

PAKISTAN EMERGENCY SITUATIONAL ANALYSIS



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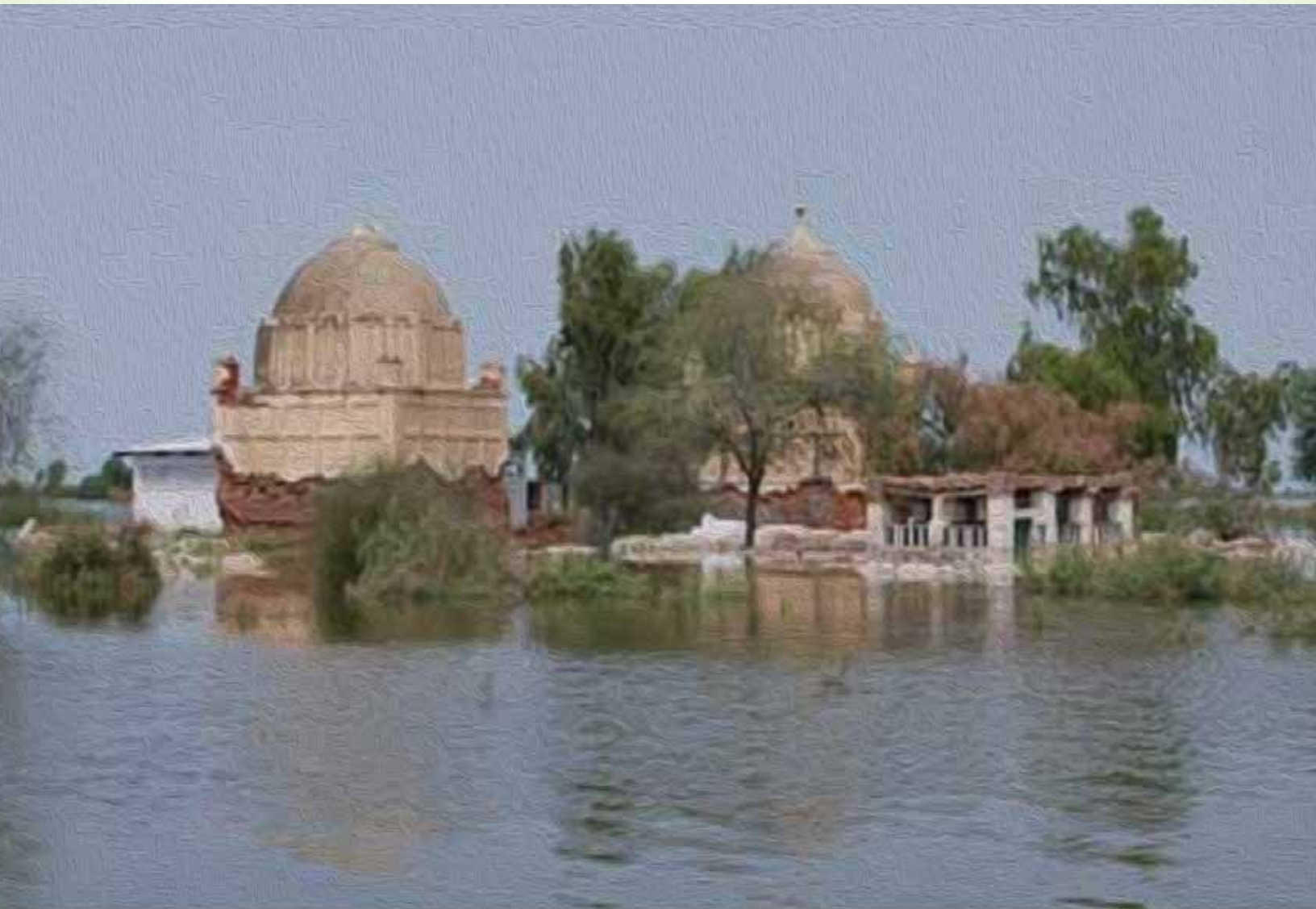
A PROFILE OF **DISTRICT KAMBER SHAHDADKOT**



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District Kamber Shahdadkot, Sindh

“Disaster risk reduction has been a part of USAID’s work for decades.we strive to do so in ways that better assess the threat of hazards, reduce losses, and ultimately protect and save more people during the next disaster.”

Kasey Channell,

Acting Director of the Disaster Response and Mitigation Division of USAID’s
Office of U.S. Foreign Disaster Assistance (OFDA)

PAKISTAN EMERGENCY SITUATIONAL ANALYSIS

District Kamber Shahdadkot

July 2014

“Disasters can be seen as often as predictable events, requiring forward planning which is integrated in to broader development programs.”

Helen Clark, UNDP Administrator, Bureau of Crisis Prevention and Recovery. Annual Report 2011

Disclaimer

iMMAP Pakistan is pleased to publish this district profile. The purpose of this profile is to promote public awareness, welfare, and safety while providing community and other related stakeholders, access to vital information for enhancing their disaster mitigation and response efforts.

While iMMAP team has tried its best to provide proper source of information and ensure consistency in analyses within the given time limits; iMMAP shall not be held responsible for any inaccuracies that may be encountered. In any situation where the Official Public Records differs from the information provided in this district profile, the Official Public Records should take as precedence.

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NOTE:

This district profile is a live document and it will continue to improve based on its users feedback and upon availability of more accurate and authenticated sources as and when they become available. It's not always possible to publish these profiles in hardcopy format; however iMMAP will ensure that these updates are made available on DRR Pakistan Information Management Portal. For updated version of following profile, please visit www.drrpakistan.pk/pesa.

Any questions/ comments concerning information presented in this report can be addressed to:

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Credits

iMMAP has been providing Information Management [IM] and Disaster Risk Reduction [DRR] capacity building services in Pakistan since 2010. Based on our lessons learned, while interacting with thousands of humanitarian partners and government officials, both national and international; we believe that the following are 7 basic requirements to improve Disaster Response and Management life cycle:

1. Information Management [IM] is a must for effective disaster response and monitoring;
2. Coordination among all stakeholders [both national and international] is of utmost importance to reduce redundancy and duplication in such critical situations – going beyond clusters and getting connected with local community representatives;
3. Appropriate logistic arrangements are critical for humanitarian relief and mitigation. However, it must be born in mind that logistic requirements drastically vary from disaster to disaster, based on its time, geography, and nature;
4. Disasters and Development are intimately connected. Its important that all disaster responders are aware of the long term implications of their actions of relief and early recovery;
5. It is important that we, as disaster responders, take full responsibility of self-accountability and transparency not only to the satisfaction of the government officials but the general public as well. Not-for-profit sector must be driven by a cause!
6. National, Regional, and International Public/ Private Partnerships [PPP] is the only way to implement sustainable Disaster Risk Management [DRM] measures;
7. Media must be integrated in our response efforts. This vastly helps to disseminate the right information, minimize duplication of efforts, and make all stakeholders aware of your organization's input/activities.

Pakistan Emergency Situation Analysis [PESA] is a series of District Profiles (DP), which is developed with the above-mentioned 7 basic requirements in focus. PESA DPs are one of the most effective iMMAP IM services in Pakistan, which directly contribute to thousands of humanitarian relief providers' effective emergency response and disaster management.

I can not conclude this note without thanking iMMAP Pakistan team that has contributed tirelessly, under extreme emergency pressure, to consistently deliver their best on time, during the 2010, 2011, 2012, and 2013 floods, 2013 earthquake in Balochistan, and the most recent drought emergency in Tharparkar, Sindh during 2014.

I particularly wish to express my great appreciation and thanks to my mentors, colleagues, and friends Mr. Fayyaz Ali Khan and Ms. Kathrin Lauer for their continuous feedback and reflection on the profiles quality. At many times, I parked their feedback, due to the time constraints of the service we have been trying to deliver. However, their feedback have always been valued and appreciated. Mr. Naeem Ahmad, being the M&E professional, has proven himself to be a gem for iMMAP. I also appreciate the efforts of other staff members who have been with us in the past and many new faces that joined iMMAP recently for their work with an exceptional dedication. This includes: Farooq Laghari, Qassim Jan, Sumbal Kazmi, Salman Mulk, Zohaib Fazal, Hadya Ali, Dr. Ahmad Ali Malik, Fatima Gillani, Fatima Ali, Zeeshan Ahmad, Sarfaraz Meher Din, Muhammad Javed Iqbal, Muneeb Muzamil, Mahwish Muzamil, Tariq Sardar, Wajid Ali, and last but not the least Nouman Ali, our amazingly skilled graphic designer.



Mehdi Bokhari
PESA Project Director

Foreword

Timely response to a disaster may save precious human lives and reduce economic costs. However, natural disasters, typically, occur unexpectedly. Consequently, in most cases, the afflicted population lacks the necessary tools and capacity to handle such tragic occurrences and the devastation is manifold more than it should be.

“Before the next disaster hits, now is the time to recommit to making smart investments that save lives, property, and money. Whether at home or abroad, measures to improve response, increase disaster management capacity, plan and prepare, can have dramatic dividends.” (Kasey Channell: Acting Director of the Disaster Response Team for USAID’s Office of U.S. Foreign Disaster Assistance.) It is so true, as preparation for unexpected calamities is a tough task. However, if certain precautions are taken, they might lessen the overall damage. This series of district profiles, prepared by iMMAP and funded by USAID, is one such effort to enhance Government of Pakistan, humanitarian organizations and all other stakeholders’ efforts towards rapid needs assessment, disaster response and mitigation.

These profiles are divided into four sections namely background information, disaster history and its impact, hazard vulnerability and capacity assessment (HVCA) and coordination and support services. Background information provides an overview of history, geography, culture, and communication infrastructure. It also provides detailed analyses of demography, livelihood, food security, health and education. The second section provides detailed history of disasters in the district; information about losses and damages; and gap analyses of above mentioned sectors. HVCA section provides detailed analyses of district hazards, vulnerabilities and capacities that exist in the local community. Coordination and support services section gives information on whom to contact in emergency/disaster situations. The motivation stems from the idea that at the time of disaster all the stakeholders in general and the donors and disaster managers in particular can have a fair idea of what to expect and how to prepare for. It is expected that this contribution of USAID and iMMAP would lead to a well-coordinated and coherent response by different humanitarian organizations on managing similar disasters.

Having stated the above, it is very candidly admitted that these profiles are by no means exhaustive and in fact require a lot more input to qualify these as good enough documents for disaster preparedness. However, these are live documents and would be improved upon as and when required. There appears to be an element of repetition, which is owed to the fact that while these documents depict the district profiles in normal circumstances, the same then provide a detail account of the impact of the emergency assistance provided by the government and the humanitarian organizations and the remaining gaps. Due to time and resources constraints, the information provided in these profiles is mainly base on secondary source data. Depending on the end users’ response and funding availability, this exercise would be extended to other districts of the country.



