway for development of physical infrastructure, road and rail networks linking Gwadar to other parts of country and Afghanistan and Central Asia. The chronic problem of unreliable and irregular power supply was resolved for the current needs with the purchase of electricity from Iran in 2003.

Primary, secondary and tertiary education and professional education has still to receive due attention. Gwadar will soon get a polytechnic institute under the Asian Development Bank-funded "Restructuring of the Technical Education

and Vocational Training System Project"¹¹. Primary health care and preventive health measures remain inadequate in the district. Construction of a new 50-bed hospital in Gwadar was inaugurated in 2005.

To provide adequate security to Gwadar amidst rapid changes, the police services have been reinforced with the deployment of civilian armed forces. Travel from the seaports and movement of fishing vessels from the fish harbours is regulated.

The Gwadar Master Plan is open to suggestions for improvement. It is hoped that the development of physical infrastructure and services will lead to commercial, industrial and urban development in Gwadar that may extend over many years.

11. ADB, RRP: PAK 36654: Restructuring of the Technical Education and Vocational Training System Project (Balochistan Province) 2004.

3 THE VISION - SOCIAL SECTORS

3.1 Population

According to DCR 1998, Gwadar District had a population of 185,498. With an average annual growth rate of 2.99 percent it is projected to have reached 227,984 in 2005. The density of population in 1998 was about 12 people per square kilometre. In 2005, the density is estimated at 14 to 15 people per square kilometre. The sex ratio is 1.15 (115 males per 100 females), indicating a larger number of men than women. Basic demographic data is given in Table 2.

Table 2: Population of Gwadar (1951-98)

Variables	Population Census Years				
	1951	1961	1972	1981	1998
Total Population	40,630	49,660	90,820	112,385	185,498
Growth Rate (District)	n.a	2.05%	5.31%	2.55%	2.99%
Growth Rate (National)	n.a	2.45%	3.67%	3.06%	2.69%
Sex Ratio	n.a.	n.a	n.a.	112	115
Density (per square km)	2.7	3.3	6.0	7.4	14.7
Household Size	n.a	n.a.	n.a.	6.3	5.5
Rural Component	34,462	31,167	53,939	69,132	85,350
Urban Component	6,168	18,485	36,881	43,253	100,150
Percentage of Urban Population	15.2%	37.2%	40.6%	38.5%	54%

Sources: DCR 1998, Population Census of Pakistan.

3.1.1 Pattern of Population Growth

Development prospects in Gwadar are attracting people in large numbers to settle in the area. This is clearly going to lead to a substantial increase in the district's population in the near future, barring unforeseen setbacks. There are visible indicators of migration to upcoming urban centres and coastal areas. The historic pattern of population growth indicates wide variations between 1951 and 1998. The average annual growth rate of the population remained lower than the national average except in 1972 and 1998. The rate of population growth more than doubled between 1961 and 1972 but again went down drastically between 1972 and 1981. These fluctuations in the average annual rate of population growth appear unnatural as the district has not seen much migration in that period. Anomalies in the demographic data of the district were pointed out in the Gwadar District Profile prepared by P&DD, Government of Balochistan¹². It may be assumed that the inhospitable terrain

12. Government of Balochistan, Gwadar District Profile, Planning and Development Department, Quetta, 1998.

and difficult environment of the district have hindered collection of correct and accurate data.

3.1.2 Population Distribution

According to DCR 1998, Gwadar is the second most urbanized district of Balochistan after Quetta with 54 percent of the district population living in four urban localities and 46 percent in rural areas. Urbanization in the district has mostly grown along the coast. The rural-urban distribution of population indicates agriculture and livestock as dominant economic activities in rural areas. The criterion for the urban-rural divide during DCR 1998 census was the existence of town and municipal committees. Devolution reforms have done away with this divide by creating union councils in what were municipal areas. These urban union councils constitute the urban component of the district population.

The urban-rural divide based on the existence of municipal and town committees as they existed at the time of DCR 1998 is now irrelevant in the context of local government. The district government will need to furnish specific indicators to segregate urban-rural components of population in the next census due in 2008.

Topographically, Gwadar takes the form of a strip stretched along the coastline. In view of this distinctive feature, the rural-urban divide is largely irrelevant as most of the population in rural and urban localities along the coast are engaged in economic activities related to fishing. All the four urban areas, Jiwani, Gwadar, Pasni and Ormara, and about 35 human settlements are located along the coast.

scarce vegetation and small rangelands are barely enough to sustain livestock. Of the total 77 villages, 44 percent have less than 500 inhabitants and only 14 percent have populations exceeding 2,000 people. This widely scattered pattern of spatial distribution has serious implications for the delivery of social services and implementation of development activities.

3.1.3 Housing and Households

The average household size in Gwadar, as reported in DCR 1998, is 5.5 people. At the time, there were 30,680 housing units in the district. Owners occupied 98 percent of the houses in the rural areas and 91 percent in the urban areas. Single-room units constituted 81 percent of the houses while 13 percent had two rooms and the remaining 6 percent three or more rooms. In some villages in the hinterland, houses are no more than small huts made of wood and dwarf palm without any courtyard or boundary wall. This phenomenon indicates extreme poverty.

To date, building controls or zoning is a concept alien to Gwadar, as are building standards, structures and designs. Responsibility for building control rests with the municipal administration that lacks the experience and authority to perform this complex task effectively.

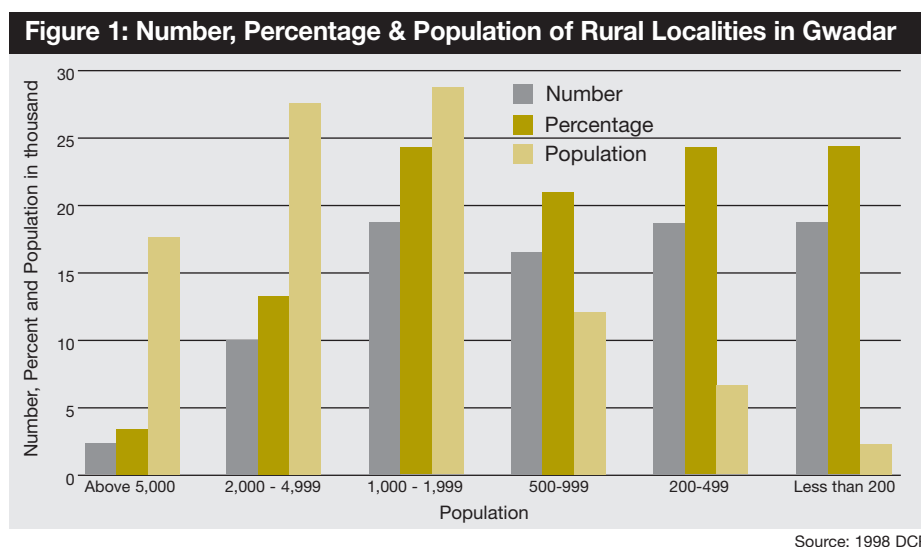
3.1.4 Religious Composition

The population of the district predominantly adhere to Islam and only 0.7 percent of the population belong to other religions. Of this, Hindus, including scheduled castes, comprise 0.39 percent whereas Christians and other religious minorities form only 0.31 percent of the population.

0.31 percent of the population.

3.1.5 Age and Sex Composition

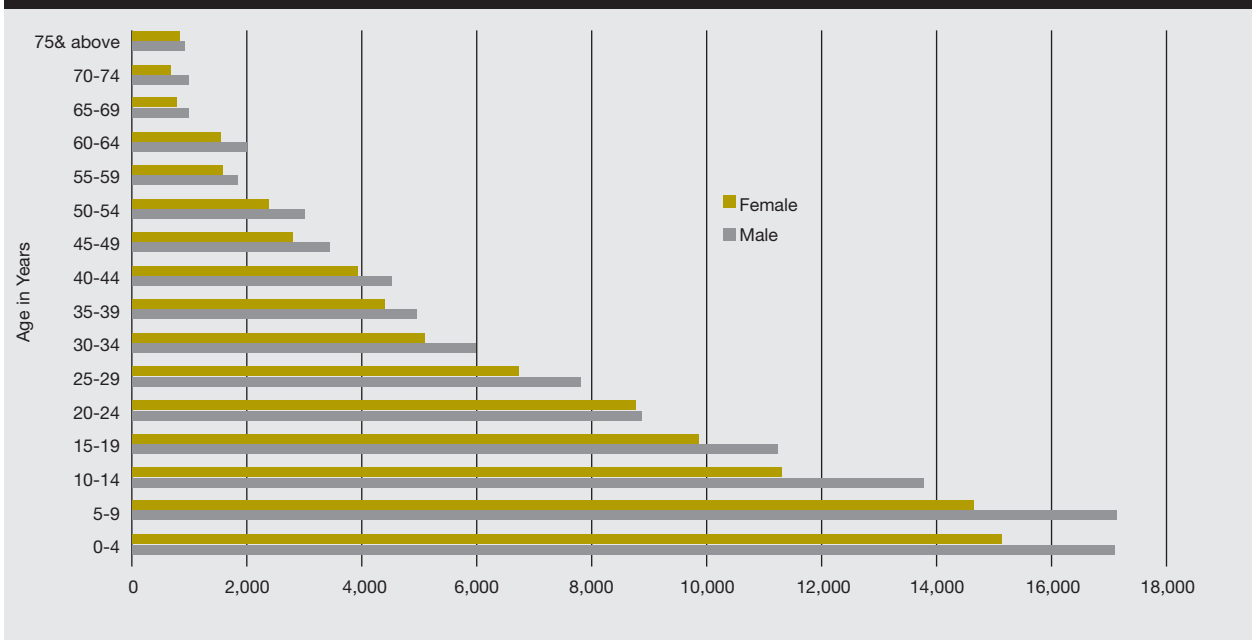
Age and sex composition of the population according to DCR 1998 is given below. The sex ratio in the district at 115 males per 100 females is slightly higher than the provincial average but much higher than the national sex ratio of 108 males to 100 females. Women comprise only 46 percent of the district's total population.



In contrast, hinterland areas are sparsely populated due to a lack of economic opportunities. Farming is based mostly on highly uncertain and unreliable flood irrigation, while

The population of women in the reproductive age bracket was 43 percent of the total female

Figure 2: Age and Sex Composition of Population in Gwadar



Source: 1998 DCR Gwadar

population. About 46 percent of the population was below 15 years of age, reflecting the youthfulness of the population. Pressures for education and health services, employment opportunities and recreational facilities are bound to increase every year, requiring increased investment of public resources in these sectors.

3.1.6 Language and Ethnicity

Almost the entire population of the district, excluding migrants from other areas, belong to the Baloch ethnic group. Though tribal bonds are deeply rooted, most local people in the district would identify themselves as Baloch. An unspecified proportion of the population belongs to the Darzadah group that represents a different racial stock and made up the service class in the past. Socio-economic changes in Mekran, particularly the Baloch nationalist movement since the 1960s and the relative economic prosperity owing to increased employment in the Persian Gulf states have blurred this social distinction. Still, in the rural areas, a vast majority of the Darzadah do not own any land.

Approximately 98 percent of the people speak Balochi. The common dialect has more Persian words than other forms of Balochi due to close proximity and interaction with Iran. Urdu is the lingua franca in urban areas but a vast majority of men in rural areas can also communicate in Urdu. Urdu is also the language of instruction in schools and colleges. The incoming population in the wake of development is bringing along different

languages that will add to the linguistic diversity of the area.

3.1.7 Population Planning

The district is sparsely populated, with small, scattered settlements that make communication difficult. This handicap also makes it difficult to provide adequate population planning services to the rural population. As in other parts of the province, population planning services are integrated with the health department. The district has three Mother and Child Health Centres (MCHC) to provide paramedical as well as mother and child healthcare facilities in hospitals. The National Programme for Family Planning and Primary Health Care is supported by 60 Lady Health Workers in the district who are providing services in the inhospitable environment of the district. By any standard, their job is difficult. Reliable statistics regarding contraceptive use are not available.

3.1.8 Strategic Interventions and Institutional Links

Population explosion is a critical problem in Pakistan with both macro and micro dimensions. Pakistan's national policy to address the population problem needs enforcement at the local level. If local entities are not attuned to achieve policy objectives, effective implementation of the policy becomes impossible. Pakistan is committed to stabilizing its population by the year 2020. With this in mind the following local-level short, medium and long term interventions for the district are identified.

S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Examine trends of density, urbanization and population growth and establish indicators in line with national ones	Population Welfare	Health, Union Administration
2	Prepare advocacy campaign sensitive to local culture	Population Welfare	Health, Information, UA
3	Formulate district-level intervention plans based on findings and recommendations of national population policy	Population Welfare	Planning Finance Health
4	Prepare local institutions for a proactive role during 2009 national census for compiling accurate, reliable and realistic statistics	Planning	Community Development Union Administration
5	Collect and compile reliable data on temporary shelters	District Planning	Union Administration, Education
6	Create district-based institution to articulate interventions for improving settlements	District Planning	Community Development
Medium Term			
1	Formulate regular, comprehensive population control plan	Population Welfare	Health
2	Introduce population issues into educational curriculum after elaborate local consultations	Population Welfare	Education, Health, Union Administration
3	Encourage civil society, especially CCBs, to support implementation of national population control policy	Community Development	DPWD Health, District Planning Department
4	Designate population-sector campaigns as eligible for funding from CCB component of development budget	Community Development	Zilla Council Secretariat, Planning, Finance
5	Tackle population issues in cognizance of social, cultural and religious norms	Population Welfare	Health, Education, Community Development
6	Build administrative capacity of unions to collect, maintain and update statistical information for socio-economic surveys	District Planning	Education, Health
7	Develop projects to access federal and provincial resources earmarked for population welfare activities	District Planning	Finance, Health
8	Organize village-level cooperatives for improvement of shelters	Community Development	Union Administration
9	Introduce low cost building standards, structures and designs	Works and services	Community Development, Planning
10	Provide regulatory framework for building controls	Tehsil Municipal Administration	Works and services
Long Term			
1	Work with civil society, CBOs and local opinion makers to keep population issues in focus and sensitize target groups to problems of unplanned growth	Population Welfare Community	Health, Education, Development
2	Monitor and evaluate impact of investment, focusing on fertility, contraceptives use, household size and age at marriage	District Planning	Health, Tehsil Municipal Administration
3	Work for empowering women by mainstreaming gender issues and enhancing educational and employment opportunities	Community Development	DPWD, Education, Planning
4	Mobilize health and education sector human resource pool (doctors, health workers, midwives and teachers) to address critical issues of population sector	Population Welfare	Health, Education
5	Ensure adequate funding for population welfare activities by exploring innovations, strengthening linkages and accessing new funding windows	District Finance	Population Welfare
6	Provide basic necessities of life and employment opportunities in sparsely populated hinterland to forestall migration	District Planning	Health, Education, Public Health, Tehsil Municipal Administrations
7	Formulate a district housing policy to regulate housing sector	District planning	Community Development, Works & Services
8	Establish credit lines for assisting poor communities to build better houses	District Finance	Community Development

3.2 Gender

Generally, women in the district enjoy a better status than those belonging to other parts of Balochistan. The 1906 Mekran District Gazetteer reads: “[A] woman in Mekran occupies a much stronger position than her sisters in other parts of Balochistan ... her status is even better than it would be in India proper. She has entire control over the property acquired from her husband as dower ... She is the 'better half,' therefore, from every point of view, and the husband, having frequently given nearly all he possessed in dower, takes a secondary place in the household, and in a sense is dependent on the charity of his wife.”¹³ The situation recounted in the gazetteer has since changed. In fact, land means little to the women in the district on account of its non-productivity. Moreover, women have restricted access to natural and economic resources, lack decision-making power and the authority to steer public affairs.

Conditions conducive for women development such as provision of health and education facilities remain extremely poor. Women employment is minimal largely because of lack of education. Focus on education has never been a priority. It appears that even CSOs have never lobbied for provision of health and education services to women.

A small number of rural women are skilled in embroidery but use the skill only for household use. Lack of access and high transportation costs are among the major constraints for marketing such products. The National Rural

Support Programme has established women organizations in rural areas, providing training to women in different skills. But whether this training has provided employment or income generating opportunities is not known. Local government institutions provide representation to women in local councils but their participation in council meetings and impact on decision-making is limited. In real terms, almost half of the population is left outside the economic mainstream.

3.2.1 Strategic Interventions and Institutional Links

The female population of the district, comprising slightly over 46 percent of the total, has a critical role to play in the development of the district. In fact, economic and social uplift of the area would be impossible without focused mainstreaming of gender issues. As a concept, gender does not only comprise biological differences between males and females. Instead, it relates to the impact of attitudes, upbringing, socio-cultural norms and expectations from male and female members of society. All legal, regulatory, development and uplift interventions have to be tailored around the concept of equity and equality.

In Gwadar, women seem to have greater economic independence than their counterparts in other districts. But they clearly do not enjoy equal opportunities. Their role in decision-making and policy formulation is marginal. The contributions of women in manufacturing handicrafts, net-making, livestock rearing, dairy production and backyard poultry farming, though substantial, remain



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Women contribute their due share in economic activity

13. District Gazetteer of Mekran 1907, page 75

S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Compile checklist of guiding principles on gender issues warranting actions by the state institutions	District Planning	Community Development, Population welfare
2	Initiate capacity building of women for political leadership	Human Resource Development	Zillah Council, TMA Population Welfare, Community Development
3	Formulate projects benefiting women and establish priorities for financing from gender development grants	District Planning	Community Development,
4	Compile and examine gender-disaggregated data in all departments of local government	District Planning	Education, Health
5	Reach out to civil society and local opinion makers to integrate gender issues in development planning	Community Development	District Planning
Medium Term			
1	Identify and tap funding sources for women-specific projects	District Finance	Planning, Population Welfare Community Development
2	Enable women to access financial resources to promote micro-enterprises	District Finance	Community Development
3	Support efforts to improve population welfare initiatives	Population Welfare	Community Development Information
4	Advocate concept of small families	Population Welfare	Health, Information
5	Create opportunities for women to access knowledge, skills, techniques and trends in natural resource management, poultry farming, livestock rearing and dairy production	Human Resource Development	Community Development
6	Use civil society to organize women around core issues impacting their working conditions and social status	Community Development	Information, Health
7	Assist networking of women leaders in local councils and government departments	Community Development	Zillah Council Secretariat, TMA
8	Establish institutional mechanisms to ensure continuity of gender-responsive interventions	District Planning	Finance, Community Development
9	Ensure continued increase in enrolment of girls at all levels of education with focus on optimum retention and accurate assessments	Education	Community Development
10.	Support advocacy programmes targeting male population for attitude change to accelerate gender mainstreaming	Population Welfare	Community Development
Long Term			
1	Evaluate progress on gender issues at local level in line with Provincial and National Gender Reform Action Plan	District Administration	Planning
2	Assist progress in economic opportunities available exclusively for women	District Finance	Planning
3	Facilitate availability of social services in rural areas	District Planning	Health, Education, Public Health, TMAs

unacknowledged as an economic activity. Provision of updated information, facilitation services, support programmes and credit facilities cannot be accessed by women involved in these activities. Female education is another neglected area. The enrolment and retention rates of women drop drastically in higher classes. Poverty is widespread, especially in the rural hinterland, and its impact is particularly severe on women. To have a modern port city coming up in one part of

the district, it would be unfair not to address the problems faced by women living there.

Gwadar's development and transformation into a modern sea port has to be attuned to bringing about a positive change in every area and population segment of the district. In conformity with the decisions of the global community, efforts should be made to provide opportunities for women, eliminating violence and discrimination against them and

Table 3: Literacy and Enrolment Ratios in Gwadar

Areas	Total		Male		Female	
	Literacy	Enrolment	Literacy	Enrolment	Literacy	Enrolment
All Areas	25.47	28.83	35.52	35.70	13.81	20.98
Rural	14.84	16.41	22.19	23.47	6.38	8.15
Urban	34.07	39.44	46.27	46.36	19.87	31.68

Source: 1998 Gwadar DCR

improving their status, health and economic welfare through equal access to economic opportunities, land, credit, education, and healthcare services. The following interventions could help realize these goals:

3.3 Education

Literacy levels and educational attainment remains low in the district. The literacy rate in

Gwadar is a mere 25.47 percent against the national average of 43.92 percent. A dismal female literacy rate of 6.38 percent in rural areas of the district indicates the virtual exclusion of women from education. The wide gaps between literacy and enrolment ratios in rural and urban areas of the district are shown in Table 3. Among other things, this clearly indicates lack of access to primary schools for girls in rural areas. Socio-economic conditions and cultural beliefs of parents concerning gender roles for girls may account partially for the low levels of literacy in rural areas. But the main reason behind the low level of female literacy and enrolment is non-availability of schools in rural areas.

3.3.1 Educational Institutions and Enrolment

The statistics of educational institutions are shown in Table 4. There are 253 schools,

Table 4: Educational Institutions in Gwadar

Government Educational Institutions	Boys	Girls	Total
Primary Schools	147	66	214*
Middle Schools	10	5	15
High Schools	11	3	15**
Intermediate College	1	0	1
Technical Training Centre	1	0	1
Private Schools (6 primary, one middle and two high schools, all co-educational)	0	0	9
Total	170	74	253

*includes one coeducational Pakistan Baitul Mal Child Labour School

**includes one higher secondary school

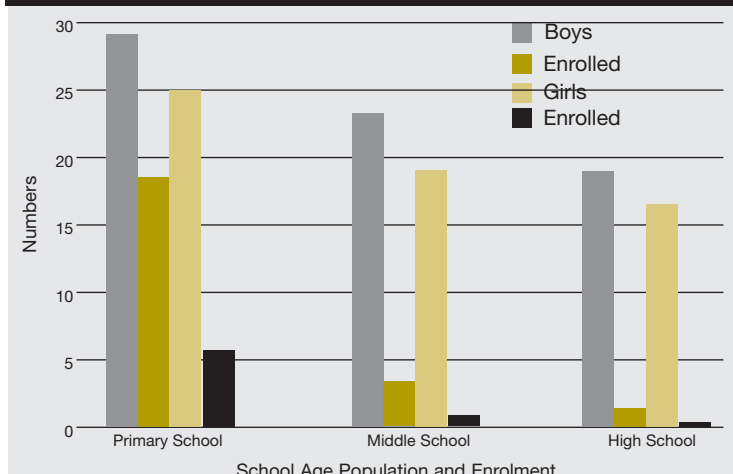
Source: GDEP (2004) Pages 37 and 38



Class room in a local school run by an NGO

Izdyar Setna/IUCN Pakistan

Figure 3: School Age Population by Gender and Enrolment in School



one intermediate college and one technical training centre for boys in the district. The total number of rural and urban localities in the district with more than 200 residents is 64. This indicates that a disproportionate number of educational institutions are located in larger localities.

The GDEP provides enrolment data for primary, middle and high schools, though the year of the data is not mentioned. As the document was prepared in 2004, it is assumed that the data is for the same year. Enrolment data is compared with projected population of different age groups in 2004. The statistics in Figure 3 present a gloomy picture underscoring a dismal rate of school enrolment and gender discrimination. In the 5 to 9 year age group 23 percent of girls and 64 percent of boys are enrolled in primary schools. Enrolment Ratios for middle and high schools of 15 percent for boys and 4 percent for girls and 7 percent for boys and 2 percent for girls, respectively, clearly point to a myopic, tradition-bound approach to education. The situation is exacerbated by lack of accessible educational facilities in the district.

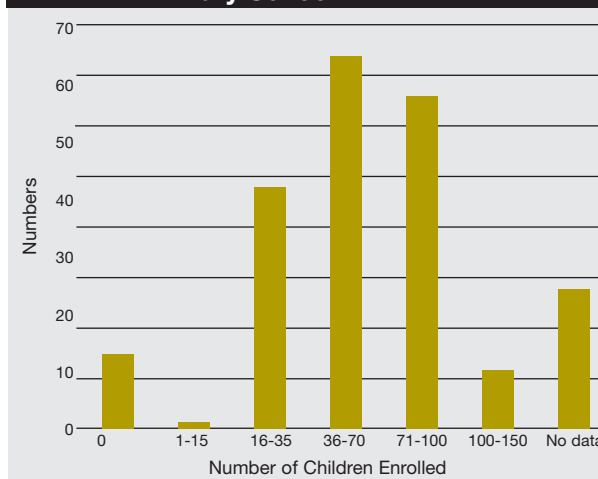
3.3.2 Non-functional Schools

According to the GDEP, only eight schools are without teachers and considered officially defunct in the district. About 13 schools have no enrolment at all and there are a number of schools that are neither defunct nor without a teacher but are for all practical purposes closed

with no enrolment. The Suntsar Middle School is not defunct, even though the school has no enrolment and is never opened for students according to local residents. Smati Primary School in Suntsar Sub-tehsil is similar.

As is evident from the levels of enrolment in primary schools, school utilization rates are quite low. Data is available for 189 of 213 government primary schools. But there is no data on enrolment for 11 percent of the schools and 6 percent have no enrolment at all. Enrolment in 20 percent of the primary schools is in range of 16 to 35 students and only 5 percent of the schools have more than 100 students. Figure 4 provides details of size of enrolment in schools.

Figure 4: Extent of Enrolment in Primary School



Source: GDEP

3.3.3 Teaching Staff Strength

Officially, the total strength of primary school teachers was 511 for 213 schools and only 5 percent of sanctioned positions were vacant. The student-teacher ratio is 38 boys per male primary school teacher and 22 girls per female primary school teacher. There is no data regarding the strength of teaching staff in the middle schools. In 14 secondary schools, the total strength of teachers is 374 and 18 percent of the posts are vacant. In three high schools for girls, 38 teachers are appointed and 47 percent of the positions lie vacant. But the most interesting fact is that of three

Table 5 : Teachers Positions Filled and Vacant in Gwadar District

Teachers	Sanctioned Post		Filled Posts		Vacant Post	
	Male	Female	Male	Female	Male	Female
Primary Schools	330	181	305	179	25	2
Secondary Schools	234	72	190	38	44	34

Source: GDEP

girls high schools, Ormara Girls High School had only one teacher.¹⁴

3.3.4 Religious Schools

There are 16 Islamic seminaries or madrasahs imparting religious education in residential schools. Some children in these schools are day scholars but a majority are resident scholars. Most boarders in these schools are orphans or belong to poor households. The seminaries are financed mainly by private charity though some also get limited support from government zakat funds. As funds are scarce, the children receive inadequate nutrition and other provisions.

The curriculum of these schools consists mainly of theological texts. Conventional school subjects are not taught. These schools have their own examination and certification system. The degree awarded by these schools is considered equivalent to a bachelor's degree by the government subject to accreditation by the Wafaqul Madaris.

3.3.7 Expenditure on School Buildings

Between 2002 and 2004, 31 million rupees were spent on construction of seven schools and repair of 52 school buildings in the district. All civil works were implemented by the Works and Services Department without any participation of the local community or elected representatives. The GDEP has identified 76 schools without buildings and a large number of school buildings that require repairs, reconstruction and provision of additional facilities. Heavy rains and floods in 2005 caused extensive damage to 50 schools in the district. More damage was caused in the 2007 cyclone and floods. Rehabilitation of school buildings in the district requires substantial funds that may not be available in the short-term.

The construction cost of a primary school in Gwadar is around 1.044 million rupees which is a lot in view of the meagre resource pool available to the district. Similarly, the cost of constructing a workshop at a high school is estimated to be

Table 6: Cost of Construction and Repair of Schools (2002 - 2004)

Source of Funds and Year	Number of Schemes	Total Cost
Education Sector Reforms (2002 - 2004)	15	10,789,000
Social Action Programme (2002)	11	4,583,000
GST Funds (2004)	10	8,817,000
Khushal Pakistan Programme (2002 - 2004)	12	7,197,111
Total	48	31,386,111

Source: District Government Gwadar

3.3.5 Higher Education

Gwadar town has only one college for boys, providing higher education up to the intermediate level. The higher secondary school at Pasni also provides education to the intermediate level. But these institutions are primarily meant for boys. Girls are only permitted to enrol in the evening shift.

3.3.6 Technical Education

There is one Technical Training Centre (TTC) for men at Gwadar under the Directorate of Manpower and Training of the provincial department of labour. The centre is mandated to provide training in 12 different vocations. But owing to shortage of teaching staff, training is imparted only in six vocations. The total enrolment in the centre is 60 students. A new polytechnic institute at Gwadar is planned under an Asian Development Bank-funded project.

1.344 million rupees. Four workshops at a total cost of 5.376 million rupees were established in four high schools in the district.

3.3.8 Strategic Interventions and Institutional Links

Education is central to human development. An educated individual has far better prospects of employment and income generation than one who is uneducated. The literacy rate in Gwadar is a mere 25.47 percent as against the national average of 43.92 percent. A dismal female literacy rate of 6.38 percent in the rural areas of the district indicates the extent of the neglect and marginalization of women. The urban-rural gap in the enrolment ratio is another critical issue that the district level education managers must address. Core issues include availability of teachers, their commitment to the profession and their students and the location of schools in relation to access and transport. A major effort on

14. GDEP, Page 38.

the part of the provincial and district governments is required to improve this critical sector by

considering the following short, medium and long term measures:

S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Compile reliable data on education and baseline indicators	Education	Planning
2	Update statistics of educational institutions to determine interventions required in medium and long term	Planning	Education
3	Review enrolment and retention trends with focus on female students	Education	Planning, Community Development
4	Involve local communities in proactive management of schools through parent-teacher associations and school management committees	Education	Community Development Union Administration
5	Articulate role and responsibilities of district government in management, operation and monitoring of school education	Provincial Government	
6	Appraise problems of non-functional and dysfunctional schools and suggest workable solutions	Planning	Education
7	Provide staff and facilities for diverse vocational training at Gwadar Technical Training Centre	Provincial Government	
Medium Term			
1	Determine annual targets and assign responsibility to specific functionaries	District Administration	Planning
2	Examine separation of management and teaching cadres and benefits of performance-based evaluation and promotion	Education Department	Law, S&GAD
3	Develop policy guidelines and review mechanisms by involving parents, elected representatives and technical experts	District Administration	Planning, Education
4	Establish parent-teacher associations in all schools to oversee progress and implementation of education policy	Education	Community Development, Union Administration
5	Encourage private sector to open institutions in rural areas	Education	Community Development
6	Track emerging development trends and introduce interventions to produce skilled manpower for future needs	District Administration	Directorate of Technical Education
7	Build capacity of education sector managers	Education	Human Resource Development
8	Focus on technical and vocational education for addressing un-employment and alleviating poverty	District Administration	Directorate of Technical Education
9	Provide sanctioned strength of teaching staff in schools	Education Department	
Long Term			
1	Provide intermediate and degree-level educational facilities for students on completion of secondary education	Provincial Government	
2	Control political interference in appointments, posting and transfers of teachers and staff by curbing politicization of education sector	Provincial Government	
3	Shift from top-down orientation to bottom-up approach by delegating maximum management responsibilities to educational institutions	District Administration	Education
4	Localize teacher appointments	Provincial Government	
5	Focus on teacher training and quality education by using locally available capacity building opportunities for greater impact with minimal input	Human Resource Development	Education
6	Enable teachers to improve qualifications, skills and capacity and provide facilities for this purpose Provincial Government through Education deptt:		
7	Focus on the needs of secondary schools by providing duly qualified teachers	Provincial Government through Education deptt:	
8	Prepare and enforce policy to integrate religious education into mainstream	Provincial Government through Education Department	



Sand filter bed for supplying drinking water from Ankra Kaur Dam reservoir to Gwadar Town and surrounding areas

3.4 Water

As ground water in Gwadar is saline except in small patches near non-perennial rivers, availability of clean drinking water is among the biggest challenges facing the district. Rain, non-perennial rivers and wells are the main source of drinking water in the district.

Large seasonal rivers in the area are Shadi Kaur in Pasni, Dasht River in Jiwani, Ankra Kaur in Gwadar and Basol in Ormara. These rivers have numerous minor tributaries. Most of these non-perennial rivers and their tributaries are important sources of drinking water through storage dams built by the government or ponds located near human settlements. There is only one spring in the district.

The two main water supply sources in Gwadar district are storage dams at Ankra Kaur and Shadi Kaur. Ankra Dam provides drinking water to most areas of Jiwani and Gwadar tehsils while Shadi Kaur Dam supplies water for drinking and irrigation to Pasni Tehsil.¹⁵ These dams were constructed by the provincial irrigation department while the water supply and distribution system is constructed and maintained by the PHED.

Ankra Dam is the main reservoir providing water throughout the year to a large number of localities in Gwadar and Jiwani. But this is no easy task as

the dam is located at a distance of 80 kilometres from Jiwani, 29 kilometres from Gwadar and much farther away from many other localities.

The water supply system comprises a huge network of pipelines stretching across the two tehsils over difficult terrain. The maintenance, repair and replacement of this network is expensive and requires constant effort on the part of the PHED.

The most pernicious problem of water supply is the siphoning of water from water supply pipelines through unauthorized and illegal connections. This is hazardous because of damage to pipelines and contamination of the whole system.

Three water treatment plants have been constructed at the Ankra Dam site. Each has a capacity to filter about 1.364 million litres of water per day¹⁶. But these plants are not optimally performing due to maintenance problems. As a result, water quality is not up to required standards. Old and damaged sections of pipelines also contribute to the substandard quality of water. Water supply pipelines to different localities were built in phases, each counted as a separate water supply scheme. There are a total of 53 such water supply schemes in the district, of which 17 operate on electricity. The remaining 36 are operated by diesel engines. Household tap water connections are provided in large localities. In smaller localities, community water tanks and stand posts are provided to serve the population.

The government has instituted a monthly water rate of 60 rupees per household with a tap water connection inside the house and 10 rupees per household using community water tanks or stand posts. Departmental estimates reveal that the water rate for domestic water connections is not paid at all throughout the district. There are a total of 4,710 household tap water connections in Gwadar and Jiwani tehsils from the Ankra Dam. Of these, 3,491 domestic water connections are in Gwadar, 502 in Jiwani, 432 in Peshukan, 167 in Sur Bandar and 118 in Gunz. There are 396 domestic water connections in Pasni. Water supply in areas of Ormara Tehsil is conveyed through pipelines from open surface wells where the department has installed pumps. Presently, the district has a total of 79 commercial water connections, provided to ice factories, hotels, barber shops and other commercial establishments.

According to DCR 1998, about 50 percent of households have access to piped water supply, of which 44 percent have water taps inside the houses and 6 percent use community tanks or

15. Shadi Kaur Dam was completed in 2004. It was washed away after the long spell of torrential rains in early 2005 and Government of Balochistan has started its reconstruction.

16. Gwadar Master Plan page ES - 5.

Table No 7: Expenditure on Water Supply Works in Gwadar (2002 - 2004)

Source of Funds	Number	Cost in Rupees
1 Social Action Programme (2002)	13	4,057,271
2 GST Proceeds (2004)	7	4,223,870
3 Khushal Pakistan Programme (2002 - 2003)	12	5,056,500
4 Khushal Pakistan Programme (2002)	13	3,219,664
Total	45	16,557,305

Source: District Government Gwadar

stand posts. About 10 percent of the households use well water, 23 percent use pond water and 15 percent use water from unspecified sources.

The PHED is partially devolved and water supply projects of up to 5 million rupees are implemented by the district government. At this level, the department has implemented a total of 45 projects for repair and extension of the water supply network in the district between 2002 and 2004 under different programmes as shown in Table No 7 below.

The government is considering several options to meet future water demands. The Gwadar Master Plan mentions the departmental proposal to acquire 45 cusecs of water from Mirani Dam for future use to Gwadar Town. The plan proposes to convey water by means of a pre-stressed reinforced concrete pressure 48-inch diameter pipeline over a distance of 154 kilometres. The PHED has proposed the construction of more water storage dams and a desalination plant of 200,000 gallons per day to meet the future needs of Gwadar. Even so, in all likelihood, Gwadar will have frequent potable water shortages for some years to come unless the issue is resolved through strategic intervention by the federal government.

The Devolution Plan and the emerging system of local government have led to a redistribution of roles and responsibilities. Water supply is included as a component of municipal services and considered as the responsibility of the municipal administration. The original plan provided for devolution of the PHED to respective tehsils. The arrangement envisaged in the LGO 2001 has yet to take root. Realistically, it is beyond the current resource and skill capacity of the local government to take on the responsibility of providing potable water to the people.

3.4.1 Strategic Interventions and Institutional Links

The Pakistan government has a sovereign commitment with the global community to reduce by half the proportion of people without sustainable access to safe drinking water by the year 2015. According to the 1998 census, only 50 percent of households in Gwadar enjoy access to piped water. Of these, 44 percent have water tap connections while the remaining 56 percent depend on community tanks. Wells supply water to 10 percent of the people, ponds service 23 percent and the remaining 17 percent have access to unspecified sources. As such, half the population of Gwadar has access to water of dubious quality.

Gwadar no doubt faces a difficult situation in the water sector. The district depends on rains and non-perennial rivers to cater to the needs of the people. The scattered settlements add to the difficulties. The complex supply system and constant need for repair and maintenance create further complications. In sum, water is scarce and its supply is expensive.

Meanwhile, unauthorized connections from supply lines have aggravated the situation. Payment of water rates as a concept is alien to the district and the enforcement agencies are unable to fulfill their responsibilities. The local government system has categorized water supply as a municipal service and made TMAs responsible. Keeping in view the enormity of the job and the lack of capacity of the newly created municipal entities, it is apprehended that the situation is going to deteriorate in the days ahead. In order to minimize chances of such a scenario, the following measures could be considered:

S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Assess magnitude of the water shortage by collecting and compiling data on water supply and developing indicators for access to safe drinking water	Public Health Engineering	TMAs, Union Administration
2	Examine possibility of introducing user charges and water rates by entrusting collection to union administration	Finance Department	PHED, TMA, Union Administration
3	Develop enforcement system to check illegal use, leakages and misuse	Public Health Engineering	TMA, Union Administration

S. No.	Strategic Intervention	Lead Department	Support Link
4	Advocate water conservation and sustainable use	Public Health Engineering	Community Development, TMAs
Medium Term			
1	Undertake detailed investigations to determine possibility of tapping groundwater	Public Health Engineering	Finance, Planning
2	Constitute district-level entity comprising elected representatives, local government and technical experts to steer development interventions in water supply sector	Provincial Government	
3	Improve quality of water for consumers by commissioning filtration plants and establishing water testing facilities	Provincial Government	
4	Continue with advocacy for water conservation and wise use	Public Health Engineering	Union Administration, TMA, Community Development
Long Term			
1	Construct more water storage dams to augment existing supplies to meet emerging needs with appropriate safeguards in case of heavy floods	Provincial Government	
2	Study economic feasibility of establishing desalination and distillation plants to cater to future needs	Federal Government	
3	Improve technical and management capacity of the PHED to manage water supply sector	Provincial Government	
4	Promote community participation in collection of user charges, operational costs and maintenance expenses	Public Health Engineering	Community Development, TMA, Union Administration

3.5 Poverty

Poverty does not mean only lack of income. The poor in Pakistan are also denied access to basic needs such as education, health, clean drinking water and proper sanitation.¹⁷ Balochistan is the poorest province of Pakistan where “social indicators of literacy, life expectancy, access to health facilities are amongst the lowest in the world.”¹⁸ The Balochistan Poverty Reduction Strategy Paper estimates that between 41 and 47 percent of the population lives below the official poverty line.

Balochistan is in a disadvantageous position owing to many factors but mainly because of its relatively small and widely scattered population across an inhospitable and difficult terrain. Inaccessibility is a major obstacle in building and maintaining infrastructure and as such impedes accountability and good governance.

As one of the most remote districts in the province, Gwadar must overcome major deficiencies in its physical and social infrastructure. Extreme poverty may not be a major issue in coastal areas. But those living in the hinterland face largely unreliable livelihood prospects. The lack of alternative means of income generation coupled with severely limited agriculture and livestock assets further increase the vulnerability of these people to economic shocks.

For instance, the long spell of drought followed by torrential rains in 2005 devastated villages and destroyed agricultural land that is difficult to cultivate without major investment. The cyclone and floods of mid-2007 have also caused loss of life and widespread destruction in Gwadar, Turbat and other neighbouring districts. There are no statistics on poverty in the hinterland but village after village with scanty cultivation indicate that barring a very small number of tube-well owners, the entire population is below the poverty line.

According to the SPDC's deprivation ranking, Gwadar is the 5th least deprived district among 22 in the province. This ranking is based on a composite index that takes into account economic, social and infrastructure conditions. The NHDR 2003 issued by the UNDP prepared the Human Development Index (HDI) for the districts of Pakistan. Gwadar with a score of 0.392 is ranked 78th of 91 districts in Pakistan. Figure 5 provides a comparison of human development indicators for the district that are lower than the province and national averages in all respects except for the immunization ratio and health index score.

In 1998, the real Gross Domestic Product or GDP per capita for Gwadar was 337 dollars, the second lowest among the 22 districts of Balochistan. Only Dera Bugti's district was worse. The computation of real GDP per capita is based

17. Government of Pakistan, Accelerating Economic Growth and Reducing Poverty: The Road Ahead (Poverty Reduction Strategy Paper), Poverty Reduction Strategy Paper Secretariat, Ministry of Finance, Islamabad, 2003
18. Balochistan PRSP page 1.

on cash value of crops and manufacturing value in the district. Agriculture and manufacturing are both negligible in Gwadar where fishing is the predominant economic activity and value of fish catch should be used for calculating district GDP. The real GDP per capita in Gwadar may be close to the provincial average or even higher if income from fisheries is taken into account.

3.5.1 Poverty Alleviation

Abject poverty is the lot of most people in the hinterland areas of the district. The population depends on flood irrigation for agriculture and rangeland for livestock. Labour in cutting and gathering fuel is a minor activity. The construction of Mirani Dam is expected to make irrigation water available from the Dasht River in Suntsar Sub-tehsil.

Rainwater harvesting from minor streams could also be used for promoting Sailaba irrigation in this area. The departments of Agriculture and On-farm Water Management could assist farmers in construction of embankments for rain water harvesting.

Another option that appears environmentally sound in view of preliminary observations and available data is the construction of tube wells in areas of Suntsar Sub-tehsil. The water table in this area is around 80 to 120 feet and some tube wells for irrigation and water supply have been

For its part, the Department of Agriculture Extension could provide extension services for production of high-value vegetables and perennial crops. But the department has not been effective in this regard. Similarly, marketing of fruits and vegetables to the Gwadar market could yield good profits for farmers but physical market access is virtually impossible at this crucial juncture.

Watershed management interventions are non-existent in the district. BRDMP has a substantial component for range management that could be used for construction of trenches, small bunds and plantation of bushes to improve rangeland productivity.

The current situation offers little hope of a major change in poverty levels in the near future. To control poverty successfully, an integrated long-term approach enabling people to avail opportunities emerging as a result of mega-projects in the district will be required.