Major (Retd) Tahir Iqbal
iMMAP Pakistan
Chairman

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DISTRICT KAMBER SHAHDADKOT AT A GLANCE

Population 1998 **900,507 persons**



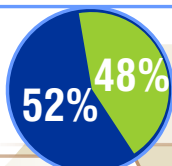
Population Density
244 per Sq. Km

2.89%

Average Annual Growth Rate (1981 - 98)



Male
192,943



Female
181,275



Average Household Size
5.7



Sex Ratio **106**
Males per 100 females

Administrative Units

Taluka	7
Union Councils	40
Mouzas	283

Population 2013

1,383,832 Persons

Area

5,675.66
Sq. Kms

Rural Population

399,992
29%

Urban Population

983,840
71%

Health & Education



Health Facilities **64**



Educational Facilities **1,631**

Literacy Rate
2012-13
(10+)

42%



Male
59%



Female
23%



Infant Mortality Rate
81/1,000 Live Births

Under 5 Mortality Rate
101/1,000 Live Births

Maternal Mortality Ratio
314/100,000 Live Births

Electoral Representation

Male	271,727
Female	224,695
National Assembly Seat: 2	(NA-205, NA-206, NA-207)
Provincial Assembly Seat: 3	(PS-39, PS-40, PS-42)

Registered Voters
496,422



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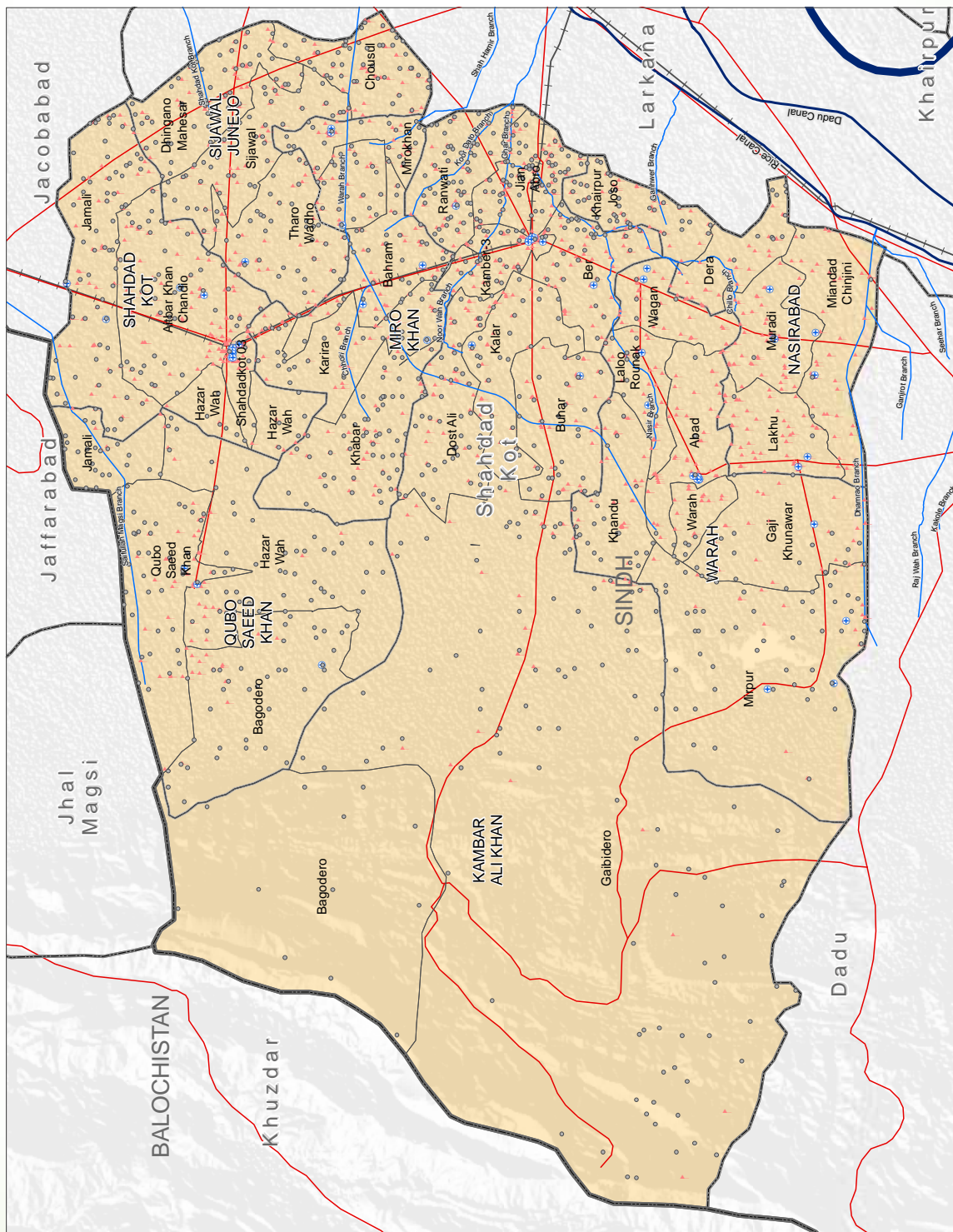
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Kamber Shahdaktot - Reference Map

July, 2014



Legend

-
- Legend:
- Settlements
 - Health Facilities
 - Education Facilities
 - Indus River
 - Canals
 - Branch Canals
 - Province boundary
 - District boundary
 - UC boundary
 - Taluka boundary
 - Roads
 - Railway



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July 14, 2014

Projection/Datum:
WGS84

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<http://www.immap.org>

Map data source(s):
 Alhassan Systems Private Limited : Admin
 boundaries, Health Facilities, Education Facilities
 National Geospatial Agency : Settlements
 Logistic Cluster-WFP: Roads, Railway
 Sindh Irrigation and Drainage Authority (SIDA) : Rivers

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Acronyms

ACO	Agriculture Census Organization
BHU	Basic Health Unit
CD/GD	Civil Dispensary/Government Dispensary
CFW	Cash For Work
DCR	District Census Report
DDRMP	District Disaster Risk Management Plan
ECP	Election Commission of Pakistan
FAO	Food and Agricultural Organization
GER	Gross Enrolment Rate
GOS	Government of Sindh
HH	Household
NADRA	National Database and Registration Authority
NDMA	National Disaster Management Authority
NDP	National Drainage Program
NER	Net Enrolment Rate
NFIs	Non-Food Items
NGO	Non-Governmental Organization
NHA	National Highway Authority
PBS	Pakistan Bureau of Statistics
PCO	Population Census Organization
PDMA	Provincial Disaster Management Authority
PLW	Pregnant and Lactating Women
PSLM	Pakistan Social and Living Standard Measurement Survey
RHC	Rural Health Centre
RSU	Reform Support Unit
SDPI	Sustainable Development Policy Institute
SMCs	School Member Committees
SUPARCO	Space and Upper Atmosphere Research Commission
TRF	Technical Resource Facility
UC	Union Council
UNICEF	United Nations Children's Fund
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
WFP	World Food Program
WHO	World Health Organization

1 Background Information

1.1 Introduction

1.1.1 History

The history of Kamber Shahdadt is akin to its surrounding districts i.e Larkana, Shikarpur and Jacobabad. This district was a part of the region ruled by Kalhoros and Talpurs. Both these dynasties are the decedents of Abbasids. They arrived in Sindh during the invasion of Nadir Shah. According to historical records, Shahdadt was founded around 1713. It was a major town on the route between Larkana and Gandawah¹. Kalhoro dynasty ruled this area from 1700 to 1783 and the Talpur dynasty ruled from 1783-1843. However, the Talpurs were overthrown by the British East India Company, led by General Charles James Napier².

During the British rule, the town of Jacobabad was the administrative headquarters of the Upper Sind Frontier District of the Bombay Presidency. General John Jacob, who was sent as Brigadier General, established many outposts to protect Upper Sindh Frontier from mountain robbers. These outposts guarded the border from 1839 to 1858 through Dost Ali, Shahdadt, Garhi Khero, Rojhan, Jacobabad, Dilmurad, Garhi Hassan, Tangwani, Kandh Kot, Kunri and Kashmore posts. He constructed roads, bridges and canals to develop Garhi Khero, Shahdadt, Kamber and Larkana areas and brought peace and trade. John died in 1858. The Indian British government then made Shahdadt a taluka of Upper Sindh Frontier Jacobabad District in 1883-84³. Later on, after independence, Kamber and Shahdadt both remained talukas of District Larkana. In 2005, the government of Pakistan bifurcated Larkana forming a new district called Kamber Shahdadt, including the towns of Kambar Khan and Shahdadt

1.1.2 Geography

District Kamber-Shahdadt is situated in the north-west of Sindh, Pakistan. The district lies between 67° 10' to 68° 12' east longitude and 27° 26' 31" to 27° 58' 55" north latitude. It is bounded by district Larkana in the east, Baluchistan province in the north-west, district Shikarpur and Jacobabad in the north-east and district Dadu in the south.

The Climate of Kamber Shahdadt district is similar to that of Jacobabad, which is the severest in the province as well as in the country. The climate of Kamber Shahdadt district is mainly dry, with rain-fall varying between 5 to 10 inches (or 127 to 254 mm) in a year. The highest temperature ever recorded in Sindh was 53.5 °C (128.3 °F), which was recorded in Mohenjo daro on 26 May 2010. It was not only the hottest temperature ever recorded in Pakistan but also the hottest, reliably measured, temperature ever recorded in the continent of Asia and the

¹ The Profile of District Kamber Shahdadt, 2011, Saroh Social Development Organization Shahdadt,

² <http://en.wikipedia.org/wiki/Talpur>

³ Javed, A. (2011), *The Social, Administrative and Literary Services of Mahraj Gopi Krishan for Shahdadt Sindh* (Master's Thesis), Department of Sociology, Shah Abdul Latif University Khairur Sindh Pakistan

fourth highest temperature ever recorded on earth. Mohenjodaro is only 47 Kilometers away from Kamber Shahdadt⁴.

1.1.3 Culture (Ethnicity, Religion and Politics)

Kamber Shahdadt is the centre of Sindhi, Balochi and Brahui cultures. The Architecture of Kamber Shahdadt has a long history, starting from Indus Valley Civilization to the present times. The cultural heritage of this land is highly inspired by Mughal and Rajputana/ Jaisalmir architecture that are reflected in Kalhora's monuments. Muslims are in majority with (98.45%), while the Hindus (1.42%), Christians (0.06%) are minorities of this district. The culture and traditions of this district are the same as found elsewhere in Sindh. People wear *Shalwar Kameez* and Sindhi cap. Sindhi is spoken by majority of the population (95.08 %), followed by Urdu (3.57%), Balochi (0.5%) and Punjabi (0.5%)⁵.