3.5.2 Strategic Interventions and Institutional Links

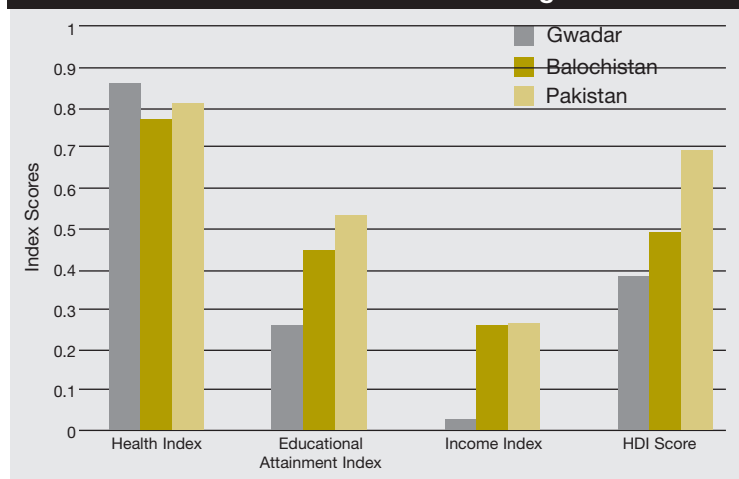
The people of Gwadar, especially those who live in the hinterland, face severe hardship and deprivation. Economic growth and macro-economic stability at the national level has had little or no effect on the situation in the district due primarily to the remoteness of the area.

Prior to the move to build the port, fisheries was the only sector providing employment to local population. Even today, fisheries sector remains the mainstay of Gwadar's economy.

In 2002, Balochistan carried out a participatory poverty and assessment (PPA) survey that came up with four major recommendations. These were increasing access and control over natural resources for people, protecting vulnerable segments of society, ending discrimination based on race, tribe, caste and gender and ensuring equal access to justice irrespective of social or economic status and gender.

The 2003 Balochistan PRSP endorsed these recommendations and identified major priority areas viz. economic development, water, governance, human development and safeguarding people from economic shocks. But the strategic interventions outlined in the PRSP can yield desired results only if an environment conducive to implementation is created and maintained at the micro level.

Figure 5: Development Indices for Gwadar in Comparison to Provincial and National Averages



Source: National Human Development Report

installed. Land distribution is skewed in Suntsar Village where all the land is owned by two families. But in the villages a vast majority of rural households own small parcels of land. In such villages, community tube wells could be developed by the local governments with funds accruing from General Sales Tax and allocations under the Khushhal Pakistan Programme.

With improved governance, investing in human capital and targeting vulnerable segments of society as core elements, the PRSP recommends employment generation, provision of social safety net, access to basic social services, efficiency in service delivery and engagement of the poor in policy formulation as critical areas in the fight against poverty. State institutions at the district level are under obligation to play their part in support of national and provincial efforts aimed at poverty alleviation. The following recommendations are made to help reduce poverty:

3.6 Health

Gwadar's primary and secondary healthcare facilities are inadequate and ineffective due to lack of trained healthcare personnel, medicines and necessary equipment. The unhygienic urban environment, growing pollution, poor sanitation and unsafe drinking water are major causes of ill-health. Remote settlements and lack of transportation facilities also contribute to poor healthcare. As a result, the people are exposed to malaria, gastro-intestinal disorders, acute

S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Ensure timely preparation of budgetary estimates and development plans by building capacity of human resources	Finance & Planning	TMA, Union Administration
2	Examine feasibility and utility of introducing user charges	Finance	Public Health Engineering, TMA, Union Administration
3	Evaluate possibility of multi-year plans at local level	Planning	Administration
4	Encourage investors by providing facilities and incentives	Provincial Government	
5	Obtain accurate statistics on prevalence of poverty with special emphasis on hinterland	Planning	
6	Provide micro-credit services for small-scale enterprises such as livestock breeding, handicrafts, chicken farming and aquaculture	Provincial Government	District Government
7	Provide loans for purchase of small single family fishing boats to fisherfolk	Provincial Government	Fisheries Department
8	Assist fisherfolk to establish cooperatives for the purpose of preserving and marketing catch	Provincial Government	Fisheries Deptt.
9	Designate specific offices as focal points for dissemination of best practices in fisheries, aquaculture, handicrafts production and other productive activities	Provincial Government	District Government
Medium Term			
1	Increase allocations for health, education and water supply sectors	Provincial Government	
2	Adopt multi-year planning for optimal impact of resource input	Planning	Administration
3	Establish institutional infrastructure to provide support services to investors	Provincial Government	
4	Develop fisheries sector by supporting fishing communities, upgrading their skills, know-how and management capacity	Provincial Government Fisheries Department	
5	Assist poor communities access support windows	Community Development	Finance, planning, Union Administration
6	Mobilize rural communities for self-help activities and transformation into formal CBOs	Community Development	Planning, Union Administration
Long Term			
1	Enforce user charges and tax culture	Tehsil Municipal Administration	Public Health Engineering, Union Administration
2	Strengthen local institutions	Provincial Government	
3	Increase investment in social and municipal services	Provincial Government	
4	Encourage public-private partnerships and community involvement in managing social sector facilities	Planning	Community Development, Health, Education, TMAs



Qualified private practitioners are rare in Gwadar District

respiratory infections and vaccine-preventable diseases.²⁰

The unhygienic and polluted urban environment is currently the greatest health hazard in the district. Open drains, cesspits on streets and garbage dumps all around provide fertile breeding grounds for disease, exposing people to the risk of contracting infections. Grey areas with regard to the regulatory regime and corresponding lines of responsibilities in the local government have added to the problem. Though statistics of deaths caused by preventable diseases are not available, preventive health measures appear to be minimal and ineffective.

The situation could be improved substantially with existing staff and resources, provided the municipal administration and the district government are committed to confronting the problem. The primary health care infrastructure of the district comprises 11 civil dispensaries, 18 Basic Health Units and 3 Rural Health Centres. The District Headquarters Hospital at Gwadar makes up the secondary healthcare outlet.

Most of the primary healthcare facilities in rural areas are without doctors and medical staff. Many of the sanctioned staff positions in the district remain vacant. Out of total posts for 29 medical officers, nine are vacant. The two posts of deputy district health officers are also unoccupied and there is no medical officer at the Rural Health Centre at Ormara.

District Headquarters Hospital Gwadar lacks appropriate facilities to provide secondary healthcare. Posts of specialists in obstetrics and gynaecology, medicine, ophthalmology, pathology, paediatrics and anaesthesia are all vacant. Evidently, nobody is ready to serve in the prevailing conditions, especially as there are no adequate residential facilities. The 34-bed District Headquarters Hospital is without surgeons and a functioning operation theatre.

Each rural health centre has three beds but without appropriate diagnostic facilities and specialized medical services they are of little or no use to the patients who are either left at the mercy of private practitioners or referred to the District Headquarters Hospital. Also, statistics on hospital-bed occupancy rates and outdoor patients are mostly unreliable.²¹

The district health department has three ambulances deployed at Gwadar and Ormara. But none are available at Jiwani and Pasni towns or any of the rural health centres.

3.6.1 Women Exclusive Services

Though women are not discriminated against in accessing and securing medical care, the cultural constraints prevent many from availing required diagnosis and treatment by male doctors and paramedics. Obstetrics and gynaecology are areas where women are unable to see male doctors. Non-availability of female doctors,

20. Gwadar Master Plan, N.D. Page 7-1

21. PD&D Gwadar District Profile Chapter 7.2

nurses and support staff greatly increases health risks for women folk in the area. With only two female doctors in the district, the health services corps is unable to meet the health needs of even half of the district's population. This disparity in the healthcare of men and women further widens gender disparities in the district.

The vacuum in the public health sector has been filled by private practitioners in urban areas and large villages. The arena is thrown open to doctors, homeopaths, medical technicians, traditional hakeems and quacks. In many cases, unqualified practitioners prescribe medicines such

as antibiotics and steroids and administer injections to uninformed patients as quick fixes without proper examination and diagnosis.

3.6.2 Strategic Interventions and Institutional Links

Health is universally accepted as a key indicator of development. Health indicators and investment in related facilities reflect the value that a society attaches to its human resources. Gwadar is at a disadvantage on this account as it is remote and marginalized. Settlements are scattered and transportation difficult. Harsh living conditions,

S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Compile data and vital statistics on healthcare facilities	Health	Planning
2	Examine causes of non-functional health facilities and develop action plans accordingly	Planning	Health-Finance
3	Provide better primary healthcare by improving facilities	Health	Finance, District Administration
4	Examine possibility of giving incentives for postings in remote areas	Finance	Health
5	Deploy mobile health teams in remote areas	Health	Finance, Planning
Medium Term			
1	Improve primary healthcare by increasing allocations to better performing health outlets	Health	Finance
2	Provide opportunities for increased public-private partnerships	Health	Finance, Planning, Union Administration
3	Make sustainability of public services a major goal in master planning	Planning	Health, Finance
4	Prioritize need-based health facilities in consultation with local communities	Planning	Health, Union Administration
5	Enforce rotational postings of health staff for hardship assignments	Health	Finance
6	Activate deployment of mobile teams in remote areas	Health	Finance
7	Examine working of private sector and enforce regulatory regime to curb malpractice, quackery and sale of spurious or sub-standard drugs	Health	Planning, Community Development, Union Administration
8	Emphasize capacity building of health technicians and provide incentives improved qualifications	Health	Finance
9	Improve situation in District Headquarters hospitals by providing sanctioned strength of doctors, specialists, equipment and facilities	Provincial Government	
10	Examine and fulfill requirements of women medical officers and female staff in hospitals and BHUs	Health	Finance
Long Term			
1	Study possibility of mobile medical teams and periodical medical camps in remote areas	Health	Finance, Planning
2	Involve rural communities in management of BHUs and civil dispensaries	Health	Community Development, Union Administration
3	Implement performance-based budgeting for health facilities	Finance	Health
4	Provide residential accommodation to doctors and staff of health facilities	Provincial Government	
5	Promote healthy living through advocacy campaigns	Community Development	Health, Public Health, TMA, Union Administration
6	Provide women doctors, nurses and female support staff and ensure retention in remote areas	Provincial Government	

substandard drinking water, inadequate sanitation and non-availability of basic healthcare facilities and personnel affect public health. In order to improve healthcare, the steps shown on page 26 table may be adopted.

3.7 Municipal Services

According to DCR 1998, 54 percent of the population of Gwadar is residing in urban localities. The district has a municipal set up in every tehsil that is mandated to provide municipal services. BLGO 2001 describes municipal services in these terms: "Municipal Services include, but are not limited to intra-city or intra or inter town or tehsil network of water supply, sanitation, conservancy, removal and disposal of refuse, garbage, sewer or storm water, solid or liquid waste, drainage, public toilets, expressways, bridges, flyovers, public roads, streets, foot paths, traffic signals, pavements and lighting thereof, public parks, gardens, arboriculture, landscaping, bill boards, hoardings, fire fighting, land use control, zoning, master planning, classification declassification or reclassification of commercial or residential areas, markets, housing, urban or rural infrastructure, environment and construction, maintenance or development thereof and enforcement of any law or rule relating thereto."

The municipal administration under the new system is obliged to "provide, manage, operate, maintain and improve municipal infrastructure and services." Elaborating this function, the law prescribes these functions to include:

- Water supply and control and development of water sources other than systems maintained by the union and village councils
- Sewerage, sewage and sewage treatment and disposal
- Storm water drainage
- Sanitation and solid waste collection and disposal of solid, liquid, industrial and hospital waste
- Roads and streets, other than roads falling under the jurisdiction of, and maintained by, the district government or government and streets maintained by the union administration or village council
- Traffic planning, engineering and management, including traffic signalling systems, road signs, street markings, parking places, transport stations, stops, stands and terminals
- Street lighting
- Fire fighting
- Parks, playgrounds, open spaces and arboriculture
- Slaughter houses

With this legal framework, the current situation of municipal infrastructure and services has the following salient features.

3.7.1 Water Supply

Under the new system, the municipal administration is responsible for managing water supply as a municipal service. But the capacity and resources at the disposal of municipal authorities clearly makes it impossible to cope with the situation. The critical water sector will require major initiatives of the federal, provincial and district government to provide clean, potable water to the people in the district. Gwadar Town and Gwadar City are already attracting attention at the international, national and provincial levels. With proper planning and management this focus could be translated into a smooth and swift uplift of the city, simultaneously catering to the corresponding needs of other less developed parts of the district.

Water, specifically drinking water, has been the greatest problem for Gwadar as groundwater is saline in most areas. Rain and flood water collected in large ponds and wells based on seepage from these ponds continue to be the main sources of drinking water in the district. Potable water supply increased in Gwadar and Jiwani tehsils during the past decade with the construction of the Saji and Ankra dams. Ankra Kaur Dam is now the only source of water for large areas in these two tehsils. Shadi Kaur and Basol rivers are sources of water for Pasni and Ormara tehsils.

The upcoming development initiatives and expansion of trade, commerce and industry will inevitably increase the population of Gwadar and the demand for water. For all practical purposes, the sector cannot be left to the municipal administration in view of the huge financial outlay that is required and the complex issues of supply and demand.

3.7.2 Sewerage System

The district lacks a sewerage system except for a few drains in the main towns. These drains collect sewerage but have no disposal system and essentially function as pits. In most houses, sewage collection pits or wells are constructed for disposal of household wastewater. These existing methods of sewage disposal not only pose a health hazard but also result in environmental degradation.

Gwadar, the headquarters town of the district, is developing into an urban settlement with a steadily growing population. A proper system of waste and sewage disposal and treatment is a basic and essential requirement for safeguarding the environment of Pakistan's third seaport. Any

delay in the construction of waste treatment plants will prolong the present sewage disposal in the sea, destroying marine life and causing serious damage to an ecosystem that is a primary source of livelihood for a bulk of the population.

As is the case with water supply, the municipal administration lacks the capacity, resources and skills to tackle the gigantic task of waste disposal. The location of the treatment plant, utilization of treated water, short and long-term requirements and lessons from national and international practices are some of the basic questions that need to be decided fairly quickly to establish a safe and long-lasting system to meet future needs.

As Gwadar is the focus of much development activity, it is likely that the city will have an appropriate sewerage system in due course. The major challenge for the municipal and public health managers is emerging in the three other sub-divisional headquarters. Pasni, Jiwani and Ormara with approximate populations of 30,000, 15,000 and 12,000 respectively produce considerable waste that could pose a formidable challenge to health and the natural environment owing to the lack of capacity at the local level.

3.7.3 Storm water Drainage

Gwadar and other towns lack arrangements for the swift and safe drainage of storm water. Owing to scant annual rainfall none of the TMAs or line departments has considered storm water drainage as a priority. Every rainfall causes flooding on the streets of Gwadar Town. Solid wastes and water

ponds on streets create an obnoxious smell besides posing a serious health hazard.

Natural drainage does not take place in Gwadar Town owing to its location in a depression. The construction of a road along the west bay and erosion control works on the east bay have created further obstructions. No Environment Impact Assessment studies were conducted for these projects which contribute to storm water ponds in the town. With construction gaining pace, the situation may become worse owing to the shrinking of open spaces.

3.7.4 Sanitation and Solid Waste Management

DCR 1998 reported that 53 percent of households in Gwadar had proper latrines. Since then, the percentage is on the rise. Many agencies, including UNICEF, have worked to provide incentives for latrine construction. In the absence of an integrated sewerage system, a majority of households have constructed indoor soaking pits. Some houses also have septic tanks.

But generally, sanitation and hygiene are lacking in all the four sub-divisional headquarters. Solid waste management is inefficient, sanitary staff are oblivious of their responsibilities and garbage heaps are piling up on streets with no solution in sight.

In the existing system of local government, the TMA is responsible for sanitation and solid waste management for the entire tehsil unlike earlier municipalities that only looked after urban areas.



Poor system of garbage collection: The city sewerage is disposed off directly to sea

Sanitation services are provided to some sections in urban areas while remote and rural areas and small localities are not covered at all. Management capacities, manpower and financial resources of the local government are by no means commensurate to the task of solid waste management. The local government must, therefore, objectively assess the magnitude of the problem and the resources needed for improvement as increasing industrial and commercial activity will definitely add to the volume of work.

3.7.5 Fire Fighting

None of the TMAs are equipped with fire-fighting facilities as the situation up to now did not warrant investment in this sector. But with urbanization gaining pace, the municipal administration needs to focus on this component of municipal services.

3.7.6 Strategic Interventions and Institutional Links

Organized municipal services are non-existent in Gwadar despite the fact that more than half the

total population is apparently residing in urban settlements. The law has made TMAs responsible for the provision, operations, maintenance and improvement of municipal services. These services range from water supply, traffic planning to the enforcement of municipal regulations. This is an enormously large range of responsibilities for the local government, particularly the municipal administration. Keeping in view the resources, skills and capacity of the municipal authorities in Gwadar, it appears far-fetched to expect them to perform these functions effectively.

Solid waste disposal is a major problem in Gwadar owing to the severely limited capacity of the municipal infrastructure. The rapid development and increasing population of Gwadar is bound to generate more waste in the future.

The following interventions would be required to sustain and improve basic municipal services including potable water supply, sewerage and waste disposal:

S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Maintain and repair existing storage dams and supply lines to ensure sufficient supply of potable water	Irrigation Department	Public Health Engineering
2	Develop local sources of potable water to minimize expenditure on expensive supply lines from distant storage dams	Tehsil Municipal Administration	PHED, TMAs
3	Initiate advocacy campaigns for conservation and sustainable management of water resources	Tehsil Municipal Administration	Community Development Department
4	Compile directory of water supply schemes with details of connections, quantity supplied, shortfall and water rate charges	Public Health Engineering	Planning, Irrigation TMAs
Medium Term			
1	Assess backlog in sewerage and waste disposal	Tehsil Municipal Administration	Planning, Union Administration
2	Establish partnerships with local communities to find sound solutions to lack of sewerage facilities in major towns	Tehsil Municipal Administration	Public Health Engineering deptt., Community Development Union Administration
3	Arrange funds for sewerage system infrastructure development, technical assistance and advocacy	Planning	Finance, Community Development
4	Enforce municipal regulations in major towns, emphasizing on sewerage and solid waste disposal	Tehsil Municipal Administration	Public Health Engineering
5	Acquire fire-fighting equipment and support capacity building of staff	Tehsil Municipal Administration	Finance, Planning
Long Term			
1	Construct storm water drains and install treatment plants for waste water	Tehsil Municipal Administration	Planning, Finance Public Health Engineering
2	Construct sewerage systems for Ormara, Jiwani and Pasni	Tehsil Municipal Administration	Public Health Engineering

4 THE VISION - GREEN SECTORS

4.1 Agriculture

Agriculture is a marginal sector in Gwadar's economy owing to lack of water for irrigation and prevalence of barren soils. Gwadar has comparatively small patches of soils suitable for farming that are restricted to Nigore, Dasht, Kulanch, Kallag and Nalant. Crop productivity is dependent on flood irrigation. The district can make use of only 3,564 hectares for agricultural activity. Moong and millet are the major crops. Table 8 present agriculture statistics of the district:

Table 8: Cropped Area in Hectares in Gwadar District in 2001 - 2002

Crops	Irrigated Area	Non-irrigated Area	Total
Vegetables	52	0	52
Fodder	6	32	38
Millet	0	370	370
Moong	0	690	690
Fruits	2,803	0	2,803
Melons	5	0	5
Total	2,866	1,092	3,958

Source: Agriculture Statistics of Balochistan 2001- 2002

Statistics for the agricultural (year 2001 - 2002) gives the number of tractors in the district as 50 with no harvesters or threshers. Some small-scale irrigation is carried out through tube wells in Kallag, Kulanch and Nalant areas. Chico grown in small orchards is consumed locally.



Table 9: Distribution of Landholdings in District Gwadar

Area in Hectares	Number of Farms	Percentage	Farm Area	Percentage
Up to 2	411	16%	447	1%
2 - 5	942	37%	3,064	10%
5 - 10	554	22%	3,913	13%
Above 10	615	24%	23,093	76%
Total	2,522	100	30,517	100

Source: Agriculture Census of Balochistan 2000

According to the Census of Agriculture 2000, total farm area of the district was 30,517 hectares, with the total number of landowners being 2,522. Land distribution is skewed in the district as 16 percent of landholdings are smaller than two hectares and account for only 1 percent of farm area. Small farms in the range of 2 to 5 hectares comprise 37 percent of all farms and account for 10 percent of the total area. Large farms of above 10 hectares make up 24 percent of the total farms and account for 76 percent of total farm area. In Suntsar Village, all the land was owned by two families, as was the case in some other areas. The only exception was in the Samati area of Suntsar Sub-tehsil where landownership was widespread among a large number of households.

Land settlement in the district is still in progress. A vast area of land is still un-surveyed and unsettled.

poor soil conditions. Of the total geographical area of 1.5 million hectares and a reported area of 248,851 hectares, 35,842 hectares is culturable waste. Some 10 percent of this area is irrigated and devoted mainly to fruit farming. Un-irrigated cropped area in the district accounts for 3 percent of the culturable waste.

Mechanized farming is severely limited in scope in the district. Agricultural produce is consumed locally as transport is difficult and costly owing to its remote location. Agriculture extension services are virtually non-existent. As such, this sector would require an extraordinary effort to enhance cropped area, improve yields and introduce crop varieties suitable to the environment. The following steps could help the farming sector move forward:

S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Validate statistics of available and cropped area through focused survey	Agriculture Department	Bureau of statistics planning
2	Initiate union council-level consultations for improving efficiency and addressing problems of agriculture sector	Agriculture Department	Community Development Union Administration
Medium Term			
1	Determine efficacy of extension services and capacity building initiatives to upgrade knowledge and farming practices	Agriculture Department	
2	Organize farming communities in cooperatives to access funding for agriculture development, addressing water shortages and adapting water harvesting techniques	Community Development	Irrigation, Agriculture Union Administration
Long Term			
1	Increase cropped area and promote cultivation of fruit and vegetables	Agriculture Department	
2	Examine possibility of introducing appropriate land reforms	Board of Revenue	
3	Prepare district-specific agricultural policy	Provincial Government	

Also, the settlement department has yet to transfer land records to the district revenue office.

4.1.1 Strategic Interventions and Institutional Links

Agriculture is a marginal sector in Gwadar's economy owing to lack of irrigation water and

4.2 Livestock and Pastures

Farming and livestock rearing often go hand in hand and depend on each other. Gwadar's livestock data is not reliable as different sources report varying statistics. Livestock population of the district as reported in the Balochistan Agriculture Census 2000 presents in the Table-10.

Table 10: Livestock Population of Gwadar District

Livestock	Population
Cattle	2,029
Small Ruminants	66,210
Pack Animals	3,352
Total	71,591

Source: Balochistan Agriculture Census 2000

Livestock rearing is predominant in the hinterland agricultural areas. But the people living in the coastal belt, preoccupied as they are with fishing, have little or nothing to do with this sector. The majority of households in the hinterland keep goats being easily manageable as they forage for

rearing. The number of livestock was apparently far greater than what could be sustained by 15,545 hectares of reported rangeland. Consequently, between 1986 and 1996 the number of livestock declined from 166,631 to 33,963.²² Among the factors responsible for this decline is reduced rainfall which has possibly curtailed the carrying capacity of the rangelands.

The health of the animals has also suffered on account of lack of proper veterinary care. In fact, veterinary services hardly exist in the district.

To redress this situation, the federal, provincial and district governments could take the following steps to promote the livestock sector on which the economically deprived people in the hinterland depend for their subsistence:

S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Strengthen veterinary services and coverage to hinterland	Provincial Government Livestock Department	National Agriculture Research Centre (NARC)
2	Survey rangelands to determine accurate total area and condition	Provincial Government Forest Department	National Agriculture Research Centre (NARC)
3	Address animal husbandry issues, including feed, fodder and water shortages and animal health	Provincial Government Livestock Department	Federal Government Ministry of Agriculture Livestock Division
4	Quantify contribution of women in livestock sector and facilitate entitlements for support through grants and credit	Women Development Department	Agriculture, Livestock, Planning
Medium Term			
1	Invite private sector investment in breed improvement and livestock extension services	Department of Livestock	Community Development
2	Improve and expand veterinary services and develop indicators to monitor performance	Livestock Department	District Administration
Long Term			
1	Maintain efforts to improve animal breeds and health	Department of Livestock	
2	Provide credit to rural women engaged in livestock rearing	Department of Livestock	

their own fodder through grazing. Cattle, on the other hand, are rare owing to the shortage of fodder. The donkey is the most common pack animal in rural as well as urban areas. A small number of families keep camels for transportation of goods. With total rangeland being 14,510 hectares, the area under fodder crops was reported to be only 38 hectares.

4.2.1 Strategic Interventions and Institutional Links

While the population in the coastal belt is engaged in fishing and fisheries, the people in the hinterland earn their livelihood through livestock

4.3 Biodiversity: Species, Protected Areas and Wetlands

“Conservation of biodiversity is crucial to the sustainability of sectors as diverse as energy, agriculture, forestry, fisheries, wildlife, industry, health, tourism, commerce, irrigation and power,”²³ reads the Biodiversity Action Plan for Pakistan. The Gwadar coast is a rich, productive and unspoiled area with many species of fish and wildlife, including turtles and migratory birds. About 800 species of marine fish have been recorded in Pakistan's coastal waters though

22. A Situation Analysis Study (SAS) District Gwadar Balochistan (IUCN, Pakistan, 2005 unpublished) p. 52.

23. Biodiversity Action Plan for Pakistan.



Livestock finding a place to rest among garbage along coastline near Gwadar Town

there is no data on their population and distributional range. Some species of shrimp and prawn are under enormous pressure because of escalating demand.

Balochistan has some of the world's finest wetlands. Gwadar hosts three of them that have also been designated as Wetlands of International Importance under the Ramsar Convention.²⁴ The sites comprise the Jiwani coast mangrove forest extending along Gwadar Bay on the Arabian Sea, the uninhabited island of Astola and the Ormara Turtle Beaches that are the habitat of the endangered Olive Ridley and Green turtles.

As common natural heritage, these hotspots merit conservation by locals as well as the federal and provincial governments. They deserve the financial and technical support of global organizations focussing on wetlands, environment and endangered species.

Systematic information on wildlife habitats and biodiversity in Gwadar district is limited.²⁵ The district forest department has little or no information on the status of wildlife or hunting in the district. In the past, the highlands of Gwadar were abundant with Sindh ibex and mountain sheep. Today, the Ibex has become rare and the mountain sheep is extinct.

It is not known whether loss of habitat, hunting or a combination of the two led the current status of

the ungulates. But it is important for the local and provincial government to investigate the cause and formulate plans for the rehabilitation and conservation of native wildlife species.

Marine biodiversity in Gwadar is threatened by bottom trawling in shallow waters that causes loss of species and habitat. Disposal of sewerage from the ever-expanding Gwadar City directly into the sea is also causing serious pollution problems resulting in marine biodiversity loss.

Located along the Gwadar Bay around the delta of the Dasht River is a significant area of mangrove forests extending westward to the Iranian border and contiguous with Iran's Gwadar Bay and the Hure Bahu Ramsar site. The total area of the mangroves stands is 4,600 hectares. As for the beaches, they provide nesting grounds for the endangered Olive Ridley and Green turtles. The area has been designated as a Ramsar site.

This sandy Ormara Turtle Beach spanning 2,400 hectares extends about 10 kilometres along the shores of the Arabian Sea. The site supports a considerable number of marine turtles. The vegetation on the site comprises salt-tolerant and arid area plants that grow in harsh, freshwater-scarce conditions. Migratory water birds visit the site but not in significant numbers.

24. BCS p. 77

25. A Situation Analysis Study (SAS) of District Gwadar, IUCN, 2005 (unpublished) p. 54.

4.3.1 Mangrove Forests

There are three areas of mangrove forests along the coastline: Miani Hor, Kalamat Hor and Gwatar Bay, of which the last two are in Gwadar District. The mangrove forest at Kalamat Hor extends over 2,160 hectares. At Gwatar Bay, the forest covers 2,080 hectares. The mangrove forests in the district are not exploited for fodder or fuel wood by local communities as they are protected. Mangroves serve as nurseries for fish, shrimps, crabs and other marine life. Shrimps also use them as their breeding grounds. A large proportion of coastal fish and shrimps pass at least a portion of their lives in the mangroves. They depend on the food chain for their sustenance and are protected by these shrubs during the fragile early period of their lives. The water surrounding them is rich in fish, shellfish and other sea organisms. In sum, the mangroves are a sanctuary for valuable marine resources.

The most visible threat to mangroves at Gwatar Bay is from the construction of the Mirani Dam that will affect the supply of freshwater to the Dasht River estuary. Mangroves survive and regenerate with the supply of fresh water into the sea. Curtailing fresh water supply at Gwatar Bay may affect the ecosystem that provides breeding grounds for many varieties of invertebrate fauna and large number of larval and juvenile fish and shrimps.

4.3.2 Strategic Interventions and Institutional Links

Gwadar and its coast is a rich, productive and largely unspoiled area with many species of fish and wildlife, including turtles and migratory birds. The development initiatives that are underway have already caused damage to the marine ecosystem by the direct discharge of effluents into the sea and interference with the flow of seasonal rivers and streams that sustain mangrove stands. The restoration and maintenance of balance should feature as a priority in all development planning and infrastructure expansion.

The agricultural statistics of Balochistan for -2005-06 indicate that Gwadar has 16,527 hectares of land under forests, which is merely 1.3 percent of the geographical area. But this figure is not supported by the document titled The Development Statistics of Balochistan (-2002-03) according to which the area under scrub forest is 13,945. In any event, forestry is accorded a very low priority by the provincial and district governments. Coordination between the forest department in Gwadar and organizations active in the field of environmental protection is reported to be minimal.²⁶ With the devolution of functions to the district government, it may be possible to accord necessary priority to this important sector.

One of the biggest problems is that the shortage of fuel in the district obliges over 85 percent of



Izdyar Setna/IUCN Pakistan

Mangrove forest near Jiwani Town in the extreme west of Gwadar District

²⁶ A Situation and Analysis Study (SAS) District Gwadar Balochistan (IUCN, Pakistan 2005, unpublished) pp. 51-52.

the population of the district to rely on fuel wood for cooking. Felling of trees and bushes is inevitable under the circumstances which is rapidly degrading the quality of the land. Unless the population is provided with an alternate source of fuel, such as natural gas, it is unrealistic to expect an end to indiscriminate logging.

The Balochistan coastline reportedly has 3 percent of Pakistan's mangrove forests that are a vital link in the life cycle of many marine species of fish that find shelter in them in the early stages of their growth. The mangroves are under pressure on two fronts: on the one hand, the

people living around them are constantly encroaching on the forest area by felling trees for fuel and letting their animals graze in the forest.

An even more serious threat comes from the damming of certain rivers, the water of which is a lifeline for the mangroves. It is apprehended that once the dams are in place, sufficient freshwater will not be released. This could have a catastrophic effect on certain species of fish and other wildlife, which in turn could cause heavy economic losses to fishing communities in the district. Several steps can be taken to avoid this situation:

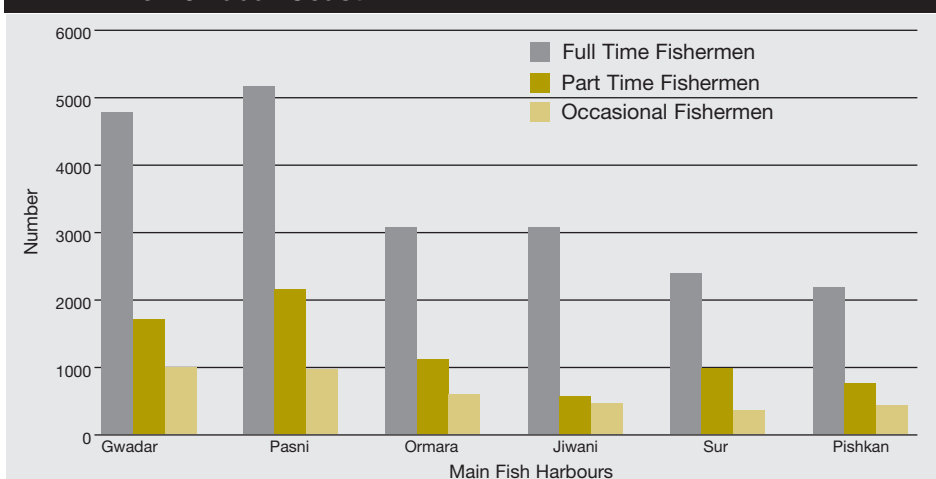
S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Review processes adopted to address threats to biodiversity and formulate appropriate short- and long-term strategies to roll back environmental degradation	Environment Department	Fisheries, Wildlife, Balochistan, Coastal Areas Development Authority
2	Conduct comprehensive survey of wetlands, forests, including mangroves and protected areas to assess scale of required damage control input	Environment Department	Fisheries, Wildlife, Balochistan, Coastal Areas Development Authority
3	Review statutory and regulatory frameworks for incorporating environmental imperatives, including over-fishing and consequent marine wildlife stocks	Law Department	Environment, Fisheries, Wildlife
4	Highlight importance of EIAs for development schemes and enforce legal requirements	Environment Department	Law Department
5	Survey wetlands, protected areas and mangrove forests to assess level of course corrections	Environment Department	Fisheries, Forest, Wildlife
6	Pursue possibility of donor support to conserve biodiversity through concrete proposals	Environment Department	Planning, Finance
7	Allocate sufficient financial and human resources for conserving forests and wildlife	Provincial Government Planning and Finance	Community development
Medium Term			
1	Compile directory of wildlife species and prepare district biodiversity master plan	Environment Department	Fisheries, Forests, Wild life
2	Define role and responsibilities of local government in biodiversity conservation	Law Department	Environment, Fisheries, Wildlife, Forests
3	Create awareness about importance of biodiversity to human well-being	Environment Department	Community development
4	Commission studies to quantify real economic returns such as current employment, income generation and eco-tourism potential accruing from sustainable management of fisheries	Environment Department	Community development
5	Provide population with alternate source of fuel for cooking, such as natural gas, to relieve pressure on forests	Federal Government	
Long Term			
1	Partner with civil society and NGOs for environmental conservation	Environment Department	Community Development Local Governments
2	Extend protected areas and demarcate new areas as wildlife habitats	Wildlife Department	Board of Revenue, Forests, Environment

5 THE VISION - MAKING THE BEST OF OPPORTUNITIES

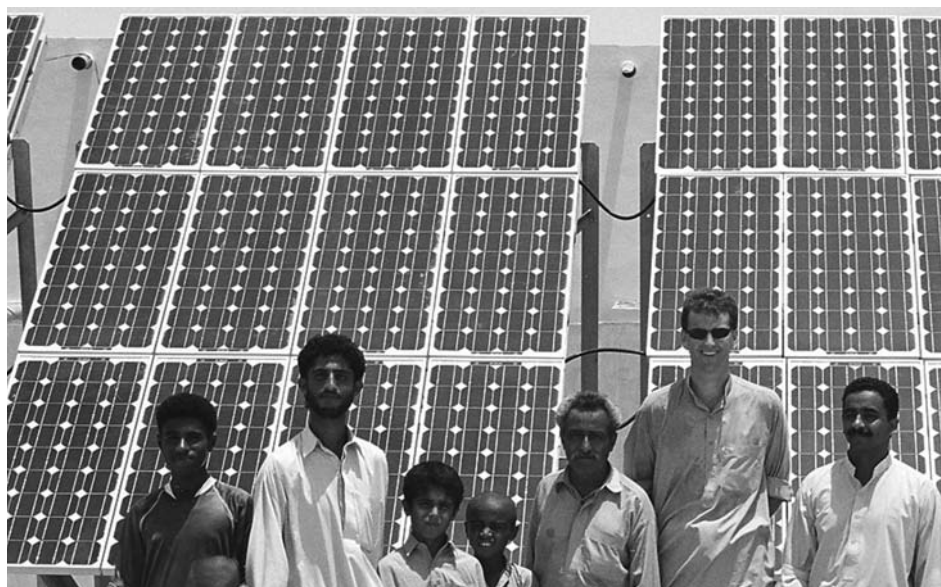
5.1 Fisheries and related Infrastructure

Fishing remains the predominant means of livelihood in Gwadar. In fact, some 70 percent of the district's total labour force is employed in the fisheries sector. In terms of statistics, there were 30,660 fishermen in the district in 2002. More than 8,000 fishermen were based in Pasni. Fulltime professionals made up 66 percent of the total, 23 percent were part-timers and the remaining 11 percent were occasional workers in the sector. In 2002, the total catch on the Gwadar coast was 105,609 tonnes, valued at an estimated 3,408 million rupees.

Figure 6: Number of Full-time, Part-time and Occasional Fishermen on Gwadar Coast



Source: Fisheries Department Gwadar



An unspecified amount of the catch is usually sold by larger fishing crafts to fish trawlers in the open sea. The volume of the catch varies widely in different months of the year. In 2002, the catch was above 10,000 tonnes per month from October to February, with the highest numbers in December and January when it was above 20,000 tonnes. In other months, the fish catch stood over 5,000 tonnes, except in May when it was 4,906 tonnes.

one tonne made up 9 percent of the total and a majority of these were based in the Pasni area. About half the fishing crafts are registered at Pasni and Gwadar. Figure 8 indicates the distribution of fishing crafts by size.

Smaller fishing boats known locally as yakdar or horri comprise about 64 percent of the total fishing craft. These boats operate in shallow waters closer to the coast; their fishing

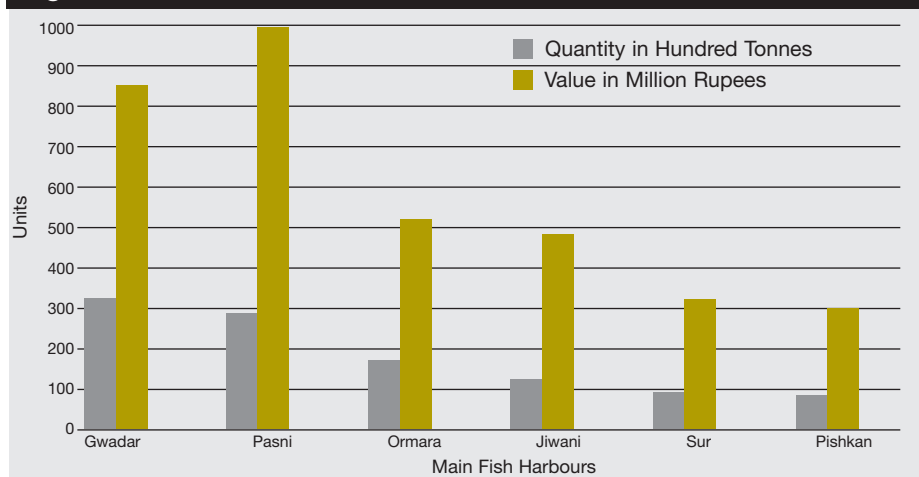
expeditions lasting from one to several days. Children, often family members of the older crew, learn their craft from an early age.

The large fishing vessels known as launches or trawlers are at sea for longer periods. They operate in the deep sea, usually out of sight of land. The crew of the vessel comprises a captain or nakhuda, fishermen or classy and one cook.

The number of the crew depends on the size of the vessel. The large fishing boats engaged in fishing in the Extended Economic Zone and Continental Shelf usually employ more than two dozen fishermen.²⁷

Professionally, fishing has well established business and trade norms. Operating costs including fuel, food, ice and other supplies are provided by the owner or managing agent of the craft and accounted for separately. Once the expedition concludes, the profits are distributed among the owner, manager and the crew in predetermined proportions. The share of the

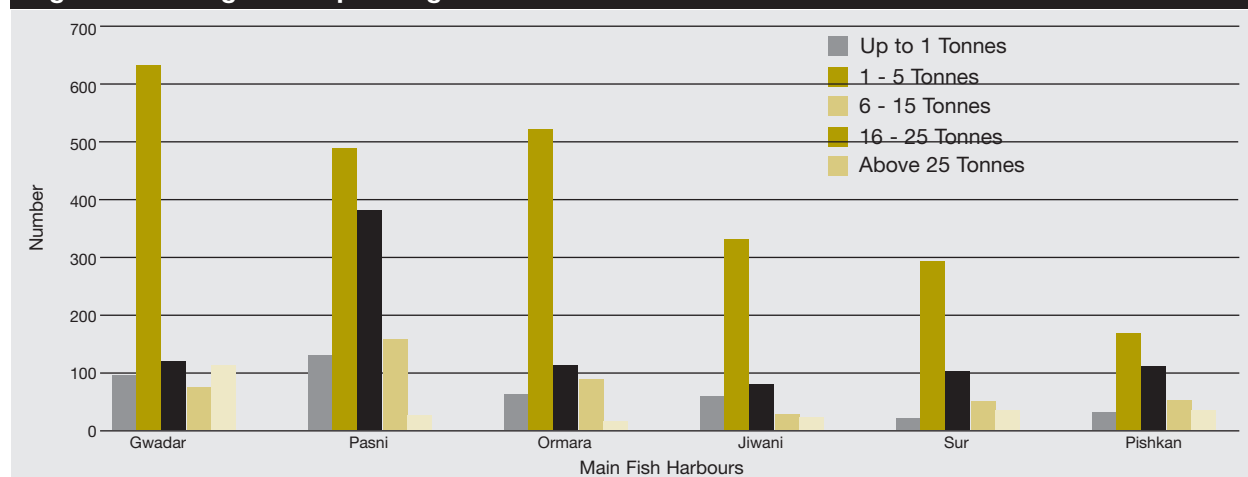
Figure 7: Total Fish Catch and its Value on Gwadar Coast in 2002



Source: Fisheries Department Gwadar

The fishing fleet registered on the Gwadar coast comprises 4,494 boats of various sizes. The largest number or 54 percent of the boats are between 1 to 5 tonnes, followed by 21 percent in the 6 to 15 tonnes category. Only 6 percent of the fishing vessels exceed 25 tonnes. All fishing crafts are fitted with engines. About 25 percent are classified as mechanized and fitted with inboard engines while 75 percent are classified as motorized and have outboard engines. No mechanized fishing craft is less than one tonne and no motorized fishing craft in the above 25 tonnes category. Very small fishing crafts of up to

Figure 8: Fishing Fleet Operating on Fish Harbours of Gwadar in 2002



Source: Fisheries Department Gwadar

27. For an interesting presentation on the Fisheries sector, see the Gwadar District Website <http://www.gwadar.sdnpk.org/fisheries.htm>. Although the statistics shown here are out of date, the web page contains useful background information.

owner ranges between 33 and 50 percent while the expedition manager receives a dividend on his contribution through logistics and nets. The remainder, after adjustment for cost of fuel and ice, is distributed among crew members with the largest share accruing to the captain. A fisherman on a large fishing boat earns around 10,000 rupees a month.