Politics of this district revolves around two feudal families, mainly, Chandios and Magsis. Historically, Pakistan People's Party (PPP) has political hold in this area. The talukas of Kamber Shahdadt had been part of Larkana district for a long time. It is said that to weaken this PPP citadel and accommodate the Chandios, ex-chief minister, Arbab Ghulam Rahim, carved a new district out of Larkana comprising of the two talukas. Sardar Khan Chandio of the PMLQ is pitted against PPP's Mir Amir Ali Khan Magsi, a former senator and the brother of two politicians, former Balochistan chief minister Zulfiqar Magsi and Sindh provincial minister Nadir Magsi. In the last elections, both of the National Assembly seats of this district were won by Pakistan People's Party Parliamentary (PPPP) candidates: Mr. Mir Amir Khan Magsi and Mrs. Faryal Talpur (sister of the President of Pakistan, Mr. Asif Ali Zardari).

1.1.4 Administrative Division

District Kamber Shahdadt consists of seven talukas, named: Warah, Kamber, Kubo Saeed Khan, Shahdadt, Sujawal Junejo, Mir Khan and Nasirabad. There are 40 union councils in the district, spread over 269 dehs. There are 283 mouzas (revenue villages), out of which 243 are rural, 4 are urban, 30 are partly urban and 6 are un-populated.

Table 1.1-1: Administrative Division of District

Kamber Shahdadt	Knungo Circles/ Supervisory Tapas	Patwar Circles/ Tapas	Number of Mouzas					
			Total	Rural	Urban	Partly urban	Forest	Un-populated
Warah	3	12	44	29	1	9	-	5
Kambar	4	18	62	56		5	-	1
Kubo Saeed Khan	3	8	38	34		4	-	-
Shahdadt	3	8	39	35	1	3	-	-
Sujawal Junejo	2	7	32	31	1	-	-	-
Mir Khan	2	7	38	37	1	-	-	-
Nasirabad	3	10	30	21		9	-	-

⁴ The Profile of District Kamber Shahdadt, 2011, Saroh Social Development Organization Shahdadt

⁵ http://en.wikipedia.org/wiki/Larkana_District

Kamber Shahdadkot	Knungo Circles/ Supervisory Tapas	Patwar Circles/ Tapas	Total	Number of Mouzas				
				Rural	Urban	Partly urban	Forest	Un- populated
TOTAL	20	70	283	243	4	30	-	6

Source: Mouza Statistics of Sindh 2008, Agriculture Census Organization

1.1.5 Road Network Infrastructure

The district has a good network of roads connecting the towns and villages. From Kamber (district headquarters), roads lead to Larkana (east), gharhi Badero (west), Shahdadkot, Qubo Saeed Khan and Khuzdar (north), Miro Khan and Sajawal Junejo (north west), Ratodero (north east) and Khair Pur Juso (south west). Most roads are metalled and, where needed, bridges and culverts have been constructed.

The Ratodero Gawader Motorway is an 892 km long project. A 64 km long portion of this motorway passes through the district. This is a 7.3 meters wide, four lane road, with 3 meters wide paved shoulders and has five bridges and 154 culverts. The estimated cost of the project is PKR 1,081 million. It is constructed by the National Highway Authority (NHA). The project will be completed in 2016⁶.

⁶ The Profile of District Kamber Shahdadkot, 2011, Saroh Social Development Organization Shahdadkot

1.1.6 Irrigation

Sukkur Barrage is the main source of irrigation in this district. The names of main canals and branches are as follows: Ghar Wah, Noor Wah, Shahdadkot Branch, Tanwary, Patooja, Kot Shahbeg, Qubo, Saifullah Magsi Branch, Edan, Begari, Dhor, Rabbi, Koor Dato, Koor Shah.

Though agriculture is mainly dependent upon canal irrigation in this district, tube wells and river irrigation are also used here. Table 1.1-2, given below, shows the total irrigated area of district Kamber Shahdadkot by different modes of irrigation. Out of 273 rural mouzas, 263 (96%) are irrigated through canals.

Table 1.1-2: Mouzas Reporting Sources of Irrigation

ADMINISTRATIVE UNIT	RURAL POPULATED MOUZAS	NUMBERS OF MOUZAS REPORTING SOURCE OF IRRIGATION						
		CANAL	RIVER	TUBEWELL /WELL	RAVINE	SPRING/STREAM/KAREZ	ARID (BARANI)	FLOODING/TORRENT
Kambar Shahdadkot District	#	273	263	2	3	-	1	4
	%	100	96	1	1	-	-	1
Warah taluka	#	38	32	1	3	-	-	3
	%	100	84	3	8	-	-	8
Kambar taluka	#	61	58	-	-	-	3	-
	%	100	95	-	-	-	5	-
Kubo Saeed Khan taluka	#	38	37	1	-	-	1	1
	%	100	97	3	-	-	3	3
Shahdadkot taluka	#	38	38	-	-	-	-	-
	%	100	100	-	-	-	-	-
Sujawal Junejo taluka	#	31	31	-	-	-	-	-
	%	100	100	-	-	-	-	-
Mir Khan taluka	#	37	37	-	-	-	-	-
	%	100	100	-	-	-	-	-
Nasirabad taluka	#	30	30	-	-	-	-	-
	%	100	100	-	-	-	-	-

Source: Mouza Statistics of Sindh 2008, Agriculture Census Organization

In the year 2008-09, 99% of the net sown area was irrigated and from this irrigated area 100% was irrigated through canals and tube wells. From 2008-09 to 2009-10, there is almost 1.5% decrease in canal irrigated area. The table below gives information regarding irrigation in the district.

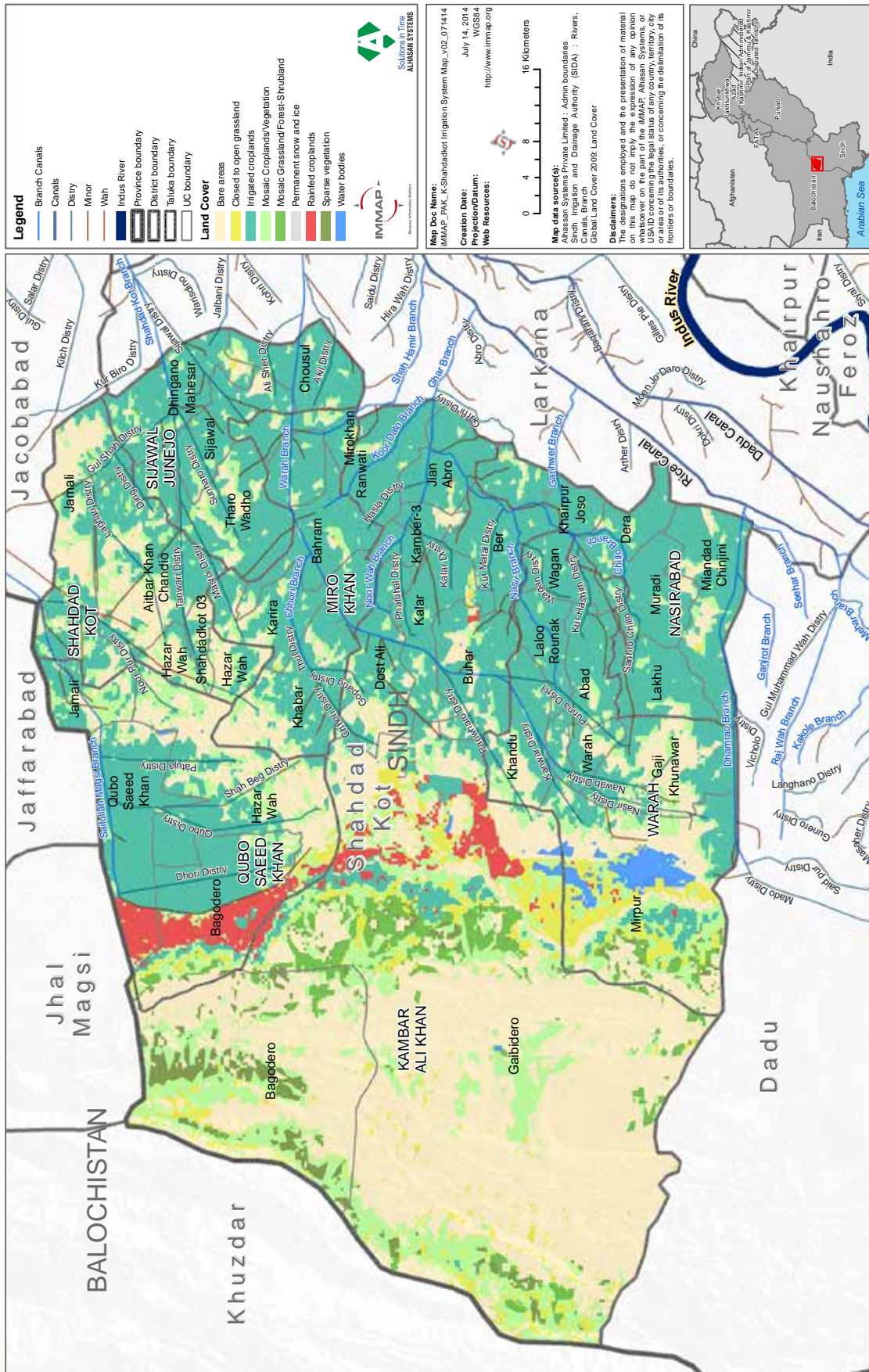
Table 1.1-3: Irrigation by Type

Irrigation Type	2008-09	2009-10
Canal	99,042	70,112
Tube well	3,950	3,927
Total Irrigated Area	102,992	74,039
Un-Irrigated	1,021	6,988
Total Sown Area	104,013	81,027

Source: Table 4.36 Sindh Development Statistics 2011

Kamber Shahdadkot - Irrigation System Map

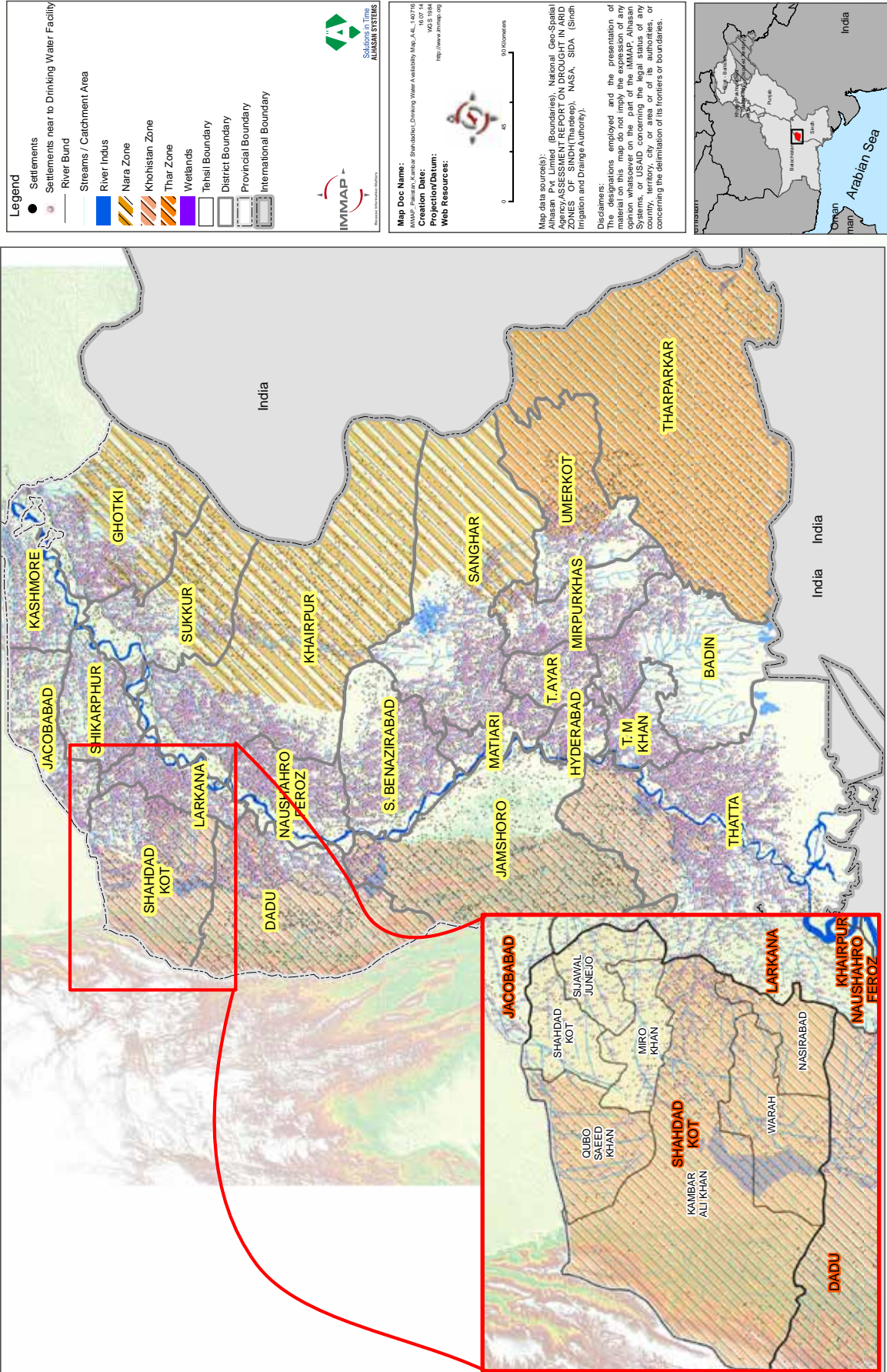
July, 2014



BACKGROUND INFORMATION

6

Sindh-Kambar Shahdadt Surface/ Drinking Water Availability Map Date (July 2014)



1.1.7 Solid Waste Management

“Solid Waste Management (SWM) is the generation, separation, collection, transfer, transportation and disposal of waste in a way that takes into account public health, economics, conservation, aesthetics, and the environment, and is responsive to public demands.”⁷

Current Scenario of Solid Waste Management (SWM)

In district Kamber-Shadadkot, three 07 TMAs in the concerned 40 UC's are responsible for the solid waste management, drainage and sanitation and water supply facilities. Nevertheless, district has poor solid waste management facilities and is partially provided in the urban areas of Kamber and Shahdadkot. Whereas, rural areas of the district on Union council level are lacking appropriate sanitation and waste management facilities.

Likewise other many districts of Sindh, District Kamber-Shadadkot also lack no updated data on solid waste management. However, certain project reports focusing the water and sanitation (WATSAN) and solid waste management (SWM), as well as, media/press release about the concerned district can be useful for understanding the situation.

The Pakistan Council of Research in Water Resources (PCRWR) disclosed in a recently-published report that ninety percent (90%) of the water supply schemes in nine districts of Sindh as well as sanitation facilities were completely washed away during the 2010 floods. The report further states that the water supply schemes in major portions of Larkana, Kamber Shahdadkot, Shikarpur, Ghotki, Dadu, Jamshoro, Badin, Thatta and Kashmore Kandhkot districts have completely been destroyed⁸.

Another report, compiled by the Ideal Rural Development Programme (IRDP), states that almost all freshwater sources of Sindh, including River Indus and its off canals, watercourses and freshwater lakes, have been contaminated with industrial effluents as well as dumping of domestic and even solid waste⁹.

In Karachi on March 7, 2014: In a meeting between Chief Minister Sindh Syed Qaim Ali Shah and his team and US-Aid Programme led by acting US Consul General Mr. Leon Stephen Waskin held at CM House Karachi. In this meeting, Modalities to implement on four year Sindh Municipal Services Delivery Programme (MSDP) jointly being carried out by US-Aid and Sindh Govt. since 2011 in some selected secondary cities / town affected by 2010 flash flood, were discussed and deliberated. Under this programme five towns including Jacobabad, Kamber Shahdadkot, Mehar and Khairpur Nathan Shah were identified to improve basic services deliveries, upgrade provincial infrastructure system and monitoring evaluation and establish a collaboration partner relationship between USAID and Sindh Govt. for Urban Sector policy programme.¹⁰

⁷ Journal of Environmental and Occupational Science Environ Occup Sci 2012; 1(2):129-131

⁸ <http://thar-parkar.blogspot.com/2011/09/flood-victims-still-awaiting-access-to.html> :Media/blog release; News accessed on June 15, 2014

⁹ Ibid

¹⁰ <http://mediacellppp.wordpress.com/2014/03/07/c-m-sindh-appreciates-the-gesture-of-usaid-specially-for-the-social-development-in-sindh/>: PPP Media Cell; News accessed on June 16, 2014

Accordingly 66 million US Dollar are being invested by US-Aid Management in addition to the Sindh Govt. investment of Rs: 926.5 million. This Programme was decided to be complete in two phases, as in 1st Phase Jacobabad has to be taken into hand for infrastructure up gradation of water supply, rehabilitation of sanitation system and solid waste collection & disposal system. While the remaining towns of the project would be taken in to hand in second phase. For this purpose USAID has already engaged a short term consultant M/s Halcrow for comprehensive engineering, assessment of existing municipal infrastructure, identify gaps, social analysis and current environment issues and the consultants are currently visiting these towns of second phase¹¹.

¹¹ <http://mediacellppp.wordpress.com/2014/03/07/c-m-sindh-appreciates-the-gesture-of-usaid-specially-for-the-social-development-in-sindh/>; PPP Media Cell; News accessed on June 16, 2014

1.2 Demography

1.2.1 Population Characteristics

In Pakistan, male population is more than the female population and is among those four countries where life expectancy for female, at birth, is less than that of males¹². Sex ratio in Kamber Shadadkot is 108 male per 100 females, which is more than the ratio at the National level that is 106. Though there could be other possible reasons for such a difference in male to female ratio, one probable reason could be underreporting of females during national surveys. Besides, a very high maternal mortality rate and poor health care, at the district and provincial level, are likely to be instrumental for this difference¹³. Like majority of the other districts in Sindh, district Kamber Shahdadt is rural by its characteristics. 71¹⁴ percent of the population resides in rural area as compared to the 29 percent that resides in the urban areas.

Table 1.2-1: Estimated Population of District for 2013

AGE GROUP (IN YEARS)	TOTAL			RURAL			URBAN		
	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE
ALL AGES	1,383,832	713,490	670,342	983,840	506,624	477,216	399,992	206,866	193,126
00 -- 04	243,112	122,467	120,645	178,587	89,471	89,117	64,525	32,997	31,528
05 -- 09	241,186	127,671	113,516	175,032	92,949	82,083	66,155	34,722	31,433
10 -- 14	161,306	90,724	70,582	111,471	63,700	47,771	49,835	27,024	22,811
15 -- 19	138,824	68,668	70,156	94,762	46,556	48,206	44,062	22,112	21,950
20 -- 24	124,149	58,974	65,176	86,877	40,838	46,039	37,272	18,136	19,137
25 -- 29	102,112	51,953	50,159	71,928	36,351	35,577	30,184	15,602	14,582
30 -- 34	79,408	41,528	37,880	55,779	28,884	26,894	23,629	12,644	10,986
35 -- 39	62,917	32,989	29,928	44,363	23,093	21,270	18,554	9,895	8,659
40 -- 44	57,959	28,344	29,615	40,889	19,929	20,960	17,070	8,415	8,655
45 -- 49	38,281	20,031	18,250	27,294	14,277	13,017	10,986	5,753	5,233
50 -- 54	24,697	13,079	11,618	17,423	9,175	8,248	7,274	3,904	3,370
55 -- 59	26,155	13,750	12,405	19,077	10,120	8,957	7,078	3,629	3,448
60 -- 64	13,397	7,015	6,382	9,615	5,027	4,588	3,782	1,988	1,794
65 -- 69	12,451	6,469	5,983	9,315	4,891	4,424	3,137	1,578	1,559
70 -- 74	11,776	5,899	5,877	8,864	4,528	4,337	2,912	1,372	1,540
75 & ABOVE	5,742	2,957	2,786	4,458	2,319	2,139	1,284	637	647

Source: Estimated using Table 4 for Rural Sindh census 1998

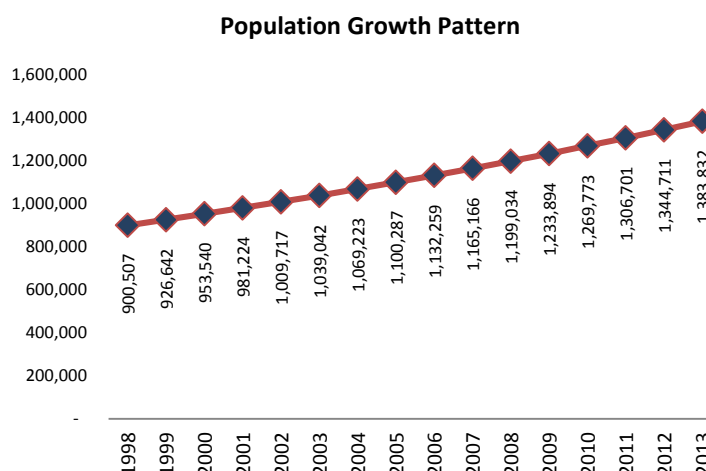
¹² A profile of District Badin, 2009. South-Asia Partnership Pakistan

¹³ Mean distance from hospital/dispensary is 12 km for Sindh: Pakistan Mouza Statistics, Table 15

¹⁴ Since Larkana is divided into two districts, Kamber Shahdadt and Larkana, the population would have been different otherwise.