Fishing is no doubt a productive and profitable activity. But like any other technical occupation, it has its own dynamics. As different fish species fetch different prices, fishermen try and net the more expensive varieties for better returns.

Besides the owner of the fishing craft, the crew and the fisherman, there are other players in the fisheries sector. Large vessel and high sea fishing expeditions are managed by mole agents who are responsible for periodic cleaning, repair and maintenance of crafts to ensure seaworthiness. In fact, mole agents manage the craft and expedition in terms of loading, unloading, maintenance, provision of crew and clearance with security agencies. But their most important work is to auction and dispose the catch, including some transactions between local fishermen and Iranian trawlers in the open sea.

For its part, the MSA performs the critical role of enforcing the regulatory regime in and around the coast, sea borders and the EEZ. Departure and arrival of fishermen from/at the harbour is being gradually regularized.

Earlier, communication equipment was not permitted on fishing crafts. Those going on expeditions tended were effectively cut off for the entire duration. Today, communication is of utmost importance for vessels on fishing expeditions in the open sea. Presently, the response and rescue component of the communication mechanism is missing. Added to the problem is the limitation of the communication equipment. Practically, communication equipment is of little or no use to fishing vessels operating in the EEZ or the Continental Shelf.

5.1.1 Processing and Marketing

An annual fish catch of 105,609 tonnes represents a sufficient quantity of the basic commodity to support the processing and marketing components of the fisheries sector. The number of freezing plants and curing facilities are increasing rapidly just as marketing is gradually picking pace.

That said, local processing and marketing facilities are outdated and cannot compete in the upper-scale world markets. Almost 5,000 fishing crafts are being used for fishing in Gwadar. The sheer number generates an opportunity for developing a vibrant market to sustain the sector. Likewise, the needs of more than 30,600 fishermen cannot be left unattended. The availability of so many hard-working fishermen and their boats provide a window for creating



Izdyar Setna/IUCN Pakistan

A fisherman displaying an assortment of fish species in Gwadar Fish Harbor

effective mechanisms for investment, employment and facilitation.

Though the fishing grounds around Gwadar are extremely rich, stocks are ultimately finite. In other parts of the world, over-fishing of many popular and abundant species, including cod, tuna and salmon, have led to a crash in stocks, with devastating consequences for the livelihood of fishermen. The fishermen of Gwadar need protection from the economic and ecological consequences of pollution, over-fishing, wasteful practices and use of illegal nets by foreign-owned trawlers.

5.1.2 Aquaculture

Like other commodities, fish is also categorized and priced according to quality and demand. Some fish are in great demand and therefore tend to be expensive. Increase in demand and prospects of better returns puts pressure on the supply side. Ultimately, the supply of popular fish species gets progressively depleted. This phenomenon creates greater demand which puts even more pressure on the commodity, pushing it to the danger zone of extinction. The unsustainable over-exploitation of shrimp is a case in point. The depletion of natural shrimp stocks has provided an opening for shrimp farming which could yield good returns.

5.1.3 Coastal Biodiversity

A long coastline on the Arabian Sea, one of the most productive seas in the world, is a boon for Gwadar. The Arabian Sea's average primary productivity is ten times that of other world oceans and four times that of the Indian Ocean. The zones of high productivity in the Arabian Sea vary temporally and spatially. Primary productivity rates are high along the Astola Island and the Continental Shelf offshore Pasni.

The sea is divided into three zones for economic and administrative purposes. Falling under the provincial government's control, the Territorial Zone extends up to 12 nautical miles. Fishing boats not registered in the province are not allowed to fish in territorial waters. The Continental Shelf is between 12 and 35 nautical miles. Fishing boats registered in other provinces are allowed to fish here. The sea zone after 12 nautical miles is also known as the Maritime Zone. The EEZ extends from 35 nautical miles to 200 nautical miles where licensed foreign trawlers are allowed deep-sea fishing.

The Provincial fisheries department monitors the Territorial Zone while monitoring responsibility beyond that is entrusted to the MSA. Anecdotal evidence suggests that foreign trawlers routinely violate the Maritime Zone to the detriment of Gwadar's fishermen. To prevent illegal operations by foreign trawlers, it is necessary to strengthen the interdiction capacity of MSA and Balochistan's fisheries department.

5.1.4 Strategic Interventions and Institutional Links

More than 30,000 fishermen along with their families are associated with fishing in Gwadar District. In fact, an estimated 70 percent of the population in the district is associated with the sea for its livelihood. Fishing is expected to remain central to the economy in the years ahead.

The rich fishing grounds of the district and adjacent EEZ combined with the human resources presently involved in the fisheries sector could be a solid basis for a highly profitable and sustainable activity. But the fishing community needs the long-term support and commitment of the government to ensure that Gwadar's waters are protected from pollution and over-fishing, especially by foreign trawlers operating in the Maritime Zone and the EEZ.

The sector also needs to update practices by adopting modern refrigeration techniques and sanitary handling of the catch to comply with European Union standards. The goal is to ensure that the fisheries sector of Gwadar remains a mainstay of the economy of the district and the province. For this, the steps are recommended in the Table on page-40.

5.2 Tourism

Gwadar is gifted with an attractive 500-kilometre coastline. The district's beaches have the potential of attracting people from all over the world, especially after the commissioning of the deep seaport. The people of Gwadar are traditionally friendly and hospitable to outsiders. Unfortunately, lack of adequate infrastructure and security concerns have made Pakistan one of the least frequented and most under-appreciated tourist destinations.²⁸ Recognizing the potential of tourism as a means of boosting the economy in a relatively short time, GoP has declared 2007 as 'Visit Pakistan Year' and set in motion a number of useful changes, including a liberal visa policy for visitors from "tourist friendly countries" and a

28. Not surprisingly, in 2004 only 648,000 foreigners visited Pakistan, generating revenues of \$186 million, as compared to India's 3.5 million visitors who generated receipts of \$6.1 billion. In 2006, the number of visitors to Pakistan increased to 798,000 but earnings remained constant, perhaps because a large proportion of the visitors were overseas Pakistanis, not genuine tourists.

generous depreciation allowance of 50 per cent for new investment in tourism.

Such incentives to encourage tourism make eminent sense as countries similar to Pakistan in terms of the cultural and religious backdrop are able to attract far more tourists. For instance, Egypt hosted 8.6 million tourists in 2005 who spent 6.5 billion dollars. In 2006, 17 million tourists visited Turkey, generating 16.5 billion dollars for the local economy.

Promoting tourism in Gwadar requires a multi-pronged approach. As a first step, GoP must

encourage Pakistanis to become tourists in their own land instead of being the most lavish spenders in Britain. The government has already provided better access to Gwadar via the MCH. The private sector must also play its role by providing clean, affordable hotels and motels without degrading the natural environment.

Moreover, it is advisable to avoid shortcuts that can lead to severe environmental degradation. Karachi in the 1950s and 1960s was an attractive tourist destination for Arabs. The city also featured on the routes of many European airlines.

S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Assess short- and long-term impact of dislocation caused by development of deep seaport sea port on fisheries sector to pre-empt loss of fishing stocks and livelihoods and explore safer alternatives	Provincial Government	
2	Modernize facilities at fish harbours to ensure catch meets European Union hygiene standards	Gwadar Development Authority	Provincial Government Federal Government Ministry of Commerce
3	Examine issues of support occupations of the fisheries sector	Provincial Government	
4	Review marine resources from economic and conservation point of view	Federal Government	
5	Determine status of former buffer zone in the maritime zone (Continental Shelf Zone) and pursue possibility of reintroducing ban on foreign trawlers for fish stock regeneration	Federal Government	
Medium Term			
1	Prepare data bank of fishing community and capitalize on their expertise, skills and knowledge	Provincial Government	
2	Provide incentives to trades and occupations supporting fishing industry	Provincial Government	
3	Regulate registration of fishing boats	Provincial Government through Fisheries Deptt:	
4	Examine spectrum of welfare activities for fisherfolk	Provincial Government	
5	Study ways of minimizing role of middle men in marketing of fish to ensure optimum returns for fisherfolk	Provincial Government	
6	Provide facilitation and support services to fishermen during expeditions	Maritime Security Agency	
7	Enforce maritime laws governing Territorial and Exclusive Economic Zones and Continental Shelf and reinforce capability of MSA and provincial fisheries department	Federal Government, Provincial Government and Maritime Security Agency	
Long Term			
1	Facilitate boat building on scientific lines	Federal Government	
2	Modernize processing and marketing of fish catch	Provincial Government through Fisheries Deptt:	
3	Improve freezing plants and curing yards	Provincial Government	
4	Encourage investment in fish farming and support local initiatives	Provincial Government	
5	Initiate welfare projects for fishing communities	Provincial Government	
6	Develop and enhance capacity of fishing community for deep sea expeditions	Provincial Government	

But that is no longer the case due to the law and order situation in the city.

GoP needs to adapt best practices of countries which have an internal security problem. Provision of adequate security in the form of escorts as is the practice in Egypt could mitigate the problem of security in places frequented by foreigners.²⁹

Our people are justly proud of the mountains of Pakistan. In the West, though, people prefer to escape the frosty winters and head south to enjoy tropical weather. The Red Sea resorts of Egypt, for example, receive many European tourists who spend millions of dollars indulging in water sports.³⁰

From November to February, the climate along the coast is quite mild. Pakistan's Arabian Sea coast is also known for its varied and prolific marine life and potential for marine sports. Angling, scuba-diving and ancillary activities could be a lucrative source of employment for local fishermen. The government should select a few beaches around Gwadar that have clear water.

Tourists should be provided facilities to observe tropical fish, large marine turtles and other marine wildlife. Similarly, close proximity to coral reefs and other structures affording protection to fish are also in order. For example, the feasibility of designating Astola Island as a national aquatic sanctuary protected from unregulated fishing may be explored.

To ensure security, some tourist sites may be provided additional security. At the same time, the interests of the people of Gwadar must be protected by giving them preferential treatment for employment in the tourism sector.

The Balochistan government and the private sector have to act in concert to remove obstacles to lucrative tourism opportunities in Gwadar. The following practical measures are recommended in order to establish a viable tourism industry in Gwadar.

The Government of Balochistan needs to develop close relations with tour operators, as almost 80 percent of world tourism is through package tours. Tour operators have to be persuaded to visit Balochistan and select sites for development.

- Investment in tourism projects should be based on 80 percent equity, with the

remaining 20 percent furnished through loans. This will ensure financial stability in case tourists do not turn up in any particular year.

- The rate of return on tourism investment should be at least six percent over the prevalent compound interest rate. In case the compound interest rate in Pakistan is 18 percent, the minimum profit should be 24 percent.
- Local investors should team up with foreign investors on a 50-50 basis to not only spread the risk but also learn from their experiences.
- GoP could enable the tourism industry by offering incentives such as tax breaks.
- The concerned federal and provincial authorities ought to set ambitious targets of domestic and foreign tourists for 2012 and plan accordingly. In order to cater to the needs of tourists, major investments in roads, hotels, airports, railways, airline facilities and other related sectors are necessary.
- The traditional hospitality of our people needs to be reinforced through education. People have to be convinced of the need to welcome tourists. The biggest stake that they can have is the employment-profit motive.
- Adequate budgetary allocations for improvement in infrastructure must be made. If the government is able to make appropriate arrangements, income from eco-friendly tourism could reach respectable figures by 2012.

5.2.1 Strategic Interventions and Institutional Links

Coasts and ports create a chain of economic activity and attract investment in commercial and industrial concerns. These facilities in turn trigger establishment of residential and industrial settlements. Knowledge, skills, technical know-how, innovation and research processes push and follow development.

Gwadar is gifted with a 500-kilometre coastline, with beaches that have the potential of attracting people from across the world. The people of Gwadar are traditionally friendly and hospitable to outsiders. But lack of adequate infrastructure and security has made places such as Gwadar one of the least frequented tourist destinations. The goal, therefore, is to turn the tide by capitalizing on the district's natural assets and attracting local and foreign tourists by offering rewarding recreational

29. An extreme example of successful segregation is the reservation of island resorts in the Maldives exclusively for tourists. Consequently, the tiny Saarc country with a miniscule population of 300,000 largely traditional Sunni Muslims is able to host as many outside visitors as Pakistan and collect four times the revenue, although Pakistan is five hundred times more populous.

30. Investment by the Gulf States has played an important role. For example, the ruling family of Abu Dhabi helped finance the super deluxe Sofitel Hotel at Sharm el Sheikh in the Sinai Peninsula. Many other three, four and five-star hotels cater to hundreds of thousands of Egyptians and Europeans. A fleet of around 50 modern boats was available to take tourists for snorkelling, fishing and sightseeing in 2003.

facilities. This is possible through meaningful interventions, which would include:

deep sea port. With these two projects, Gwadar has experienced the emergence of new jobs in

S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Examine potential through focused studies and assess range of institutional arrangements needed to boost ecotourism	Balochistan Coastal Areas Development Authority	Federal Tourism Ministry
2	Set ambitious targets for local and then foreign tourists to visit Gwadar by 2012	Balochistan Coastal Areas Development Authority	Federal Tourism Ministry
3	Encourage private sector to invest in establishing attractive, eco-friendly three- and four-star hotels to attract Pakistanis, especially those interested in marine sports	Balochistan Coastal Areas Development Authority	Federal Tourism Ministry
4	Examine possibility of loans to a select members of fishing community for purchase of boats suitable for salt water sports fishing and scuba-diving to enhance income levels	Balochistan Coastal Areas Development Authority Provincial Government Fisheries Department	Federal Tourism Ministry
5	Develop close relations with tour operators in Pakistan and overseas, persuading them to visit Gwadar and select sites for eco-friendly development and tourism packages	Provincial Government	Federal Tourism Ministry
6	Consult relevant stakeholders to establish marine life sanctuaries that could be used as eco-tourism sites	Balochistan Coastal Areas Development Authority	Federal Environment Ministry
7	Invite responsible investors associated with eco-friendly hotel chains to set up flagship projects to target overseas tourists	Balochistan Coastal Areas Development Authority	Federal Environment Ministry
Medium Term			
1	Formulate long-term plan for development of beach facilities with concurrent efforts to maintain law and order for tourist secure	Balochistan Coastal Areas Development Authority:	Home Department:
2	Invest in human capital to create essential skills and capacity by establishing a hotel training institute in Gwadar to build capacity of locals in hospitality sector	Provincial Government	Federal Tourism Ministry Private Sector
Long Term			
1	Promote 'soft' image of Gwadar as an attractive, hospitable tourist destination for eco-friendly Pakistani and foreign visitors	Balochistan Coastal Areas Development Authority	

5.3 Diversification of Jobs

The MCH has boosted road transport while the deep seaport is likely to revolutionize Gwadar's economy and beyond. With a dozen berths in place, the port is expected to handle a large volume of cargo for and from the land-locked Central Asian Republics and Xinjiang province of Peoples Republic of China. The deep seaport has impacted other sectors as well. Gwadar is now a Special Economic Zone and enjoys exemption from taxes and duties.

5.3.1 Deep Sea Port

Fishing was the sole major economic activity in Gwadar until the construction of the MCH and

the public and private sectors. The most immediate impact was the development of hotels employing a large number of people from distant places. The construction boom has generated a manifold increase in the demand for masons and construction labour as well as the supply of construction material. The number of auxiliary workers has also increased in the district. Furniture making has yet to emerge but sales appear to be booming.

The availability of power from Iran has changed lifestyles in Gwadar and boosted business in electrical goods. This has created a new cadre of electricians. Similarly, a large number of people are engaged in the real estate business which was unknown in the district prior to recent developments. Newspapers and publications

have been started being published from Gwadar. Soon there will be printing presses and other services. The completion of the seaport and commencement of industrial and commercial development will create demand for more diverse of jobs in Gwadar in the near future.

5.3.2 The Mekran Coastal Highway

The MCH has opened up Gwadar to the rest of Pakistan and is also slated to provide road access to Iran. With the reduction of travel time, transportation of fish to Karachi is now fairly swift. Loss of weight and quality has been minimized. Through the Khuzdar-Rattodero Road, the area will have a hook to the National Highway. These improvements have led to new venues for employment and business. Improved road links will also have a positive impact on the volume of trade in the area, particularly with the regularization and documentation of trade with Iran which presently remains informal and undocumented.

5.3.3 Salt Making

Salt is prepared by drying saline water in salt pans measuring 10'x15' on the coast of Pasni and Gwadar. Shallow troughs are dug near the coast into and filled with water that is changed several times until harvest time. Salt is collected in the shape of small crystals. The production cycle is shorter in summer (approximately 15 days) and longer in winters (between 30 and 40 days). Salt making is a family business. About 40 families in

Pasni and 15 in Gwadar are engaged in this profession. The average monthly production of one household is about four to five tonnes per harvest. Salt makers are satisfied with their profession and level of income. A new generation of salt makers after studying up to the intermediate level have also joined the family business.

5.4 Planning and Managing Development Initiatives

Gwadar is opening to investment, business, industry and international trade. The deep seaport will generate an expansion of urban settlements. This growth could gradually engulf present-day Gwadar Sub-division. Therefore, a master plan has been developed to regulate spatial expansion for integrated and coordinated development. At present, it is comparatively easy to enforce zoning in Gwadar and areas in its immediate proximity as zoning specifications are not going to lead to dislocations followed by the tedious process of resettlement.

Moreover, the developing Gwadar port city will have implications for the rest of the district as many critical sectors are apparently being sidelined. Development interventions by the federal and provincial governments need to include comprehensive strategies and plans for the overall development of the district, with particular focus on social sectors and human capital.



Izdyar Setna/IUCN Pakistan

Newly developed Gwadar Deep Seaport is adding to the skyline

The deep sea port and MCH are two mega-projects in Gwadar that have provided impetus to investment in the area. Mirani Dam in Kech District too has had a positive impact on Gwadar's economy. These mega-projects are being funded by the federal government.

The establishment of an Economic Zone in Gwadar is expected to provide the port with the requisite leverage to compete with seaports in neighbouring countries. Until recently, Gwadar was a remote fishing town with no industrial, economic or agricultural base. Recent exemptions from taxes and incentives for investment are now boosting industrial growth to meet the region's emerging requirements. The Gwadar Master Plan is another activity generated as a sequel to the inception of the deep seaport. The plan provides for urban planning, zoning and land use in the next 50 years.

Today, Gwadar district has three operational airports with potential for expansion in the future. The plan for a new airport proposed at Gwadar includes a four-star hotel, a duty free shopping plaza and a cargo village, a terminal building, parking bays and extended runways.

Seasonal rivers and their tributaries are the major sources of drinking water through specific storage arrangements. The 1.25 million-gallons daily supply from Ankra Dam meets the

requirements of different localities, including Gwadar Town, which receives 0.7 million gallons. This supply is augmented by a large number of water tankers engaged by industrial concerns and ice factories that need at least 50,000 gallons a day. Pasni District, on the other hand, had been meeting its needs from Shadi Kaur Dam³¹. But the arrangement was disrupted in 2005. The residents of Ormara receive their drinking water from open surface wells. Flash floods, 18 tube-wells and 30 other wells in the district irrigate a total of 2,600 hectares.

An adequate supply of water for industrial and domestic use is essential for development activities. But water remains a scarce commodity in Gwadar. The water sector has been the focus of attention and concern for a long time and a number of dams have been built to meet the basic needs of people. Ankra Kaur Dam, completed in 1995, has a gross storage capacity of 17,000 acre feet and provides potable water to Gwadar and Jiwani.

Plans for the construction of Mirani Dam on the non-perennial Dasht River are underway to tap rain water flowing from a catchment area of 20,627 square kilometres. With a gross storage capacity of 302,000 acre feet, the dam will provide 152,000 acre feet water to its command area of 33,200 acres in Kech District. It has been proposed that water from this dam be supplied to meet the growing needs of Gwadar Town.



Izdyar Setna/UJCN Pakistan

Gwadar Improved communication system in Gwadar – coastal highway leading to Karachi and upland areas

31. Located at some 40 kilometres from Pasni, Shadi Kaur Dam was built to supply water to areas in Pasni and Ormara. The Shadi Kaur Dam has an irrigation component as well. This 50-foot high dam has a storage capacity of 48,000 acre feet and a catchment area of 2,849 square kilometres that breached in February 2005, resulting in heavy loss of life, property and infrastructure, including damage to the MCH.

Saji Dam, some 64 kilometres to the north of Gwadar, provided water to Sunstar and villages up to Paleri through a network of PVC pipelines which was washed away in 1998. A proposal is in the pipeline for remodelling the dam and constructing a 46-kilometre long line for Paleri to replace supply Ankra Dam for Gwadar. Belar and Sawar Kaur dams are the current initiatives of the Irrigation and Power department to mitigate the district's shortage of water.

Hydrological investigations of WAPDA indicate that the water table in the Dasht River basin is generally less than 30 meters below the surface and 16 of the 55 test holes have been converted into tube-wells. The chemical quality of ground water in the basin is also considered suitable for irrigation.

Supplying electricity to Gwadar has been a problem owing to its distance from the national grid. In fact, until recently it was too remote to be considered for a transmission line. As a result, power generation and supply was a local activity, based on diesel generators that could meet the needs of the town for only a few hours at a time. Frequent breakdowns and disruptions were routine and often led to agitation and protest.

The purchase of 30 megawatts of electricity from Iran has eased the situation. The frequency of breakdowns and disruptions has also been reduced.