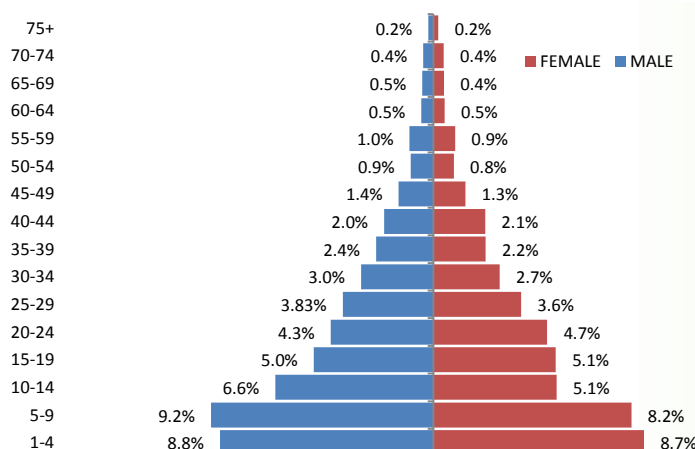
1.2.2 Population Growth Pattern

Total population of the district, in 1998, was 9000,507¹⁵. Population of district Kamber Shahdaskot has an estimated growth rate of 2.89% per annum, which means that the population would double itself in 24.22 years¹⁶, from 1998. 46.65 percent of the population is below 15 years of age and 2.17 percent is 65 years or above. The estimated population for 2013 is 1,383,832¹⁷, showing a 54% increase in 15 years from 1998.



1.2.3 Population Distribution by Age and Gender

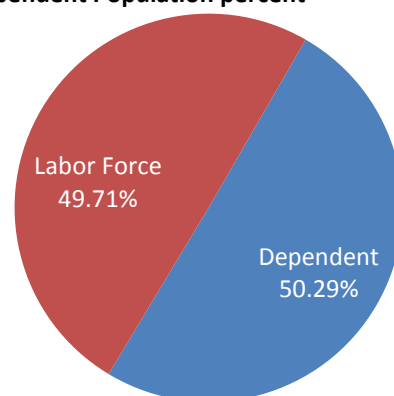
Out of the total population, 52 percent are males and 48 percent are females. Largest cohort of population is 0-4 years, which decreases with 5 years interval. Total population in this cohort is 243,112. Except the age groups 15-19, 20-24 and 40-44, in all the rest of the age groups, male population out numbers female population.



1.2.4 Dependent Population

The economically dependent population is considered to be the population that is less than 15 years and more than 65 years of age. In addition to them, widowed, and/or divorced women are also considered dependent population. Dependent population in the case of Kamber

Dependent Population percent



¹⁵ Population for the Talukas in Kamber Shahdaskot District for 1998

¹⁶ Rule of 70 <http://controlgrowth.org/double.htm>

¹⁷ UNOCHA

Kamber Shahdadkot District is 50.29 percent of the total population and the working population is 49.71 percent, which shows that dependency ratio¹⁸ in the district is 101 percent.

Table 1.2-2: Population Details by Taluka

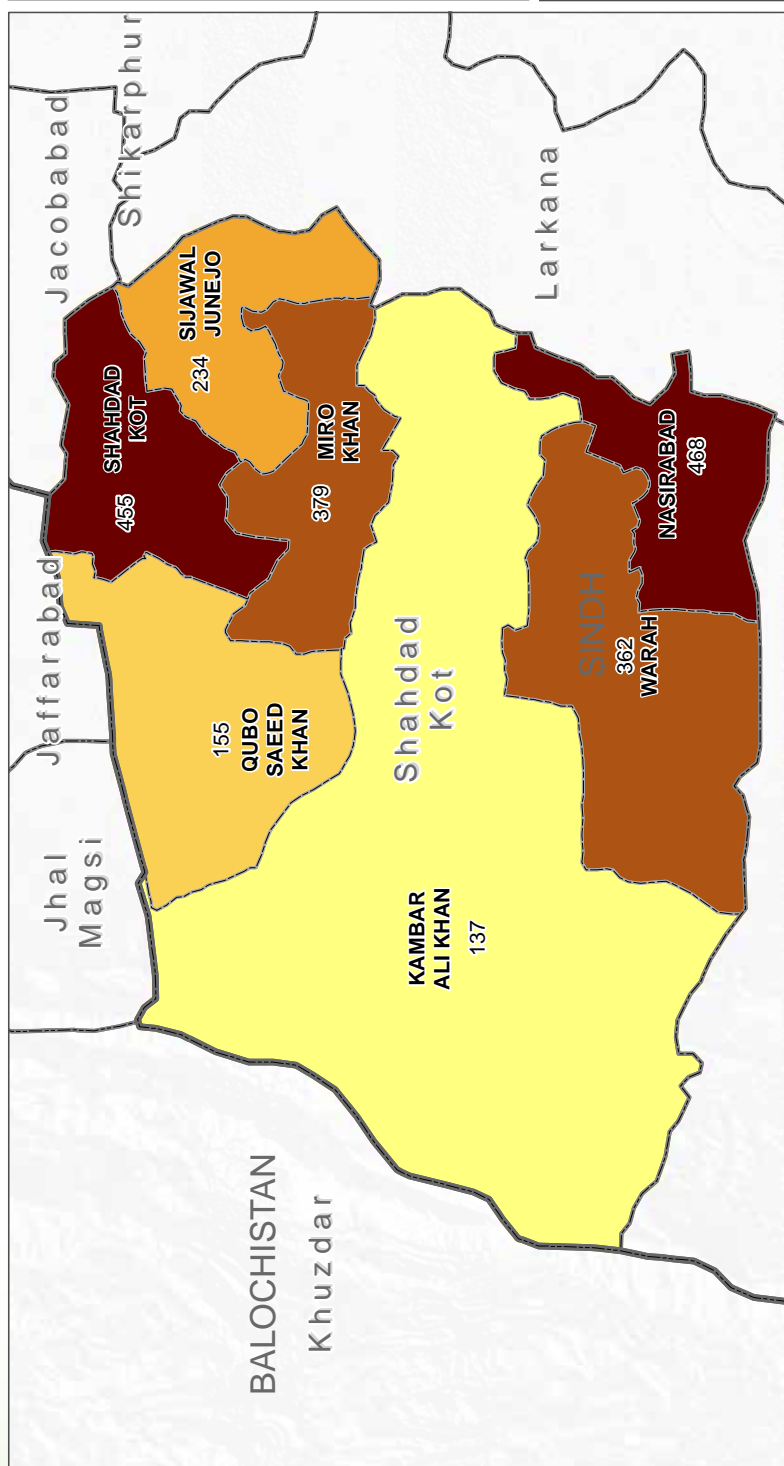
<i>Taluka</i>	<i>Population</i>	<i>Male</i>	<i>Female</i>	<i>Pop Density</i>	<i>Sex Ratio</i>	<i>Average HH Size</i>	<i>Estimated HHs</i>
Kamber Ali Khan	374,218	192,943	181,275	137	106	5.8	64,520
Miro Khan	151,452	78,087	73,365	379	106	5.6	27,045
Nasirabad	174,445	89,942	84,503	468	106	5.7	30,604
Qubo Saeed Khan	97,674	50,360	47,314	155	106	5.7	17,136
Shahdad Kot	183,382	94,550	88,832	455	106	6.2	29,483
Sujawal Junejo	127,295	65,632	61,663	334	106	5.7	22,332
Warah	275,366	141,976	133,390	362	106	5.3	51,956
Total	1,383,832	713,490	670,342	244	106	5.7	243,077

Source: Estimated using Table 1, District Census Report 1998

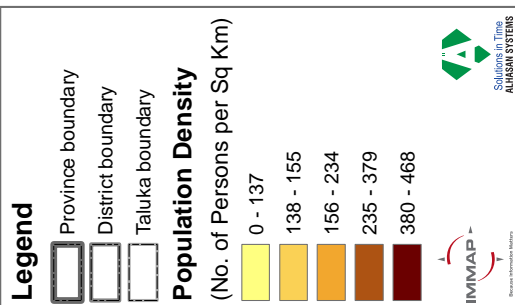
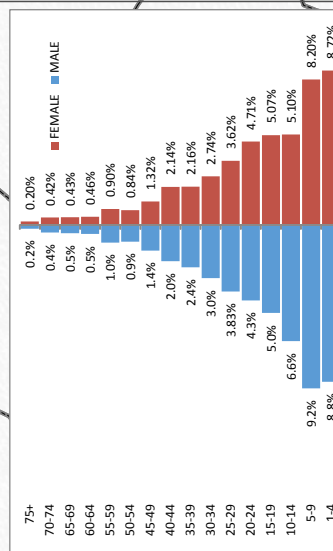
¹⁸ Dependency Ratio= (Population < 15 Years + Population > 65 Years)/ Population 15-65 Years



Kamber Shahdadkot- Population Density Map July, 2014



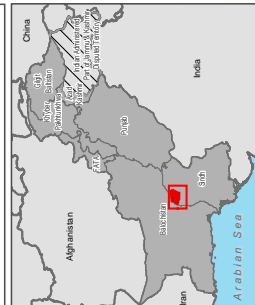
Summary of Estimated population 2013			
Taluka Name	Area (Km ²)	Population	Pop.Density (No./ Km ²)
Kamber Ali Khan	2,729.96	374,218	137
Miro Khan	399.10	151,452	379
Nasirabad	372.71	174,445	468
Kubo Saeed Khan	630.83	97,674	155
Shahdad Kot	402.60	183,382	455
Suiawal Junejo	380.72	127,295	334
Warah	759.73	275,366	362
Total	5,676	1,383,832	244



Map Doc Name : IMMAP_PAK_K-Shahdadkot Pop. Density Map_v02_071414
Creation Date : July 14, 2014
Projection/Datum : WGS84
Web Resources : <http://www.immap.org>

Map data source(s):
Alhasani Systems Private Limited; Admin boundaries
Population: Derived from table 1, district census report

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1.3 Livelihood

1.3.1 Main Sources of Livelihood/Income

The district is enriched with amenities required for livelihood. Primarily, Kamber Shahdadt is an agro-based economy where most of the income is generated from agriculture and daily wage labour. The bazaars at every taluka headquarter have abundance of products and are busy. Grains, fruits and vegetables markets remain open and the whole sellers mostly operate through commission agents. These commission agents are in direct contact with all the important markets of the country

Table 1.3-1: Number of Mouzas Reporting Sources of Employment

GENDER	QUANTIFICATION	SERVICE	AGRICULTURE	TRADE	INDUSTRY	PERSONAL BUSINESS	OVERSEAS EMPLOYMENT	LABOUR
MALE	MOSTLY	5	146	0	0	3	1	38
	SOME	244	112	38	8	107	101	224
	NONE	24	15	235	265	163	171	11
FEMALE	MOSTLY	0	81	0	0	0	0	82
	SOME	139	116	2	2	43	14	132
	NONE	134	76	271	271	230	259	59

Source: Mouza Statistics of Sindh: 2008, Agriculture Census Organization

The categories under which these mouzas have reported against different livelihood sources are:

- Mostly: population of 50 percent and above
- Some: population between 1 percent and 50 percent
- None: less than or equal to 1 percent

The above table reveals the sources of employment for the people of district Kamber Shahdadt. Out of the 273 rural mouzas, 258 (94%) reported agriculture as the source of employment for male population. The table also reveals that casual labour is frequent in this district, as 95% of the mouzas reported casual labor as a major source of employment for male population. Services and personal businesses are also major sources of employment for some of the population. Agriculture sector is a major employer for the female population also as 197 (71%) mouzas reported it as a source of employment for female population. It can be ascertained that, in the category of mostly and some, for both male and female population; agriculture, labour, services and personal business are the major sources of employment. Average per month income of the family is estimated to be equal to national monthly per capita income of Rs. 8,960/-¹⁹.

1.3.2 Agriculture

Major Crops of district Kamber Shahdadt are rice, wheat, jowar, bajra, gram & chickling. Seasonal vegetables are cultivated in every taluka. Some Vegetables are also grown in some of

¹⁹ Economic Survey of Pakistan (2012), Ministry of Finance, Government of Pakistan

the farmlands during cold season. Other important agricultural products are sugarcane, pulses, maize, oil Seeds, mutton and poultry.

As majority of the people belong to farming class and depend upon agriculture for the source of income, their income increases and decreases depending upon the quality and sufficient availability of water for rice crop, which is major cash crop of the district.

The annual production of wheat and rice in 2008-09 was 89.3 (000 Tonnes) and 288.8 (000 Tonnes) respectively. As mentioned above, other crops such as jowar, cotton and sugarcane are also cultivated in the district but at a very minimal level.

Area sown and production of food and cash crops in 2008-09 are reported in Table 1.3.2.

Table 1.3-2: Food and Cash Crops Cultivated in the district

Type	Crop	Area Sown in 2008-09 (000 Hectares)	Production in 2008-09 (000 Tonnes)	Area Sown in 2010-11 (Acres) FAO
Food	Wheat	32.1	89.3	-
	Rice	82.6	288.8	208,701
	Jowar	2	1.4	-
Cash	Sugarcane	0.2	9.7	524
	Cotton	-	-	-

Source: Crop Area and Production by Districts for 28 Years; 2008-09 *Pakistan Bureau of Statistics (PBS)*

1.3.3 Industry

The small industries of the district include the following: electronic goods, agricultural tools, construction material and food processing through bakeries and shops, iron and steel, tractor trolleys, bullock and donkey carts. There are no large scale industries present in the district.

While major exports of the district are wheat, rice, mangoes, lemons, watermelons, dates, vegetables, handicrafts, leather items, embroidery pieces, Sindhi caps and animal hide, the main imports are medicines, vehicles, iron ore, petroleum, edible oil, and cosmetics²⁰.

1.3.4 Livestock

Total livestock population in the district is 1,255,172²¹. Livestock is one of the major sub-sector of agriculture and backbone of Pakistan's economy. It not only provides rich food such as meat, milk, eggs, poultry meat, but also produces essential raw material such as manure, offal, trotters, hides and skins, wool and blood for various kind of industries. Livestock has been a major source of income for the people of Kamber Shahdadkot. This district has vast potential for establishing livestock farming in the district.

Table 1.3-3: Livestock Population of the District

Cattle	Buffaloes	Sheep	Goats	Camels	Horses	Mules	Asses	Poultry
229,617	357,132	159,938	351,413	883	1,418	168	72,740	1,126,848

Source: Livestock Census 2006

²⁰ The Profile of District Kamber Shahdadkot, 2011, Saroh Social Development Organization Shahdadkot

²¹ Livestock Census 2006

1.4 Food Security

Food security can be broadly divided into four components:

- **Availability** of food in terms of sufficient quantity available through domestic production or imports
- **Access** to adequate resources given the socio-political and economic arrangements of the community
- **Utilization** Refers to the body's ability to make use of the nutrients provided. This requires clean water sanitation and health care
- **Stability** includes an all-time access and utilization of food without any fear of losing it due to any shock (natural calamity, economic shock). This component points out to sustainability of food in an area.

1.4.1 Availability

In this district, wheat and rice is produced for meeting food requirement as major crops along with other crops such as sugarcane, pulses and vegetables. Maize, pulses and vegetables are produced in relatively lesser quantities in the district as the below table shows. Wheat and rice are cropped in 80% and 89% of the mouzas respectively. The overall crop based food availability is sufficient in Kamber Shahdadkot district²².

Table 1.4-1: Number of Mouza Reporting Major Crops

ADMINISTRATIVE UNIT	NUMBERS OF MOUZAS REPORTING MAJOR CROPS							
	WHEAT	RICE	COTTON	SUGARCANE	MAIZE	PULSES	ORCHARDS	VEGETABLES
District	219	245	2	8	5	20	-	11
Warah	37	29	-	6	2	8	-	6
Kambar	46	59	-	-	1	4	-	-
Kubo Saeed Khan	32	30	-	-	-	-	-	1
Shahdadkot	36	32	1	-	-	-	-	-
Sujawal Junejo	31	31	-	2	-	-	-	-
Mir Khan	35	34	1	-	2	8	-	4
Nasirabad	2	30	-	-	-	-	-	-

Source: Mouza Statistics of Sindh: 2008, Agriculture Census Organization

Food availability not only depends on the obtainability of wheat but also rests on availability of other cereals like rice, maize etc. Rice is also produced in surplus quantity whereas maize production falls short of the requirement in this district. As far as cereal food is concerned, this district is producing surplus food for the consumption of its residents. Besides cereals, animal based food availability (meat and milk products) is also important for total food availability. As far as animal based food self-sufficiency is concerned, this district is deficient in production of animal-based food against its requirements. Nonetheless, combining both, crop based and animal based food availability, Kamber Shahdadkot is self-sufficient²³.

²² Food Insecurity in Pakistan (2009), Sustainable Development Policy Institute (SDPI), Islamabad

²³ *ibid*

1.4.2 Access

Per capita availability of food items alone is not a reliable indicator of food security. If the available food is socio-economically not accessible to the masses, the community is food insecure. Certain other indicators like household income, inflation, child dependency and monthly food expenditures depict the overall access to food of a community. The average monthly income of households (HH), in the district, is less than Rs. 11,000/-, which, according to the food security perspective, is considered extremely low²⁴. Child dependency (ratio between children and household members in economically active age group) is one of the limiting factors in meeting the daily food needs of households and is an important indicator to measure access to food. The increased dependency ratio increases spending of the household on child care and food, which results in a per capita reduction of socio-economic access to food. Child dependency ratio is high in this district. The share of household expenditures on food is 61.8% of the total income²⁵. So the low level of income, high food expenditures, high child dependency and high inflation (particularly food inflation) hinders access to food.

The following table shows physical access to food in the district Kamber Shahdadt, by giving distances of mouzas from the wholesale markets. Average distance from the fruit, vegetable and the grain markets of a mouza is 17 kms. Such long distances impede access to food.

Table 1.4-2: Distance of Mouzas from Wholesale Markets

Type of facility		Rural Populated Mouzas	Overall Mean Distance (KM)	Mouzas by Distance (in Kilometres) by Facility				
				Less Than 1	1 - 10	11 – 25	26 – 50	51 & Above
Livestock Market	Number	273	15	11	119	110	33	-
	Percent	100		4	44	40	12	-
Grains Market	Number	273	17	9	106	109	45	4
	Percent	100		3	39	40	16	1
Fruit Market	Number	273	17	7	100	113	46	7
	Percent	100		3	37	41	17	3
Vegetable Market	Number	273	17	9	100	112	46	6
	Percent	100		3	37	41	17	2
Govt. Procurement Centre	Number	273	17	12	105	110	41	5
	Percent	100		4	38	40	15	2

Source: Mouza Statistics of Sindh: 2008, Agriculture Census Organization

1.4.3 Utilization

In addition to food availability and access, proper assimilation of food in the body is essential. Food utilization and stability shows this absorption of food and its sustainability. Improved sanitation facilities, clean drinking water, health infrastructure and individual health status along with female literacy plays vital role in food absorption.

²⁴ Food Insecurity in Pakistan (2009), Sustainable Development Policy Institute (SDPI), Islamabad

²⁵ *ibid*

According to Food Security Analysis (FSA) 2009, access to improved drinking water is reasonable in this district. 59% of the HH use hand pumps and 7% use motor pumps as source of drinking water²⁶. Female literacy rate is 26% in this district, which is considered as low.

Table 1.4-3: Percentage Distribution of HH by Source of Drinking Water

Kamber	Water Delivery System				
	Tap Water	Hand Pump	Motor Pump	Dug Well	Other
Total	22	59	7	0	12
Urban	26	33	13	0	29
Rural	21	65	5	0	8

Source: PSLM 2010-11

Also, the sanitation conditions are satisfactory in the district Kamber Shahdadt, where 52% of the households use flush toilets and 48% use the non-flush toilets.

Table 1.4-4: Percentage Distribution of HH by Type of Toilet

Flush			Non-Flush			No Toilet		
Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
81	46	52	19	54	48	0	0	0

Source: PSLM 2010-11

In a nutshell, this district has sufficient availability of food, a slightly poor socio-economic access; and a reasonable food utilization environment. Combining all the indicators of food security i.e. availability, access, utilization and stability, it can be ascertained that district Kamber Shahdadt is a food secure district of Pakistan.

²⁶ Food Insecurity in Pakistan (2009), Sustainable Development Policy Institute (SDPI), Islamabad

1.5 Health and Immunization

1.5.1 Health Facilities

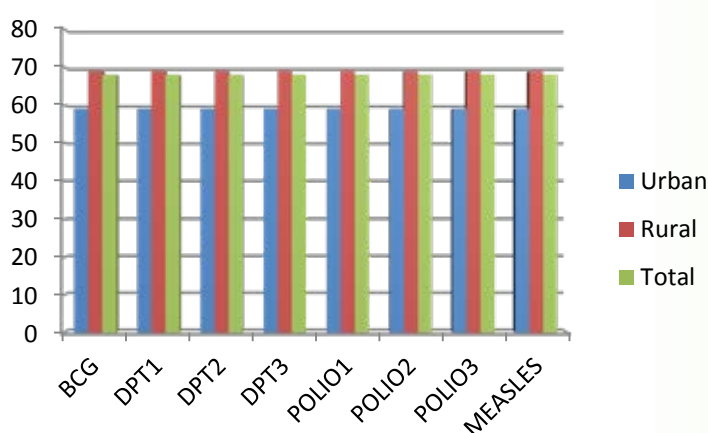
Table 1.5-1: Number of Health Facilities by Type

Type	Number	Bedding
DHQ		0
THQ		4
RHC		4
BHU		28
Dispensary		26
MCH		2
SHC		0

1.5.2 Immunization

Immunization coverage estimates are used to monitor immunization services, and to guide disease eradication and elimination efforts. This indicator is a measure of the percentage of children under one-year (i.e. <12 months) of age who have received all the doses of BCG vaccine, three doses of polio & pentavalent vaccines and 1 dose of measles vaccine in a given year.