5.4.1 Strategic Interventions and Institutional Links

There is much hope attached to the completion of Gwadar Deep Sea Port. To explain its significance, the PRSP describes the port as a: “key driver of

development in Balochistan [following which] the area will be declared a duty free zone with investments ... envisaging regional reach and industrial development. As such, the document concludes, “the project will bring a change in the life of the people of Balochistan and make them more demanding in terms of education, social empowerment and will allow faster human development in the province. It will provide enhanced investment opportunities and generate employment in the province. Additionally, it will boost the trade in the region.”

Ports and port cities have special characteristics the world over. The Gwadar Deep Sea Port and the city around it would be no exception. Both have to develop side by side as special complexes adhering to international standards in terms of facilities, environment, opportunities and supportive infrastructure to handle trade and transit activity.

The institutional back-up to oversee development of the port as well as the necessary infrastructure for opening it up for trade and business is the responsibility of the GPA. The BCDA is another statutory body in existence since 1998 with its headquarters at Gwadar. The authority is required to prepare a master plan for the development, improvement, expansion and beautification of the coastal areas of Balochistan.

The inception of the port has created the opportunity for all institutions and statutory bodies to fulfill their obligations and perform in accordance with their mandate. The following interventions need swift and judicious action for smooth progress of planned development:

S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Articulate roles, responsibilities and jurisdiction of development entities to avoid replication and conflict	Planning & Development Department	LAW, LG&RD
2	Review mandate of GPA, GD Authority and BCDA in line with constitutional provisions	Law Department	Federal Law Ministry
3	Establish coordination forum to facilitate institutional interaction of development authorities and boards	Planning & Development Department	LG&RD
4	Address issues of water quality and quantity in light of future pressure due to increased pace of development	Public Health Engineering	TMA
5	Plan for expansion of urban settlements through zoning in Gwadar Sub-division	District Planning Department	Works and Services, TMA
6	Accommodate interests of local people with respect to provision of services, job quotas, skills and access enhancement	Balochistan Coastal Areas Development Authority	Planning & Development Department, District Government
7	Provide enabling environment for private sector by improving law and order	Home Department District Government	LG&RD

6 THE VISION - TACKLING LAND AND GOVERNANCE ISSUES

6.1 Land - Use and Planning

Land, its ownership, tenancy and proprietary rights are integral to governance as they have a direct impact on society, administration, law and order and dispensation of justice. At times, land issues generate debates with far-reaching political implications, especially when large swathes of land are acquired for public purposes. In Gwadar, land has become a major issue, requiring urgent attention on several fronts.

Land in Gwadar meant little before the federal government's decision to establish a deep seaport. Since then, property dealers all over Pakistan have been doing thriving business in Gwadar real estate despite the fact that the district does not have the infrastructure to support the activity. The land revenue department, for instance, is not in possession of land records and settlement remains an ongoing activity in the district. Land records will only be transferred to the district land revenue department on completion of land settlement which is a tedious and complex process. Moreover, the settlement is being undertaken at a critical juncture when the district-based revenue collectorate, headed by the former deputy commissioner, is being transformed into a district-based revenue office with no executive, magisterial authority or supervisory tier for guidance and support.

Owing to this, the land settlement process has attracted a fair amount of controversy that has been reported by the national and regional press. It is alleged that vast tracts of land now included in the master plan was wasteland for which no claim of ownership existed in the past. One source contends: "This grabbing of land has been made possible by the settlement department whose officials wilfully transferred tens of thousand of acres of



state land to persons with no right to them. These were totally barren lands, sand dunes, state forests and uncultivable wasteland but which according to revenue laws, regulations and settlement manuals cannot be transferred through dishonest entries.” Ownership of thousands of acres of land has been granted to individuals, contrary to the land reforms of 1977, which set the maximum ceiling for individual ownership at 100 acres of irrigated or 200 acres of un-irrigated land.

Complaints against land scams in the district were registered by a federal minister, who is also a member of the National Assembly from Gwadar. Complete transparency of the settlement process and adherence to the declared stand of the

federal and provincial governments to safeguard the rights of the local people is the only way out of the mistrust and litigation emerging as a result of dubious land transactions.

Land settlement compilations and the resultant “Record of Rights” are extremely sensitive documents. They create, establish and sanctify titles. Gwadar will be a test case for the reorganized revenue set up at the district level.

6.1.1 Strategic Interventions and Institutional Links

The following interventions are identified to address issues related with land.

S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Focus on settlement to resolve land issues	Board of Revenue	Law
2	Safeguard proprietary rights of local people and ensure appropriate assessments and compensation for lands acquired by government	Board of Revenue	
3	Expedite refinement of institutional hierarchy of revenue department at district level	Board of Revenue	Law
4	Examine requirements of manpower, office and residential accommodation of revenue establishment	Board of Revenue	Planning, Finance
Medium Term			
1	Consider feasibility of land reforms with detailed situation analysis in view of ongoing and future developments	Board of Revenue	Law, Planning & Development, Finance
2	Analyze impact of migration of people from other areas	Home Department	
3	Complete process of land acquisition for public use and award appropriate compensation in addition to reservation of quotas in residential and commercial plots	Board of Revenue	Law, Finance, Local Government & Rural Development
4	Accord priority to conclusive disposal of land-related litigation, settlement, acquisition and transactions	Board of Revenue	Law
5	Pursue policy of protecting legitimate rights and interests of local population	District Administration	Planning, Finance
6	Formulate plans to provide office and residential accommodation to revenue establishment	Board of Revenue	Planning, Finance
Long Term			
1	Review land situation on continual basis to safeguard due rights of local population with respect to acquisitions	Home Department	LG&RD, Planning, Board of Revenue
2	Strengthen district revenue establishment by providing requisite staff, office and residential accommodation	Board of Revenue	Planning, Finance

6.2 Governance

Planning and development, integration, mainstreaming and sustainability cannot be segregated from governance as it is central to every intervention. Its significance in Gwadar is much greater than any other district because the area is the focus not only of the federal, provincial and local governments but also multinational donors, trade and commerce syndicates and investors.

Calibrating development needs and human welfare is the domain of governance which includes the administration of development, management of issues in planning, ensuring sustainability and integrating different interventions into the larger and long-term development agenda.

The situation prevailing in and around Gwadar, including the urgency of boosting development

activities and change management has given rise to duties and obligations for managers and administrators at the district and provincial levels. In the present situation, the roles and responsibilities of various institutions have yet to be conclusively determined. Devolution has introduced the new three-tiered system of local government in place of the local councils of the past. The new institutions created as a result of the BLGO 2001 have yet to start handling their assigned responsibilities effectively. For instance, the resource pool of the union administration does not correspond to the needs of the people. TMAs, the successor institution to the erstwhile municipal committee, are now obliged to provide services to all areas in a sub-division. Their area of responsibility has expanded and new functions have been added.

The spectrum of municipal services has also been enlarged. The statutory distribution of functions needs to be tallied to the ground situation. The district is at the extreme fringes of the country where the concept of municipal services is new and unfamiliar. Provision of municipal services in the area would need a big push supported by substantial investment and focused management.

For all legal and theoretical purposes, responsibility for the management, control and operation of the departments and functions scheduled in the BLGO 2001 has devolved to the district government. Today, the district government is a different entity from its predecessor district council.

The district government headed by the is obliged to provide basic social services, including school education, basic and primary healthcare, safe drinking water and infrastructure maintenance. In terms of statutory responsibility, education, healthcare, civil defence, agricultural extension, livestock, on-farm water management, soil conservation, fisheries, labour, social welfare, sports, culture, cooperatives, population welfare, environment, land revenue, excise, taxation, transport and housing and public health engineering functions stand devolved to the district government. New responsibilities have also been added, including coordination, human resource management, community organization, planning and development, information technology development and promotion, literacy campaigns, vocational education and finance.

Providing services is a challenge in Gwadar in terms of monitoring and coordination as the institutional framework remains weak in Gwadar. Coherent planning, strategic direction, integration of development interventions, effective coordination and above all improvement in the lot of the common people are some areas of concern.

6.3 The People

Gwadar is home to more than 228,000 people. This population is growing at the rate of 2.99 percent each year. So far, the population has relied mainly on fishing in the coastal areas and subsistence agriculture and limited livestock



Izdyar Setna/UCN Pakistan

Local young generation finding sometime to leisure and chat on sand

rearing in the hinterlands. The people and the district have always been marginalized as is evident from the district's socio-economic indicators that are far below those of other parts of the country.

There is no activity to engage the youth other than the labour associated with the fisheries sector. The limited educational services have failed to provide a way out of the vicious cycle of poverty, backwardness and illiteracy. Healthcare facilities in the district are also ineffective and of limited utility. Poor means of communication have kept the people restricted and confined to their area.

6.4 Macro Landscape

6.4.1 Backwardness:

Traditionally, Gwadar has been a backward district. The meagre funds channelled through the federal and provincial public sector development programmes have not had a qualitative impact on the district's poverty levels. The inhospitable environment of the area has prevented public sector functionaries from discharging their duties effectively. Lack of monitoring and supervision has also contributed to receding levels of services. The district has always depended on trade with Iran owing to lack of access and linkages with domestic economic activities and opportunities. But business remains undocumented and illegal

6.4.2 Law and Order

Gwadar is located in a volatile zone. Its development, prosperity, peace and tranquillity have internal as well as external dimensions. The area cannot develop and prosper in a state of fear as economic development and law and order are inextricably linked. Even under peaceful conditions, it will take much effort to move forward in the right direction. Gwadar's agenda for sustainable development should be taken seriously and an enabling environment fostered for its growth.

6.4.3 Long-term Scenario

Gwadar will have a busy deep seaport in the near future. As a natural sequel to this development, a port city is going to emerge. This process cannot be one of emergency measures or short-term expediency. Deep seaports and cities around them are special entities. Development in Gwadar has to adopt a model which is not available in this country. A basic requirement of the IDV is to build on best practices and lessons learned from other countries, particularly those in the region.

6.4.4 Articulation of Roles and Responsibilities

Our system at present is woven around the axis of authority and power. At times, the areas of responsibility of various state institutions overlap or are blurred. The countless activities arising as a result of the macro- and micro-development initiatives need to be clearly demarcated for responsibility, accountability and the duty component of public service.

6.4.5 Strategic Interventions and Institutional Links

Governance is critical to development. But this critical sector has remained marginalized at the local level resulting in institutional disorientation. Devolution of power and decentralization of administrative and financial authority are a major component of the restructuring process.

The successor institutions have to take time to settle down. This transitional phase is crucial and needs careful management. As the PRSP points out: "Devolution is now a ground reality. The challenge now is the full implementation of all its components and consolidation ... The challenge is formidable as it needs concurrence of all actors and stakeholders." If devolution, decentralization and delegation of power, authority and responsibility are all about empowering grassroots entities to manage and control services and functions, the institutional arrangement should also start taking shape at the same level.

Presently, the system is based on the union as a management unit. The directly elected union and naib nazimeen represent this entity at the district and tehsil level, respectively. Local government are mandated to perform a lot functions but lack the requisite resources, institutional back-up, especially skilled and trained manpower, to discharge their responsibilities effectively. The priority areas in the context of devolution seem to be service delivery, law enforcement and financial discipline.

The transitional phase of devolution is further complicated for Gwadar in view of the major focus on development in the area. The transformation of the governance structure from a centralized regime to a decentralized dispensation or of the social milieu from a tradition-bound society to a commercial urban centre is taking place simultaneously. As a result, the following measures require priority attention.

S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Articulate roles, responsibilities and spectrum of activities for each tier of local government through regulatory framework	Local Government & Rural Development	Law Department
2	Prepare and implement tailor-made capacity building programme for elected representatives and public functionaries in devolved offices	Local Government & Rural Development	Finance, Planning, Law
3	Deepen devolution and decentralization in consonance with Constitution	Local Government & Rural Development	Law
4	Assess effectiveness of institutional arrangements envisaged in the BLGO 2001	Local Government & Rural Development	Planning
5	Strengthen union entities by engaging members in consultations and forging linkages with support organizations	Community Development	TMA's, Union Administration
Medium Term			
1	Specify roles for effective discharge of local government responsibilities	Local Government & Rural Development	Law Department
2	Introduce multi-year planning in local government with technical assistance from provincial government and donor-funded projects	Planning & Development	Local Government, Finance
3	Transfer managerial functions to grassroots entities and devise effective system of monitoring and evaluation	District Government	Local Government & Rural Development
4	Classify development sectors for local government by assigning responsibility and transferring allocated resources	Planning & Development	Local Government & Rural Development, Finance
5	Initiate specialized capacity building programme for monitoring and accounts committees	District Government	Local Government & Rural Development
6	Conduct special audit of local government finances impact assessment and course corrections, if required	Local Government Commission	Finance, Local Fund Audit
7	Examine efficacy of municipal administrations in all sub-divisions	Local Government & Rural Development	Planning, Public Health Engineering
8	Evaluate efficiency of enforcement arm of local government	Home Department	Local Government & Rural Development, Law
9	Specify district government's role in maintaining law and order and provide institutional back-up to improve performance	Home Department	Law
10	Focus on amicable settlement of disputes and minimize litigation through alternate dispute resolution processes	Home Department	Local Government & Rural Development, Law
Long Term			
1	Enable local government to play enhanced role in law enforcement	Home Department	Local Government & Rural Development, Law
2	Monitor and evaluate performance of local government entities continually	Local Government Commission, Planning	Provincial Finance Commission, Finance,
3	Manage local services through community participation, providing space for local government to focus on governance issues	LG&RD	Finance, Planning, Education, Health, PHED
4	Build capacity of Public Safety Commission to perform its role of oversight and addressing complaints	Home Department	Law, Local Government & Rural Development
5	Create institutional nucleus at district level to represent executive authority of federal and provincial governments	Home Department	Law

7 THE VISION - INSTITUTIONAL RESOURCE POOL

The prospects of generating more and more revenue for economic development and prosperity depend on how prudently and judiciously institutions utilize existing resources. Some of these resources fall within the ambit of the federal government while others are within the jurisdiction of provincial authorities. The framework of the existing institutional resource pool of the district has the following dimensions:

7.1 Local Component of Resource Pool

BLGO 2001, as a statutory instrument for decentralization and devolution of political power, delegation of administrative authority and distribution of resources, has created three tiers of local government and institutions to support service delivery and management functions at the district, sub-division and union level. This new system has replaced what was in place for more than a century. The current transitional phase is indicative of functional and institutional complexities. In addition, certain visible and overwhelming influences tend to undermine the new system.

An overview of the devolution reforms gives the impression that the local governments are working in segregated compartments and some vital horizontal and vertical linkages are either missing or weak and informal. A range of interventions would be required to strengthen the system and remove hurdles.

A case in point is the role of the zila nazim. Apart from being the elected representative of all councils in the district, the zila nazim is the administrative head of the district administration, chairman of the Budget and Development Committee and Reporting Officer to evaluate the performance of various officers. As such, the office of zila nazim seems the focus of activity but these roles have not been spelled out in requisite detail so far.



BLGO 2001 defines the functional and jurisdictional parameters of various tiers of local government. Their institutional organization with respect to their mandate and responsibility is outlined below.

7.1.1 District Government

The district government, which is headed by the nazim and includes the district administration, is responsible to the people and the provincial government for improving governance and service delivery of services. The statutory authority of the district government covers the operation, management and control of the departments placed under it. The district government is under obligation to exercise this authority in accordance with the general policy of the provincial government.

With the enforcement of BLGO 2001, the administrative and financial authority for managing the following groups of offices is decentralized to the district government:

business for the convenience of the people. As a matter of principle, decentralization of authority and delegation of responsibility are central to the democratic dispensation. But the transformation of a centralized hierarchy into a decentralized entity has a tagged cost. The new entities at the district level have no institutional precedents to follow. They are required to improve service delivery and are accountable for it despite the fact that they have to work with reduced capacity, resource restrictions and hazy alignment of command and control mechanisms.

The system requires the zila nazim to provide the vision for district-wide development, leadership and direction for the efficient functioning of the district government in addition to development of strategies and timeframes for accomplishing goals approved by the zila council.

The DCO is responsible for coordinating the activities of the groups of offices for coherent planning, synergistic development and effective functioning of the administration. The EDOs,

S. No.	Group	Department
1	District Coordination:	Information Technology, Coordination, Human Resource Management, Environment, Finance and Budget, Planning, Development and Civil Defence, Enterprise and Investment Promotion
2	Agriculture:	Agriculture (Extension), On Farm Water Management, Soil Fertility, Fisheries
3	Community Development:	Community Organization, Registration of Voluntary Organizations, Social Welfare, Sports and Culture, Special Education, Labour and Cooperatives
4	Education/ Literacy:	Boys Schools, Girls Schools, Technical Education, Colleges, Sports (Education), Literacy Campaigns, Continuing Education, and Vocational Education
5	Health:	Public Health, Basic and Rural Health, Child and Woman Health, District and Tehsil Hospitals and Population Welfare
6	Revenue:	Land Revenue and Estate, Excise and Taxation, Transport
7	Communication and Works:	Housing and Urban Development, Rural Development, District Roads and Buildings, Energy
8	Public Health and Engineering:	Water Supply and Sanitation
9	Livestock:	Livestock, Forest and Wildlife (except Juniper Forests and National Parks) and Soil Conservation

Devolution and decentralization is a constitutional requirement. Article 32 of the Constitution of Pakistan requires the state to encourage local government institutions. Article 37 (i) of the Constitution requires decentralization of authority for the expeditious disposal of government

heading specific groups of offices, are obliged to ensure that the human and material resources at their disposal are utilized for better governance. Preparation of development plans and implementation of approved plans and policies is one of the critical responsibilities of the EDOs.

7.1.2 Zila Council

As an integral component of the local government for district, the zila council comprises 13 union nazimeen, four women members and one member each representing peasants/workers and minorities in the district. Besides other functions, the council is mandated to approve long- and short-term development plans, budgetary proposals, taxes proposed by the district government and bye-laws. As a legal requirement, the council is supported by a secretariat working under the naib zila nazim as convener of the house.

The allocation of functions and powers of the council is to allow elected representatives to steer the process of development, financial management and the regulatory regime at the local level. In practice, the council is handicapped in effectively performing its legal functions owing to weak secretarial support, a perpetual resource crunch and the lack of an enabling environment.

7.1.3 District Mushavirat Committee

The District Mushavirat Committee under the chairmanship of the zila nazim consists of a naib zila nazim, four tehsil nazimeen and the DCO as member- secretary. The committee is mandated to articulate the vision for the integrated development of the district, prioritization and coordination of inter-tehsil development plans, resolution of intra-district disputes, resource mobilization for crisis management and setting directions for realizing the economic potential of the district. In theory, the envisaged meant is supposed to oversee the process of development, resources mobilization and crisis management. In practice, this institution has not become operational at this crucial take-off stage of Gwadar District.

7.1.4 Monitoring Committee

Zila Council Gwadar, as required under section 39 of the ordinance is responsible for election of committees to monitor performance of the district government. These committees submit their quarterly reports to the council. The reports on prescribed formats have to evaluate performance of offices in relation to achievement of targets, responsiveness to difficulties faced by citizens, efficiency in delivery of services and transparency. But this mechanism too has not started delivering.

7.1.5 Tehsil Municipal Administration:

Gwadar has four tehsils. The municipal administration of each tehsil is headed by a tehsil nazim. As a corporate body, the TMA consists of the tehsil nazim, TMO, tehsil officers, chief officers and other officials. The TMO serves as administrative officer- in- charge of the following tehsil offices:

Number	Tehsil Office	Functions
1	Municipal Regulation of	Licensing, management of municipal lands, estates, properties, facilities, enforcement municipal laws, rules and bye-laws
2	Infrastructure and Services	Water, sewerage, drainage, sanitation, municipal roads, streets, street lighting, fire-fighting and parks
3	Planning	Spatial planning, land use control, building control, coordination of development plans and projects with unions
4	Finance	Budget, revenue and accounts

Besides the provision, management, operation, maintenance and improvement of municipal services, the TMA of each tehsil is responsible for spatial planning, control over land use, zoning and enforcement of municipal laws. As administrative in-charge of the municipal administration, the tehsil nazim is mandated to provide vision and direction for efficient functioning. Formulation of strategies for the development of municipal infrastructure and improvement in delivery of municipal services are the tehsil nazim's critical functions. Coordination of municipal activities for coherent planning and development and redressing public complaints is the responsibility of the TMOs. Tehsil officers are under obligation to ensure that municipal services are efficiently provided, laws and rules are enforced and approved plans and policies are implemented. The arrangement is elaborate and workable provided the required work force, duly capacitated to manage the charge is made available. But the human capital at the disposal of the four tehsils is hardly enough to shoulder the new functions.

7.1.6 Tehsil Councils

Tehsil councils in Gwadar have a small membership. Jiwani and Ormara tehsils have two

union councils each which means the tehsil councils have five members only. Suntsar has only one union council while Gwadar and Pasni, with four union councils each have tehsil councils composed of seven members each.

As a matter of principle, there is no harm in limiting membership in an elected council as it still represents the political will of the people. The problem is that in the existing system of local government, the functions, powers and responsibilities entrusted to the councils have been drawn out on the assumption that the councils will have a sufficient number of members to service the numerous committees required to support the system.

The local government system is based on the union as the basic administrative and electoral unit. The union is a territorial unity within the revenue limits of a specific tehsil and generally comprises a whole number of patwar circles or census and blocks. District Gwadar is divided into 13 union councils. Every union council is composed of 13 members elected through direct elections based on adult franchise and joint electorate. The union nazim and naib nazim are elected as joint candidates.

The union as a body corporate consists of the union nazim, naib union nazim and union

secretaries and is headed by the union nazim. Union secretaries are required to coordinate and facilitate community development, functioning of union committees and delivery of municipal services. Collection and maintenance of statistical information for socio-economic surveys, consolidation of development needs, their prioritization into project proposals and identification of deficiencies in municipal services are some critical functions of the union administration.

The union nazim as head of the union administration is required to provide leadership for union-wide development and organize management of inter-village municipal services. The law also requires the union nazim to report encroachment on state and local government property, violation of land use and building laws, trading in dangerous goods, adulteration of food and breach of public water courses. The law elaborately defines the functions of the union administration and the union nazim and almost every function creates a responsibility for the union administration. But the law stops short of prescribing administrative, financial and regulatory powers of the union administration and leaves this to the government to prescribe. The situation on the ground is indicative of functional difficulties as powers corresponding to responsibilities are not clearly defined.



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Newly installed improve and hygienic hand pump in operation

7.1.7 Union Council

The union council is the directly elected grassroots entity of the present system. It is broad-based, representing all segments of the population, including women, peasants, workers and minorities. Important functions of the union council include approval of the development plan, helping set up citizen community boards and cooperatives for improving economic returns and reducing poverty and mobilizing the community mobilization of public ways, streets, desalting of canals and other development tasks. Though the system has been in place for the last five years, the institutions have yet to perform the functions that have been legally entrusted to them.

7.1.8 Union Committee

The concept of monitoring given in the BLGO 2001 has its refined and articulated existence at the union level. Every union council is responsible for electing union monitoring committees for municipal services, finance, public safety, health, education, literacy, works and services. These committees are required to monitor functioning of all offices of the district government, municipal

administration and union administration within the area of the union. The mechanism creates an opportunity for elected representatives to initiate the process of recovery and improvement at the micro level.

But the opportunity has a corresponding threat as well. The concepts of monitoring and administrative control are divided by a very thin line demarcating the spheres. The experience over the past five years indicates that the monitoring envisaged in the law has yet to start at the union level.

7.1.9 Strategic Interventions and Institutional Links

Some vial areas of intervention at the local government level are primarily concerned with:

- Roles and responsibilities;
- Establishing linkages;
- Institutional strengthening; and,
- Capacity building.

The proposed short, medium and long term interventions in the above are as are identified below:

S. No.	Strategic Intervention	Lead Department	Support Link
Roles and Responsibilities - Short, Medium and Long Term			
1	Define role and responsibilities of zila nazim in administration, planning, development and coordination	Home Department	Law, Planning & Development, Local Government & Rural Development
2	Define management, operation and control functions of devolved departments for effective law enforcement	Local Government & Rural Development	Planning, General Administration
3	Articulate responsibilities of district government with respect to section 16 of BLGO 2001	Law	Local Government & Rural Development, Planning
4	Review devolved functions for demarcating mandate and benchmarks to assess progress and evaluate performance of local government	Local Government & Rural Development	Law
5	Re-examine coordination group of offices to determine if it has the skill, capacity, authority and resources for efficient discharge of roles	Home Department	General Administration, Law
Establishing Linkages - Short, Medium and Long Term			
1	Explore possibility of joint committees of district, tehsil and union councils as tehsil councils have limited membership	District Government	Zilla, Tehsil, Union Councils
2	Formalize informal linkages between municipal and district administrations	Local Government & Rural Development	Law, General Administration
3	Evaluate mandate of development authorities in relation to local government functions	Planning & Development	Law, Local Government & Rural Development
Institutional Strengthening - Short, Medium and Long Term			
1	Assess needs of union administrations and facilitate provision of basic requirements for enhanced efficiency	Local Government & Rural Development	Planning
2	Integrate committees of various councils for required impact	District Government	Zilla, Tehsil, Union Councils

S. No.	Strategic Intervention	Lead Department	Support Link
3	Strengthen zila council secretariat to provide support to committees	District Government	
4	Study possibility and implications of granting Gwadar a special local governance dispensation	Local Government & Rural Development	Law
Capacity Building - Short, Medium and Long Term			
1	Update skills in developing projects and proposals, budgets, accounts and book keeping of finance and planning officers of district and municipal administration	Local Government & Rural Development	Planning & Development, Finance, Local Fund Audit
2	Create training opportunities for elected representatives with focus on monitoring, evaluation, conduct of proceedings in councils and integrating gender perspectives in all activities of local government	District Government	
3	Provide support for capacity building of union nazimeen and secretaries to collect, analyze and update basic socio-economic data at union level	District Government	
4	Review performance of CCBs, classify sectors for interventions and build capacity to maximize input impact	Community Development	Planning, Finance
5	Encourage academia and civil society to contribute to development by organizing public opinion around core issues	Community Development	Municipal & Union Administration

7.2 Provincial Component of the Pool

The development arena in Gwadar is being managed by many agencies and authorities. It seems odd that one development authority executes schemes for another development authority as is the case of the BDA working for the GDA. The presence of so many authorities in one tehsil can atrophy focus, as a result of which it is important to review existing arrangements. The following sections deal with the various agencies active in the District.

7.2.1 The Gwadar Development Authority

Gwadar Development Authority was established under the Act of 2003 “for the planning, development, improvement and construction of Gwadar.” The governing body of the authority comprises a chairman, director-general and 10 other members appointed by the government. The mandate of the authority is vast. As such, the authority is empowered to “enter into and perform all such contracts as it may consider necessary” and “cause removal of any works obstructing the execution of any of its schemes.”

One of the main functions of the authority is to develop a master plan for Gwadar and facilitate construction of infrastructure necessary for smooth operations of the Gwadar deep sea port. Other major areas of work for the authority are approval and regulation of residential, commercial and investment projects and provision of infrastructure for development.

Presently, the Gwadar Development Authority is implementing major road projects, including access roads to the port. Big cities and metropolitan areas in Pakistan are faced with problems of traffic congestion, sewerage, irregular expansion and ever-increasing pressures on the infrastructure and institutions. The Gwadar Development Authority has to take cognizance of the challenge it faces to regulate the growth of Gwadar through the rule of law to safeguard the interests of the people and of the district.

7.2.2 Department of Fisheries

The Fisheries department is mandated under the Balochistan Sea Fisheries Ordinance 1971 to regulate marine fishing in the provincial waters up to 12 nautical miles from the coast. The department is responsible for licensing of fishing boats, regulating fishing nets, declaring periods and areas closed for fishing and protecting marine resources. The ordinance is aimed at ensuring the sustainable use of provincial marine fisheries resources and enforces restrictions on bottom trawling and fishing vessels using illegal nets that endanger marine life. The department currently owns six patrolling boats of which only one is in working order. Though the department is trying hard to enforce the law, it is not possible to cover the long coastline with a single boat.

The department is also responsible to prevent poaching by vessels not registered in Balochistan by apprehending the culprits. But the system of arrest and prosecution has serious practical

difficulties, particularly with respect to conservation of marine life.³³

Section 19 of the ordinance determines another aspect of the issue where the Balochistan Sea-Fisheries Ordinance 1971 is described as “supplemental” to any other enactment. This provision has a very clear bearing on the effectiveness of the ordinance that needs consideration at the appropriate level.

7.2.3 Balochistan Coastal Development Authority

The BCDA was established under an act of the provincial assembly in 1998 with its headquarters at Gwadar. The objectives of the authority are: “planning, development, preservation, monitoring, construction, operation, management, and maintenance of coastal areas in Balochistan for the purpose of fostering of all resources concomitant to coastal development and for matters connected therewith or ancillary thereto.”³⁴ The geographical jurisdiction of the authority is extended to all areas falling within 30 kilometres from the high tide water line.

The governing body of the authority comprises the Balochistan chief minister as ex-officio chairman and 18 other members. The governing body includes secretaries of 11 provincial government departments,³⁵ two district nazimeen (Lasbela and Gwadar), two members of the provincial assembly from coastal areas nominated by the chief minister and two qualified people of repute on coastal affairs nominated by the chief minister and the director-general of the authority. The governing body may co-opt any other person as its member as deemed appropriate. The governing body is required to meet quarterly.

The BCDA is working with an extremely broad mandate encompassing the combined mandates of all the line departments of the provincial government. The statute calls for the preparation of a master plan, “as soon as possible, for development, improvement, expansion and beautification” of the coastal areas. But the authority has yet to prepare any master or local plan for the coastal areas. Preparation and implementation of an Integrated Coastal Zone Management Plan or any other on major issues of sustainable development, environment, biodiversity, endangered species, wetlands and protected areas in the coastal zone are

conspicuously missing. In contrast, the authority is responsible for implementation of any development project for provision of social and physical infrastructure and delivery of services in coastal areas that fall under the mandate of line departments.

The authority is not adequately staffed. Ad hoc appointments have adversely affected its efficiency and effectiveness. In some areas, the authority overstepped its mandate (by issuing licences to trawlers from Sindh, for instance) which has resulted in complications for other departments mandated to perform these jobs.

In 2005, an amount of 371 million rupees was allocated to the authority for construction of 10 roads and one water supply scheme. Another scheme for the Dosi Delay Action Dam is allocated to the authority at an estimated cost of 20 million rupees. The third allocation for BCDA is for the construction of four jetties at Jiwani, Gunz, Kund Malir and Dam and the construction of three link roads at a total estimated cost of 188.5 million rupees. As such, the total allocation for BCDA projects in PSDP for fiscal 2005 is 579.5 million rupees. Some of the schemes allocated to BCDA are beyond its jurisdiction.

7.2.4 Balochistan Development Authority

BDA was established in 1974 for “promotion of the economic and industrial development of Balochistan and for matters ancillary thereto.” The authority is governed by a board of directors appointed by the government with one of the directors designated as chairman. The functions of the authority include “preparation and execution of comprehensive development programmes, including projects and schemes relating to land, water development, power, agriculture, industry and activities ancillary thereto, for the economic uplift of relatively underdeveloped areas to be notified by the government.” The authority is implementing road sector projects on behalf of the Gwadar Development Authority in the district. Presently, it seems that the jurisdiction of different development entities overlap in certain areas. This phenomenon, unless corrected, will impact adversely on the development of the district.

33. Shaheen Rafi Khan, Fahd Ali, Azka Tanveer, Compliance with International Standards in the Marine Fisheries Sector: A Supply Chain Analysis from Pakistan. Sustainable Development Policy Institute (SDPI), for the International Institute of Sustainable Development, 27 November, 2005. P.33

34. BCDA ACT

35. These are: (i) Planning and Development Department, (ii) Finance Department, (iii) Forest and Wildlife Department, (iv) Coastal Development and Fisheries Department, (v) Livestock Department, (vi) Agriculture Department, (vii) Sports, Culture and Tourism Department, (viii) Local Government and Rural Development Department, (ix) Public Health Engineering Department, (x) Urban Planning and Development Department, and (xi) Communication and Works Department.

7.2.5 Provincial Finance Commission

Chapter XII-A of BLGO 2001 provides for the constitution of the Provincial Finance Commission and a system of fiscal transfers to local governments. The commission is mandated to make recommendations for a formula to distribute resources between the government and local government to ensure predictability of funds for the latter.

The PFC has a direct role in promoting the financial stability of local government by ensuring equitable distribution of resources and predictability of funds meant for local government. The arrangement postulates the division of provincial receipts into 'allocable' and 'retained' components before the submission of the budget to the provincial assembly. This extraordinary arrangement should have a positive impact on the overall financial situation. Besides the recommendation of a formula to distribute resources, the commission is mandated to report regularly on the receipts and expenditures of local government.

7.2.6 Provincial Local Government Commission

The Local Government Commission constituted under section 131 of BLGO 2001 is mandated to organize consultative planning meetings of the national and provincial legislators and the zila and tehsil nazimeen of the district for their participation in developmental activities. With this mandate, the local government commission can provide an enabling environment in the district for coherent planning and optimize the impact of development interventions. But as the commission is not properly funded it has not been able to perform its role.

7.2.7 Strategic Interventions and Institutional Links

The following interventions are identified for attention at the short, medium and long term for various agencies:

S. No.	Strategic Intervention	Lead Department	Support Link
S. No.	Strategic Intervention	Lead Department	Support Link
Gwadar Development Authority			
1	Assert GDA jurisdiction under Section 9(J) and Section 11 to give an appropriate direction to development in Gwadar Tehsil	GDA	Law, Planning & Development, Local Government & Rural Development
2	Establish better coordination with local government in identification, execution, and monitoring of development schemes and activities of providing safe drinking water and communications	GDA	Planning, Local Government & Rural Development, and District Government
3	Establish a clear institutional understanding among GDA and TMA to ensure inter-se compatibility	GDA	Local Government & Rural Development, TMA and District Government
Department of Fisheries			
1	Create a regulatory framework to control and regulate fishing along Balochistan coast	Department of Fisheries	General Administration, Law
2.	Strictly implement the provisions of Section 19 of the Balochistan Sea Fisheries Ordinance	Department of Fisheries	
Balochistan Coastal Development Authority			
1	Critically review legislation for establishing BCDA and its territorial jurisdiction to provide focus on its function as a core managing body	BCDA	Law and General Administration
Provincial Finance and Local Government Commissions			
1	Ensure special grants to Gwadar district to improve service delivery	PFC	Planning
2	Focus on consultations among legislators and local government	Local Government Commission	LGRDD
3	Conduct an objective audit of local government accounts	Local Government Commission	Finance
4	Suggest classification of development interventions for members of legislature and local government so that development input is channeled towards sustainability	Local Government Commission	Planning

7.3 Federal Component of the Pool

7.3.1 Gwadar Port Authority

Established under an ordinance in 2003, GPA is a statutory body under the Ministry of Ports and Shipping. Its main task is the development of Gwadar as a deep sea port, related facilities and communication infrastructure to open up its accessibility to traders, businessmen and tourists from within and outside the country.

The challenges that lie ahead for the GPA are numerous and have political, social and economic dimensions. Presently, the head office of GPA is located in Karachi which suits current requirements. As the port develops into a hub of commerce, the location of the headquarters could be shifted to Gwadar in the interests of providing economies of scale, minimizing expenditure, enhancing efficiency and accessibility. The challenges that lie ahead before the Gwadar Port Authority to overcome are numerous and have political, social and economic dimensions.

Political Issues: Every development initiative has repercussions on the existing social set-up. A society following a traditional lifestyle with tribal customs may prefer to adhere to the status quo when confronted with the prospect of change brought by outside forces. Gwadar poses just such a challenge.

Social Issues: People tend to be sensitive about their customs and traditions and have a legitimate expectation that they will be respected. Institutions that ignore this by working in an isolated or culturally dismissive manner only create mistrust and resistance to desirable change.

Economic Issues: The problems of poverty being faced by the people of Gwadar and neighbouring areas could potentially lead to serious unrest and disaffection if the economic benefits of Gwadar's development as a deep sea port and a modern town are not distributed horizontally and further down to the lower socio-economic strata. The economic uplift of the area must first and foremost benefit the local people in terms of access to clean water, employment opportunities and provision of better health and educational facilities.

The GDA has before it the lesson of rapid growth of industry and population in Karachi followed by economic disparities, environmental degradation, disaffection and turmoil. It can learn from the mistakes of the past to build a superior model of economic development at Gwadar.

7.3.2 Maritime Security Agency

The MSA has been created by the federal government to regulate maritime activities and safeguard Pakistan's interests. The MSA in Gwadar will gradually gain momentum with activity gaining pace in and around the port.



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Gwadar Deep Sea Port's development brings in new dimensions to social, economic and political issues

Some of the core functions as outlined in the legislation are as follows:

- Prevent unauthorized exploitation of economic resources by any person, agency, vessel or device within maritime zones
- Protect Pakistani fishing vessels and crew against threats or interference within maritime zones
- Enforce national and international laws, agreements and conventions “on and under the water” in the maritime zones
- Coordinate search and rescue missions for vessels, property and lives in distress and provide back-up in case of emergency in the maritime zones and high seas
- Help other government departments and agencies maintain and preserve quality of marine life and control affects of marine disasters, including marine pollution in and around the ports, harbours, coastal areas, estuaries and other areas within maritime zones
- Coordinate with national and international agencies in hydrographic and oceanographic research, navigation, weather reporting and other scientific activities in the maritime zones
- Support other government departments and agencies in safeguarding and protecting artificial islands, off-shore terminals, installations and other structures and devices in the maritime zones
- Facilitate petroleum exploration and production, mineral exploration, seismic studies and gathering assessment data in the maritime zones
- Assist customs, Coast Guards and other departments, agencies and authorities in maritime zones in discharge of duties
- Serve as effective secondary maritime force for deployment in any emergency, war or conflict

- Perform functions that may be assigned by the federal government from time to time to protect Pakistan's maritime interests

The MSA is responsible for the regulation and protection of Pakistan's maritime interests and enforcing national jurisdiction and sovereignty in the maritime zone. Under section 10 (d) of the Maritime Security Agency Act 1994, the agency is tasked to “assist and coordinate search and rescue for the vessels, property and lives in distress and render such assistance which may be necessary in any emergency in the maritime zones and on high seas.”

The agency will be required to regulate an area and people used to free and unrestricted movement. Its efficiency and responsiveness in helping fishermen and sailors in distress would determine its image and standing in the new set-up.

7.3.3 Gwadar Fish Harbour

The Gwadar Fish Harbour is regulated by the Ministry of Ports and Shipping. In order to compete effectively in international markets, it is highly desirable to upgrade the handling and sanitary facilities to enable Gwadar's fish products gain access to international markets, especially the European Union. Investment to upgrade the harbour would yield dividends to the economy as well as the local people.

7.3.4 Strategic Interventions and Institutional Links

The following interventions are identified for improving the efficiency and working of the federal government agencies active in the district:

S. No.	Strategic Intervention	Lead Department	Support Link
S. No.	Strategic Intervention	Lead Department	Support Link
Gwadar Port Authority			
1	Clearly define the limits of Gwadar Deep Sea Port	GPA	Ministry of Shipping and Ports
2	Establish the GPA headquarters in Gwadar	GPA	Ministry of Shipping and Ports
3	Articulate the appointment and retention requirements and conditions of service of GPA employees	GPA	Ministry of Shipping and Ports
Maritime Security Agency			
1	Entrust MSA officers with the powers equivalent to: <ul style="list-style-type: none"> ● Customs officers of under Customs Act 1969 ● Fisheries Officers UNDER Exclusive Fishery Zone Act 1975 ● Officer-in-charge of a police station under the Police Order and Code of Criminal Procedures 	MSA	Ministries of Defence, Communications and Law



Falcon hunting is a roaring business amongst local in Gwadar

7.4 Civil Society

7.4.1 Citizen Community Boards

BLGO 2001 is meant to improve service delivery and transparency in decision making through institutionalized participation of the people. For the first time, district governments, TMAs and unions are under legal obligation to earmark 25 percent of their developmental budget for utilization through CCBs, comprising groups of non-elected citizens joining hands through voluntary, proactive and self-help initiatives.

The unions are required to facilitate the formation and functioning of CCBs. The incentive in forming these boards is the legally binding requirement earmarking 25 percent of the development budget for them. But evidence on the ground suggests that these boards have yet to take shape, let alone perform their assigned role.

The office of EDO, Community Development, in Gwadar district is mandated to register these boards. To access 80 percent grant of the reserved 25 percent of the local government development budget, the CCBs are required to contribute 20 percent of the cost of the project. Despite the appointment of EDO Community Development in Gwadar district since January 2005, no CCB was registered with the office.

7.4.2 Civil Society Organisations

CSOs in Gwadar are few in number and have limited outreach. They lack resources and have no programmes. One of the few indigenous NGOs working on a voluntary basis in Gwadar is the Rural Community Development Council of Gwadar. The council is the oldest NGO formed by local volunteers for community development in the area. To its credit, it has raised awareness through cultural and literary programmes in the district.

Still, the organization has been unable to attract any donor to fund its programmes. All its costs have been covered by regular contributions by about 200 members and occasional donations by local people and sometimes by the government.

The council has earned the confidence and respect of people in Gwadar. It has successfully implemented contractual work for several education and adult literacy projects. In 2004, the council opened a private school and now intends to upgrade it to a higher level.

7.4.3 National Rural Support Programme

The NRSP established itself in the district by setting up field offices at Gwadar and Pasni.



Better educational facilities: Newly constructed auditorium in a primary co-education school run by a local NGO

Since then it has established 121 community organizations (58 male and 63 female) with a total membership of 3,098 people. The community development approach of the programme is based on community organization, resource mobilization and skill development. NRSP provides funds for small-scale community infrastructure projects on a cost-sharing basis as well as microcredit facilities.

Under the community infrastructure, the programme has funded the construction of four water tanks, repaired another one and installed a new water supply pipeline. On the capacity development front, NRSP has trained 129 members of community organizations during the past four years in embroidery, tailoring, computer skills, electrical skills and automobile mechanics.

Under its social sector services programme, NRSP arranged a two-month training course for Traditional Birth Attendants at the District Headquarters Hospital. Besides, the programme has provided adult literacy training for six months to men and women aged between 17 and 35 years and built capacity for making fuel-efficient cooking stoves. The programme is also engaged in establishing Parent Teacher School Management Committees under a contract from the Education Sector Reform Assistance Programme.

7.5 Academia

There is no dearth of people with interest in literature and poetry in Gwadar. Since the 1960s, the Rural Community Development Council has been organizing mushairas which have led to the emergence of literary societies in the district.

Nadikar Lafzon Ki Majlis, a notable literary society comprising prose writers and poets in Gwadar regularly organizes literary functions with a sizeable local participation. The Syed Hashmi Academy, with its head office in Karachi, is another forum that promotes literature and poetry by enabling literary figures of the district to interface with those from outside.