In district Kamber, around 58% pregnant women have received tetanus toxoid injections. In urban areas this percentage is 75% and in rural areas it is 55%²⁷. Record based²⁸ immunization data of district Kamber shows that 68% (Male 70%: Female 65%) of the children, aged 12-23 months, have received full immunization. In urban areas this percentage is 59 percent (Male 76%: Female 49%) and in rural areas it is 69% (Male 69%:



Female 68%). The corresponding graph shows the percentage of children of 12-23 months that have been immunized by the type of Antigen based on records²⁹.

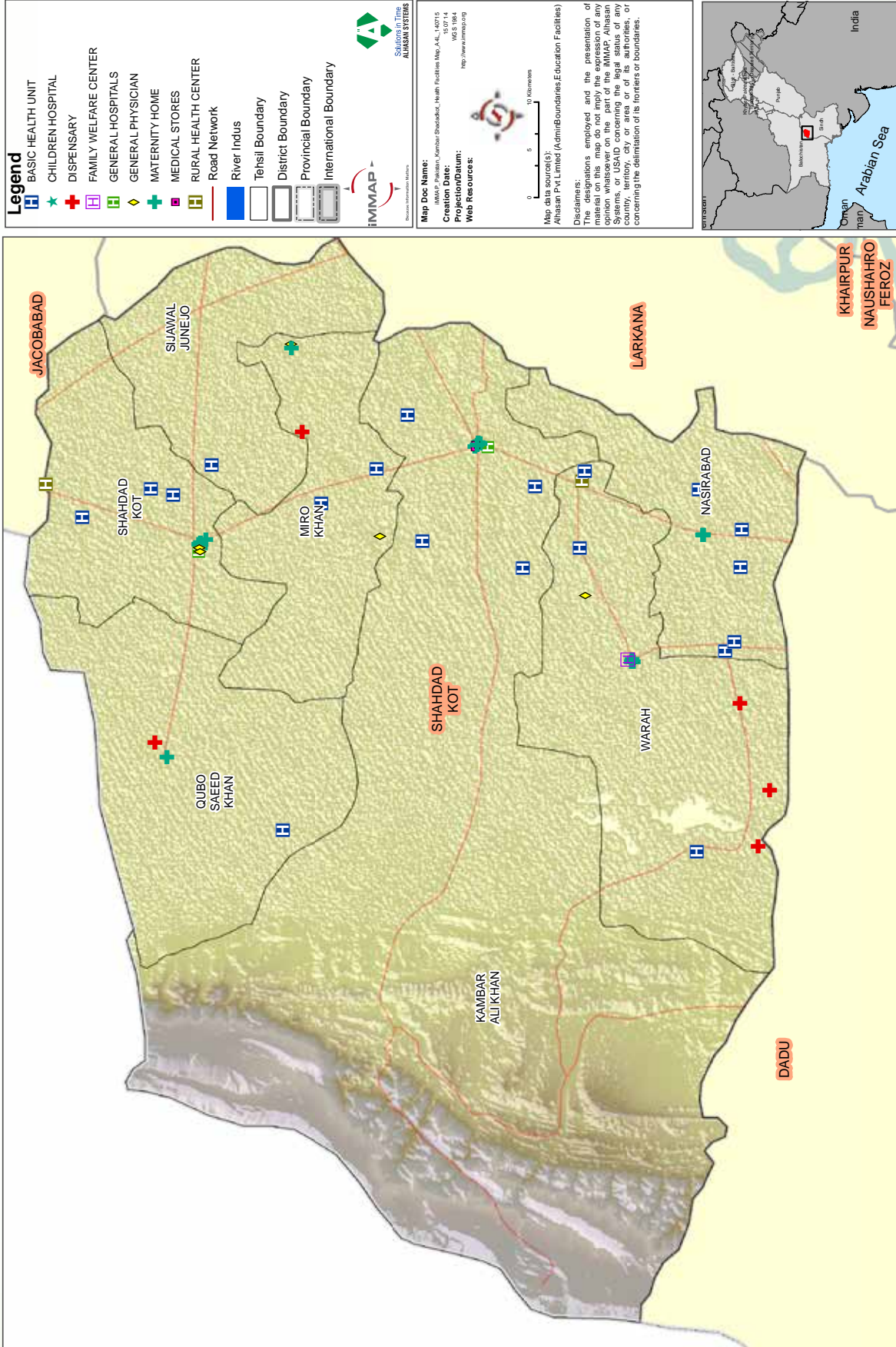
²⁷ Table 3.11, Pakistan Social and Living Standards Measurement Survey (PSLM)2010-2011

²⁸ Table 3.4 (b) Based on record: Children who reported having received full immunization who also have an immunization card, expressed as a percentage of all children aged 12-23 months. Also immunizations to be classed as fully immunized a child must have received: 'BCG', 'DPT1', 'DPT2', 'DPT3', 'Polio1', 'Polio2'

²⁹ Table 3.5: Pakistan Social and Living Standards Measurement Survey (PSLM)2010-2011

Sindh-Kambar Shahdadkot Health Facilities Map

Date (July 2014)



1.6 Education

1.6.1 Some Highlights

Literacy Rate (10 years and above)	42%
Adult Literacy Rate (15 years and above)	37%
GPI Primary	0.72
GPI Middle	1.07
GPI Secondary	0.62
GPI Higher Secondary	1.12
Population that has ever attended School	42
Male	59
Female	23
Population that has completed primary level or higher	34
Male	49
Female	18
Student Teacher Ratio	44
Primary	47
Middle	25
Secondary	36
Higher Secondary	41

Source: Kamber Shahdadkot Education Profile 2012-13 and PSLM 2012-13

1.6.2 District School Enrolment Ratio

The education status is quite poor in Kamber Shahdadkot. The overall literacy rate (for the population of 10 years and above) is 42% (males: 59%, females: 23%). For the urban rural comparison, urban literacy rate is higher than the rural, which is 49%. Among urban community, literacy rate for male is 67% and for female it is 29%; whereas the rural literacy rate is 40%, and in the rural community, literacy rate for male is 57% and for female it is 22%. Adult literacy rate (for the population of 15 years and above) is 37%. Gross Enrolment Ratio³⁰ (GER) for primary level schools is 73% (Male: 86%, Female: 57%), in the urban community it is 78% (Male: 88%, Female: 66%) and in the rural community it is 72% (Male: 85%, Female: 56%). Net Enrolment Ratio³¹ (NER) for the primary level is 49% (Male: 55%, Female: 52%), in the urban community it is 54% (Male: 51%, Female: 57%) and in the rural community it is 48% (Male: 56%, Female: 39%). Table 1.6.1 shows details of Gross and Net Enrolment Rates by Rural and Urban Gender at different levels.

³⁰ Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school year.

³¹ Enrolment of the official age group for a given level of education expressed as a percentage of the corresponding population.

Table 1.6-1: Gross and Net Enrolment Rates by Gender and Locality at Different levels

Urban/ Rural/ District	Gender	Gross Enrolment Rates			Net Enrolment Rates		
		Primary Group (5-9)	Middle Group (10-12)	Matric Group (13-14)	Primary Group (5-9)	Middle Group (10-12)	Matric Group (13-14)
Urban	Male	88%	51%	48%	51%	25%	17%
	Female	66%	31%	43%	57%	19%	20%
	Total	78%	43%	46%	54%	22%	18%
Rural	Male	85%	40%	46%	56%	21%	11%
	Female	56%	24%	23%	39%	14%	10%
	Total	72%	32%	34%	48%	17%	11%
Total	Male	86%	42%	47%	55%	21%	13%
	Female	57%	25%	26%	52%	15%	12%
	Total	73%	34%	36%	49%	18%	12%

Source: Pakistan Social and Living Standard Measurement Survey 2010-11

1.6.3 Gender and Level Wise Details

The total enrollment of students in district Kamber Shahdadt is 192,284 (Male: 111,247 and Female: 81,037). Out of a total of 4,384 teachers, 3,511 are male and 873 are female teachers. This illustrates that one teacher is teaching averagely 44 students. The total boys' schools of district Kamber Shahdadt are 495, and the total female schools are 294. Besides, there are 842 mixed gender schools. Thus, the total number of schools is 1,631 and averagely every school has a teaching staff of around 3³².

Primary

Total numbers of primary level schools that are reported are 1,520. The total enrolment, at the primary level, is 146,421 (Boys: 85,208, Girls: 61,213). Total numbers of teachers at the primary level is 3,087, out of which 2,478 are male and 609 are female teachers. Thus, on an average, each primary school has an enrolment of 96 students with a teaching staff of 2. However, the student class ratio is 55 and each school has averagely around 2 class rooms.

Middle

There are reportedly a total of 55 middle schools in the district. The total enrolment at the middle level is 4,229, of which 2,040 are boys' enrolment, whereas, the girls' enrolment is 2,189. The total number of teachers at the middle level is 169, out of which 136 are male teachers and 33 are female teachers. Thus, on an average, each middle school has an enrolment of 77 students with a teaching staff of 3. However, the student class ratio is 25 and each school has averagely around 3 class rooms.

Matric

There are a total of 46 secondary schools in the district. The total enrolment at the secondary level is 29,889, of which 18,470 are boys' enrolment whereas 11,419 are girls' enrolment. The total number of teachers at the secondary level is 840, out of which male teachers are 707 and female teachers are 133. Thus, on an average, each secondary school has an enrolment of 650 students with a teaching staff of 18. However, the student class ratio is 57 and each school has averagely around 11 class rooms.

³² Statistical Education Bulletin, Reform Support Unit, Sindh Government.

Higher Secondary

There are a total of 10 higher secondary schools. The total enrollment at the higher secondary level is 11,745, out of which 5,529 are boys' enrollment and 6,216 are girls' total enrollment. The total number of teachers at the higher secondary level is 288, out of which 190 are male teachers and 98 female teachers. Thus, on an average, each higher secondary school has an enrolment of 1,174 students with a teaching staff of 29. However, the student class ratio is 83 and each school has averagely around 14 class rooms.