There are several literary associations of Balochi poets and writers in Mekran and other parts of the country that maintain linkages and exchange views among writers. Gwadar-based poets and writers are well connected through these forums.

Balochi books and periodicals are published in the district and are available in books stalls in many cities. A quarterly literary journal titled *Drud* is published at Gwadar. A monthly magazine with the name of *Sichkan* is also published in the district. Another quarterly literary journal *Rooch* is published from Pasni. Local intellectuals frequently write on current affairs and focus on development and other local issues in these journals.

8 THE VISION - COMPLEXITIES AND VULNERABILITIES

Until recently, Gwadar was a neglected area of the country with little importance for investors, entrepreneurs and traders. The MCH ended the district's isolation while the upcoming deep sea port brought it prominence. The unprecedented investment in the real estate sector seems to have changed the complexion and make-up of the population in and around Gwadar City. Land has changed hands many times in the past three to four years.

Ostensibly, the local communities appear to have lost their precious assets to this change. This change needs conscious management so that the process of transformation is smooth, gradual and equitable.

The emerging employment opportunities will have a commercial and industrial orientation. Presently, the manpower available in Gwadar lacks the capacity to meet future needs as it is neither skilled nor used to working in commercial or industrial establishments. Connected to this deficiency is the problem of migration from other areas contributing to further marginalization of local communities.

Recent development initiatives have added another facet to Gwadar's strategic importance. The transformation of Gwadar into an Economic Free Zone and possibly a duty-free port are incentives to attract investors. Provision of incentives to industrial and export promotion zones have included exemption from labour laws. Traditionally, these exemptions and incentives have been abused, with investors and entrepreneurs treating them as a licence for exploitation.

In accordance with the master plan, the port city of Gwadar would span the entire area of Gwadar Town. Resettlement is always complex, sensitive and difficult. Almost every mega-project in Pakistan has had a bitter experience in



this respect. Any mishandling of the resettlement issue in Gwadar will have far reaching effects.

The Mekran Coast is seismically active. Tsunamis and earthquakes in the recent past have caused enormous damage to life and property in various parts of the world. The Gwadar coastline is bound to witness settlements and human habitation with the development of the port. Therefore, the district would need a strict regulatory regime to oversee the development process along the coastline.

The steady rise of the sea level owing to global warming is another area of concern that would need attention at the national level. And last but not the least is the threat of floods in the storage dams that are a major source of water supply to almost all areas in the district.

At the end of June 2007, a devastating cyclone followed by torrential rains inundated four districts in Balochistan, including Gwadar, marooning 900,000 people. The hardest hit was Turbat on account of flooding, which critics claim was caused by a backup of flood waters from Mirani Dam on which Gwadar depends for partial supply of potable water.³⁶

In 2007, Cyclone Yemin also caused widespread destruction and heavy loss of life and property in the district. Critics have alleged that the government had ample advance warning from the Pakistan Metrological Department about the cyclone but did not have a disaster preparedness plan in place. This shortcoming, coupled with the paucity of resources, meant that the people in the flood-affected areas had to endure privation and loss of property. Relief supplies failed to reach the people in time, which incensed the flood affectees.³⁷

Detailed description of the complexities and vulnerabilities and the proposed interventions to protect against them is given in the following sections.

8.1 Social Change and Migration

The upcoming deep sea port in Gwadar has started the process of rapid social change that has accelerated with the completion of the MCH. A scramble for land in or near Gwadar was the most immediate impact of the decision regarding the development of the Gwadar Port. Realtors from all over Pakistan flocked to Gwadar for business, triggering escalation of prices. A large

number of housing, commercial and industrial schemes have also been announced and permission is being sought for construction of high-rise buildings.

The development of Gwadar Port and expansion of its economy depends on various factors, including provision of swift, safe and stable means of communication, improvement of physical infrastructure and services and a good incentives regime for the private sector. Gwadar Port has to compete with nearby ports for its share of shipping, trade and transportation. To meet international standards for provision of business requires compliance with established specifications that depends on the performance of a host of institutions in the public as well as private sector.

The future employment market in Gwadar will require a highly skilled and technically qualified workforce. The available workforce is small with low levels of education and is therefore unable to take advantage of emerging employment opportunities. The ongoing expansion of the labour market has created a wide gap between supply and demand that is being met through engagement of the requisite workforce from other areas.

It is evident that the rhythm of development in industry, trade and commerce will necessitate substantial migration of people from other parts of country. This phenomenon is accompanied by a real fear that the local people will be sidelined. To avoid this, concerted efforts to educate and train local youth and develop their skills to meet upcoming market will be required.

The traditional social values and organizations are now face to face with a modern urban industrial culture. The traditional Baloch fishing communities in Gwadar are required to switch over to new types of jobs with different a different ethos and working hours.

Migrant workers will bring their own culture, habits and values to Gwadar. A process of assimilation is expected to develop a new culture representing different regions, communities and nationalities of Pakistan. Experience gained the world over has shown that rapid economic growth creates prosperity for some segments and disparities in incomes and living conditions for others. These conditions often create alienation and estrangement. Gwadar will be no exception if the dynamics of the situation are not handled with due care, caution and diligence.

36. The News, 29 June 2007

37. Amjad Bhatti, Responding to disasters. (Dawn OpEd, 9 July 2007)



One of the many new mangrove forest plantations undertaken by IUCN

8.2 Marginalization of Local People

Developments in Gwadar will have far-reaching effects on the local and national economy. The location of Gwadar near the entrance of the Persian Gulf, its proximity to the main seaplanes and the Straits of Hormuz, has increased its strategic significance. The regional and international powers are definitely interested in developments taking place in the area and beyond. Maintenance of a delicate equilibrium will be a perpetual challenge for decision-makers at the local, provincial and national level.

The local people of Gwadar are used to free and unrestricted movement. The emerging security concerns will require regulation of movement which is bound to make life difficult for the populace in general and the fishermen in particular. Compatibility of security instruments to the traits and norms of the area should be the prime consideration in the placement of control mechanisms. It will take some time for the fishermen community to adapt to the regular lifestyle of a modern port city.

8.3 Resettlement

Land acquisition and resettlement is an important issue in Gwadar. According to the Gwadar Master Plan, land of the old settlement of Gwadar Town

is required to develop facilities and access for the port. The master plan estimated a resettlement cost of 7.4 billion rupees for this land. The majority of residents in the area are fishermen working on small boats anchored on the coast close to their houses.

Acquisition of land to meet the requirements of the deep sea port and the resultant expansion of allied structures will result in dislocation of some people. Their resettlement is a very complex issue in view of the direct effect on their livelihood. This necessitates careful consideration of all aspects of acquisition, cost estimation, payment mechanisms, resettlement plans and the social cost for the communities.

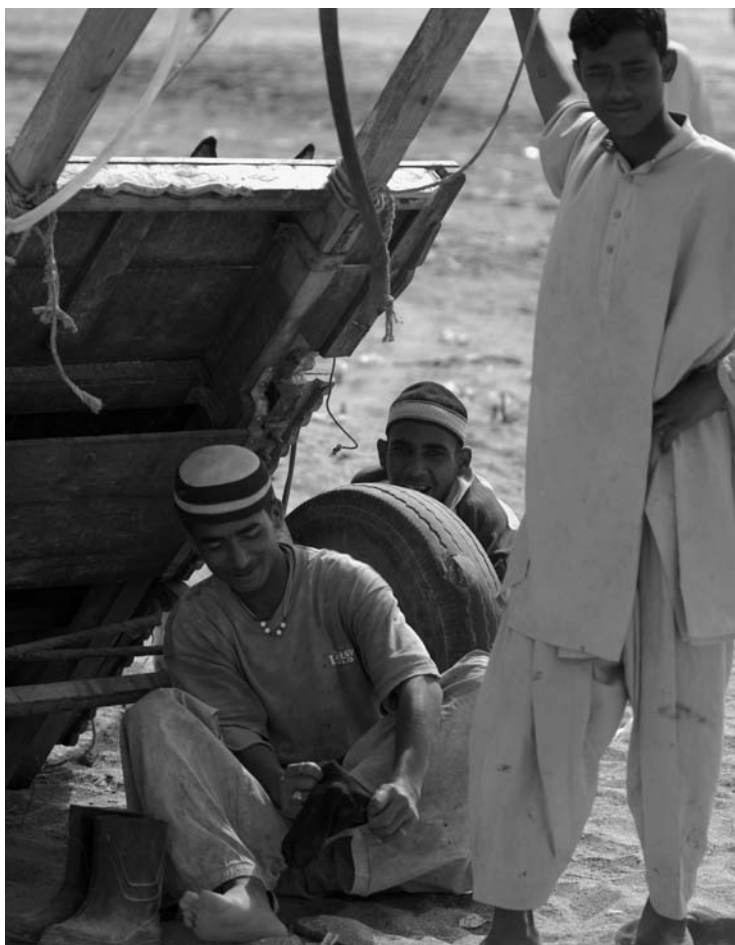
8.4 Enforcement of Labour Laws

Gwadar is expected to become an Economic Free Zone for attracting investors and investment. The availability of cheap labour, subsidies and exemption from duties and taxation play an important role in attracting foreign and local investment. Export processing zones in Pakistan enjoy exemptions from local labour laws. Reports from foreign countries regarding ill-treatment of workers in the overseas economic free zones strongly suggest the need for the enforcement of laws relating to employee benefits and welfare.

8.5 Tsunamis, Earthquakes and Sand dunes Movement

The available seismic record of the area indicates the occurrence of 193 earthquakes of the magnitude of 4 and above on the Richter Scale from 1851 to 1990. The Mekran coast is seismically active and susceptible to earthquakes and tsunamis³⁸. In 1945, an earthquake measuring 8 on the Richter Scale, followed by a tsunami, destroyed several coastal settlements. The epicentre of the earthquake was 87 kilometres southwest of Chur in Balochistan. The towns of Pasni and Ormara were both reportedly underwater after the tsunami that was also recorded at Muscat and Gwadar.³⁹ This was the most recent major tsunami-generating earthquake in the Arabian Sea.

Moreover, there are fine sand beaches along the coast and sand dunes in the hinterland. Hurricanes and winds blow sand and the shifting of sand dunes is common. Paved streets are buried under sand in towns and roads are covered with sand during the windy season. Therefore, sand dune stabilization remains a major issue in the area.



To traverse the remote rough dirt tracks a young man is putting on his socks & boots

8.6 Cyclones and Floods

Gwadar is a dry district without a perennial river. Floods along the district's seasonal rivers are uncommon. As groundwater is often brackish, storage dams have been constructed on many seasonal streams. These dams are a source of flooding whenever heavy rainfall occurs in the catchments areas. Yet these dams are important sources of water supply, with Ankra Dam in Gwadar and Shadi Kaur Dam in Pasni being the largest among them. Heavy rains in February 2005 washed away Shadi Kaur Dam. The resultant floods devastated many localities by damaging roads, bridges and culverts which in turn caused hardship to the people.

Even more devastating were the floods of June 2007 in the wake of Cyclone Yenmin. Reportedly, the backup of floodwaters from the Mirani Dam caused massive destruction of property, particularly in Turbat District. The people of the district have to factor in the probability of recurring, albeit rare, cyclones as part of life along the northern Arabian Sea.

8.7 Inaccessibility and Remoteness

Despite the MCH, Gwadar remains remote and isolated. The district is about 400 kilometres in length and all areas in the interior are without all-weather roads. Sections of rough dirt tracks and fair-weather roads are common and make travel difficult and expensive. Lack of transportation and easy access to other areas is also a major cause of poverty in the hinterland. A small distance of 65 kilometres between Gwadar and Suntsar takes four hours on a four-wheel drive vehicle and 120 rupees in fare. The road between Gwadar and Jiwani too is in a poor state. The fares charged by vehicle operators are normally more than the daily wage of an unskilled labourer.

8.8 Climatic Change and Rising Sea Level

Owing to global warming and the melting of the polar ice-caps, the mean sea level is slowly but gradually rising at a rate of about 1.1 millimetres annually. This may affect low-lying areas, including Gwadar and its lagoons and wetlands. The rise may also affect the deep sea port and salinate fresh water reservoirs along the coast.

38. Sheikh, M. M. 1992. "Seismic Risk Analysis and Perspectives Earthquake Hazards along Mekran Coast ." In Proceedings of the National Conference on Problems and Resources of Mekran Coast and Plan of Action for its Development, Islamabad, Pakistan Council of Science and Technology. Quoted in BCS page 99.
39. http://asc-india.org/gq/19451127_mekran.htm

8.9 Strategic Interventions and Institutional Links

S. No.	Strategic Intervention	Lead Department	Support Link
S. No.	Strategic Intervention	Lead Department	Support Link
Short Term			
1	Investigate land transactions in and around Gwadar	Provincial Government	
2	Protect identity, proprietary rights and livelihood of local population	Provincial Government	
3	Initiate practical measures to accommodate locals in emerging job market	Provincial Government	
4	Prepare checklist of actions necessary to ensure improved future disaster preparedness at district and tehsil levels, bearing in mind lessons of Cyclone Yemyin	District Government	Federal Government Provincial Government International Aid Agencies
5	Review ongoing programme of dam construction and incorporate necessary design changes to minimize possibility of floods in case of exceptionally heavy rainfall	Provincial Government	Federal Government
6	Establish disaster preparedness cells at district and tehsil levels	District Government	Provincial Government
Medium Term			
1	Make necessary institutional arrangements for change management	Provincial Government	
2	Examine applicability of labour laws in Economic Free Zone and Export Processing Zone	Provincial Government	
3	Devote necessary attention to master planning ⁴⁰ for resettlement of people dislocated due to land acquisition for public use	Provincial Government	
4	Establish guidelines for compensating land owners by reserving quotas in residential, commercial and industrial plots and schemes	Provincial Government	
5	Enforce building control laws in coastal areas and demarcate prohibited areas to keep human settlements safe from cyclones and tsunamis	Balochistan Coastal Areas Development Authority	TMA's, Planning
6	Assess resistance level of storage dams against unusually heavy rains as experienced in June 2007	Irrigation Deptt:	
7	Create opportunities for local people to acquire skills and technical know-how	Provincial Government	
8	Invest in facilities such as schools, hospitals, sanitation, clean water and all other necessary accompaniments to improve quality of life	Planning	Finance, Public TMA's
9	Enable expeditious settlement of disputes and litigation arising due to land transactions	Board of Revenue	
Long Term			
1	Engage with global community on issues of global warming and climatic change	Federal Government	
2	Monitor incoming migration for maintaining a balance in favour of local population to minimize possibility of marginalization	Provincial Government	
3	Engage opinion makers in meaningful partnerships for furthering development agenda	Provincial Government	
4	Improve and expand communication network to cover remote areas	Provincial Government	

40. The Master Plan is supposed to address city location, size, form, character, image and environment. It includes proposed new buildings and infrastructure growth while at the same time defining spaces that unify all functions of the city. People displaced as a result of the new port city have to be compensated, rehabilitated and trained to meet the new challenges and take advantage of the emerging opportunities.

REFERENCES

- ADB - IUCN Pakistan 2003: Regional Technical Assistance For Coastal and Marine Resources Management and Poverty Reduction in South Asia (ADB RETA 5974), Mangroves: Status and Management - Pakistan Component.
- ADB, DFID and the World Bank, Devolution in Pakistan: An Assessment and Recommendation for Action, 2004
- Ahmad Bhatti, Responding to Disasters (Dawn OpEd, 9 July 2007)
- Alliance for Education Development N. D.: Gwadar District Education Plan 2003-2006, no other details.
- Anger and despair in Balochistan, (BBC Friday, 29 June 2007, 21:34 GMT 22:34 UK)
- Asian Development Bank Project Performance Audit Report 1995: Balochistan Fisheries Development Project (Loan 619 - PAK [SF]), Manila.
- Astola (Haft Talar) Island, 2001 (Information Sheet on Ramsar Wetlands) Google Search
- Baloch, Abdul Hakim 2004: Bringing Development to Balochistan, (Dawn, 13 December 2004, Islamabad.
- District at a Glance (<http://www.gwadar.sdnpk.org/sorg.htm>) Website maintained by IUCN
- District Consultation Report, Gwadar District, May 1999
- District Releases up to June 2004, Finance Department, Government of Balochistan, Quetta.
- Fishery and Aquaculture Country Profile - Pakistan (FAO, Fisheries and Aquaculture Department) FAO Website.
- Fishing Capacity and Fisheries in Pakistan. Issued by the Assistant Fisheries Development Commissioner, Ministry of Food, Agriculture and Livestock, Islamabad, Pakistan.
- Government of Balochistan & IUCN 2000: Balochistan Conservation Strategy, IUCN, Quetta
- Government of Balochistan 1907 (reprinted 1995): District Gazetteer of Mekran Gosha -e- Adab, Quetta.
- Government of Balochistan 1971: Balochistan Sea Fisheries Ordinance 1971, with amendments up to 1994, Balochistan Coastal Development Authority Act.
- Government of Balochistan 1974: the Balochistan Development Authority Act 1974.
- Government of Balochistan 1997: Gwadar - A District Profile, Planning and Development Department, Quetta.

Government of Balochistan 1998, Balochistan Coastal Development Authority Act 1998 with Amendment 2003.

Government of Balochistan 1998: Balochistan Coastal Development Authority Act 1998 and Amendment 2003.

Government of Balochistan 2003: Gwadar Development Authority Act 2003.

Government of Balochistan 2003: Balochistan Local Government Ordinance 2001, Quetta.

Government of Balochistan 2003: Balochistan Poverty Reduction Strategy Paper, Planning and Development Department, Quetta.

Government of Balochistan 2003: Gwadar Master Plan, Planning and Development Department, Quetta.

Government of Balochistan 2003: Progress Report on Projects under Different Programmes, Department of Irrigation and Power, Quetta.

Government of Balochistan 2004: Budget Estimate for the Year 2004-05, District Government Gwadar, Gwadar

Government of Balochistan 2004: Draft Annual Report of Provincial Finance Commission, September 2004, Provincial Finance Commission, Quetta.

Government of Balochistan 2005: Balochistan Performance Grants rules, 2005, Notification.

Government of Balochistan n. d., PC - 1 of coastal zone Management for Fisheries Development of Balochistan Coast, Balochistan Coastal Development Authority, Quetta.

Government of Balochistan n. d., PC - 1 of the Project Continuance of the Japanese grant of Yen 414 million, Directorate of Fisheries, Food, Fisheries and Coastal Development Department, Quetta.

Government of Balochistan n. d., Prospects of Shrimp Aquaculture on Balochistan Coast, Balochistan Coastal Development Authority, Agriculture, Food Cooperatives & Fisheries Department, Quetta.

Government of Balochistan, 1971: Balochistan Sea Fisheries Rules 1971.

Government of Balochistan, Balochistan Coastal development Authority Act.

Government of Pakistan 1977: Land Reforms Act , 1977.

Government of Pakistan 1999: Mekran Coast Master Plan Balochistan, Planning Commission, Islamabad.

Government of Pakistan 2000: 1998 District Census Report of Gwadar - Census Publication No. 65, Population Census Organisation, Statistics Division, Islamabad.

Government of Pakistan 2003: Accelerating Economic Growth and Reducing Poverty: The Road Ahead (Poverty Reduction Strategy Paper), Poverty Reduction Strategy Paper Secretariat, Ministry of Finance, Islamabad.

Government of Pakistan, WWF & IUCN 2000: Biodiversity Action Plan for Pakistan.

Hasan Sahin 2005: Silk Road Turkish Expo Train, ECO Bulletin, Volume 42, June 2005, Eco Secretariat, Tehran.

IUCN 2005: A Situation Analysis Study of District Gwadar Balochistan.

National Reconstruction Bureau 2005: Brief on Local Government System and Fiscal Decentralisation in Pakistan. International Conference on Fiscal Decentralisation, May 3 - 4, 2006, Islamabad. Organised by NRB in cooperation with World Bank Institute.

Majeed, A & J Qureshi 2000: Water - Balochistan Conservation Strategy Background Paper, IUCN Balochistan Programme Office, Quetta.

Pakistan's dam of sorrow? [Mirani Dam] (BBC, Thursday, 5 July 2007, 17:01 GMT 18:01 UK).

Proceedings of National Roundtable Meeting on Fisheries. (Karachi, August 9, 2006) Sponsored by the Pakistan National Committee Members of the IUCN. (Google Search).

Sami Memon, Ban on deep-sea fishing trawlers urged, (Dawn, Karachi - 8 March 2007).(Google Search).

Shaheen Rafi Khan, Fahd Ali, Azka Tanveer, Compliance with International Standards in the Marine Fisheries Sector: A Supply Chain Analysis from Pakistan [Sustainable Development Policy Institute (SDPI) For The International Institute of Sustainable Development (IISD)] November 27, 2005. Google Search)

Shahid Amjad 2000, Fisheries & Coastal Development - BCS Background Paper, IUCN Balochistan Programme Office, Quetta.

Shahid Kardar, The Bitterness of the Baloch, (Dawn, 27 January 2005)

Pamela Stedman-Edwards, Ed. Pakistan Mangroves . (Google Search).

Usman Karim, Will marine fishing be militarised? (April 2007) (Google Search).

Unpublished data: District Wise Statistical Data of development Schemes, Physical Infrastructure etc, Gwadar District Government, DO Planning and Finance.

Unpublished data : District Development Working Group Approved Development Schemes for the Year 2004-05, Gwadar District Government, DO Planning and Finance

Unpublished data Department of Fisheries Gwadar

Map of Gwadar