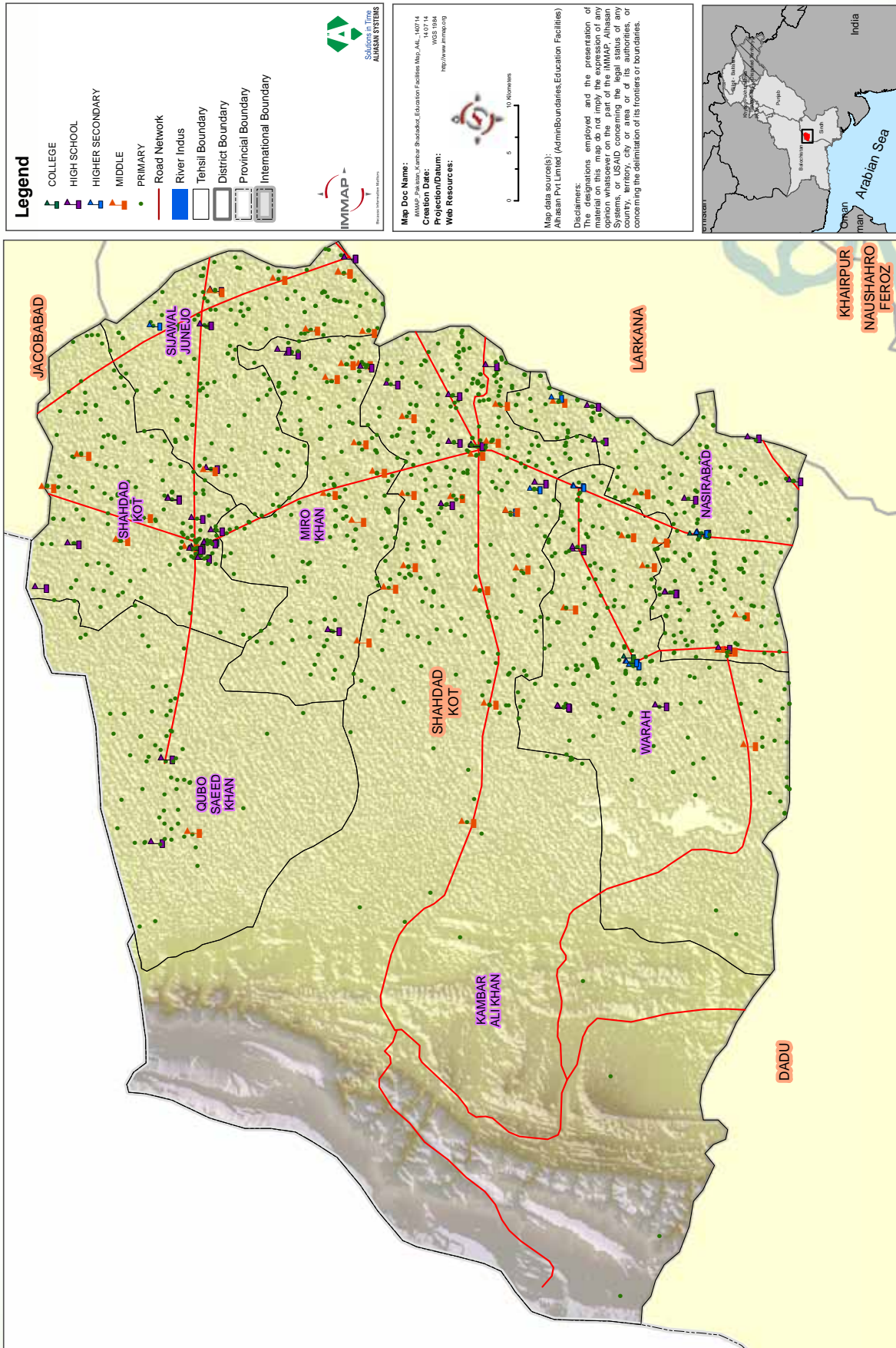
Table 1.6-2: Enrolment and Educational Facilities by level and Gender³³

Level	Enrolment			School Facilities				Teachers		
	Boys	Girls	Total	Boys	Girls	Mixed	Total	Male	Female	Total
Primary	85,208	61,213	146,421	472	265	783	1,520	2,478	609	3,087
Middle	2,040	2,189	4,229	7	16	32	55	136	33	169
Secondary	18,470	11,419	29,889	14	9	23	46	707	133	840
Higher Secondary	5,529	6,216	11,745	2	4	4	10	190	98	288
Total	111,247	81,037	192,284	495	294	842	1,631	3,511	873	4,384

³³ District Education Profile Kamber Shahdadt 2012-13

Sindh-Kambar Shahdadkot Education Facilities Map

Date (July 2014)



2 Disaster History and Its Impact

2.1 Disaster in District

2.1.1 Disaster History

Kamber Shahdadt district has a history of disasters. It was consecutively hit by heavy floods and torrential rains in 2010, 2011 and now again in 2012. The extent of damage was higher in 2010 wherein a population of 892,500 persons was affected. The relative severity of the floods was ranked as high in district Kamber³⁴. River Indus, after receiving water from 5 of its tributary rivers, causes floods in the northern and southern parts of Sindh province. The upper regions of Sindh Province comprise of the districts of Jacobabad, Shikarpur, Kashmore, Larkana and Kamber Shahdadt on the right bank of River Indus and Ghotki, Sukkur, Khairpur, Naushahroferoze and Shaheed Benazirabad on the left bank of River Indus. These districts on the right and left of River Indus are prone to a severe threat when River Indus is in high flood.

Heavy rains are also a major cause of flooding in the district. Vulnerable UCs are Khando, Mirpur, Gaji Khuhawar, Ghaibi Dero, Dost Ali, Kalar, Boohar, Khabar, Karera, Aitbar Khan, Silra, Jamali-III City, Qubo, Hazarwah, Bago Dero, Lakha, Miandad³⁵. Vulnerable points of the district are RD-181, Village Akber Khoso, RD-478, Rabi Pul, RD-478, Rabi- Pul, RD-169, Village Mujeed Magsi, RD-177, Village Seth Khudadad Khoso, RD-178, Village Seth Khudadad Khoso, RD-179, Village Kabir Khoso, RD-184, Village Jan Muhammad Khoso/ Kachi Pul, RD-186, Village Jan Muhammad Khoso/ Moosa Khoso, RD-194, Village Jagirani, RD-196, Village Khushhal Magsi, RD-198, Village Essa pur, RD-203, Village Ashique Ali Mugheri / Seelra Village, RD-213, Village Khan Wah / Aamir Chandio.

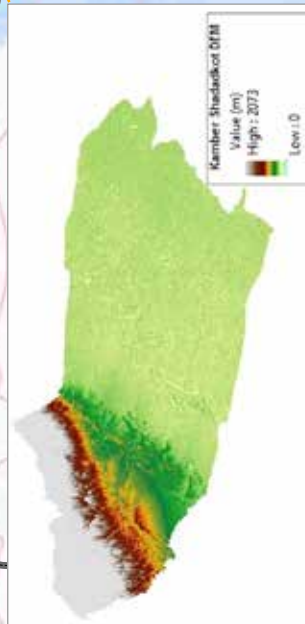
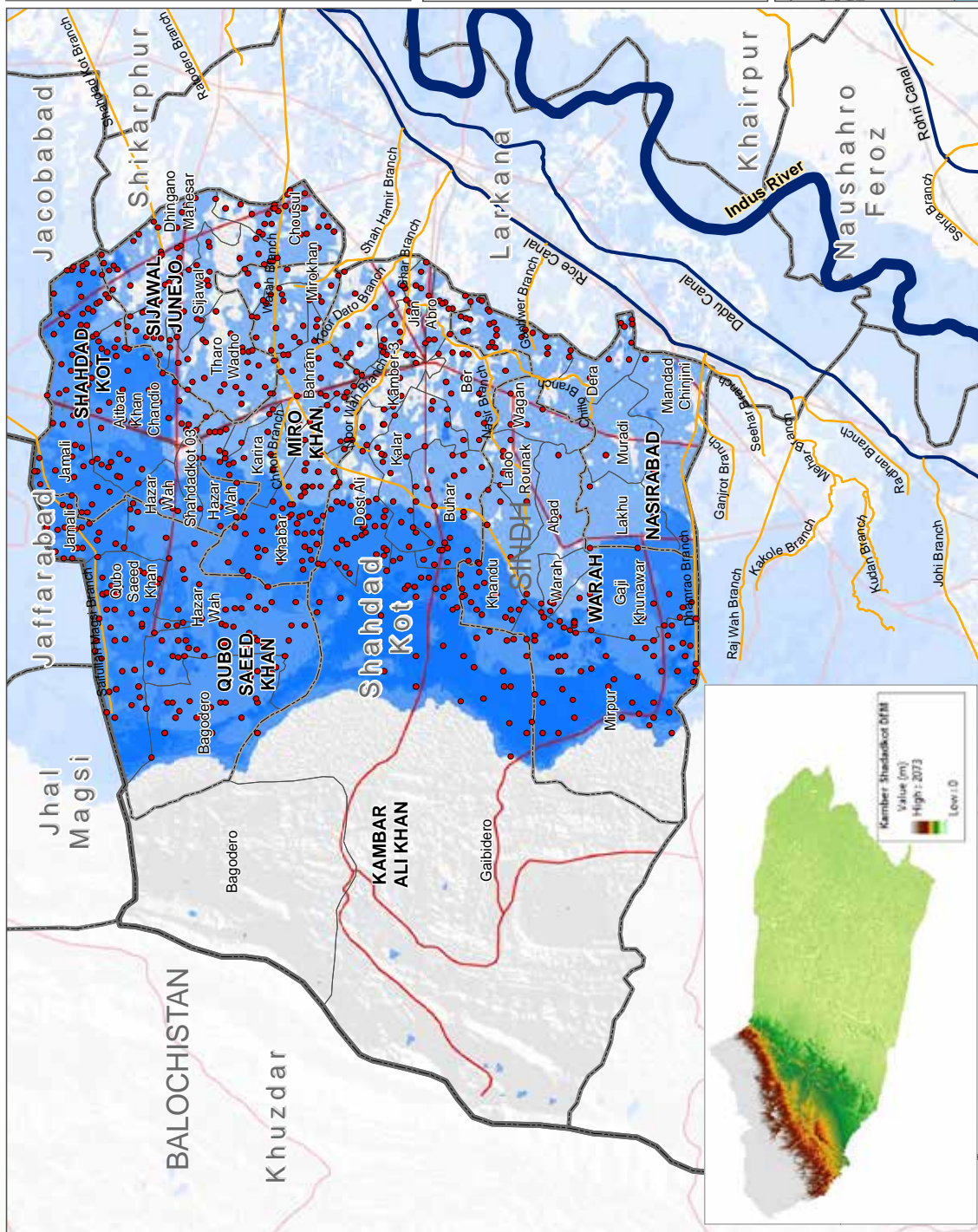
Along with the aforementioned floods, earthquake hit this district in 1935, plague in 1905-06 and epidemics, casualties from accidents and environmental degradation occurs on yearly basis.

³⁴ Flood Facts, Disaster Management Apparatus, 2010

³⁵ Sindh Contingency Plan 2012.

Kamber Shahdadkot - Risk Analysis Map

July, 2014



Legend

- Settlements at risk
- Branch Canals
- Canals
- Indus River
- Roads
- Railway
- Maximum Flood Risk (2010-12)
- Province boundary
- District boundary
- Taluka boundary
- UC boundary

IMMAP

Map Doc Name: IMMAP_PAK_K-Shahdadkot Risk Analysis Map_v02_071414

Creation Date: July 14, 2014

Projection/Date: WGS84

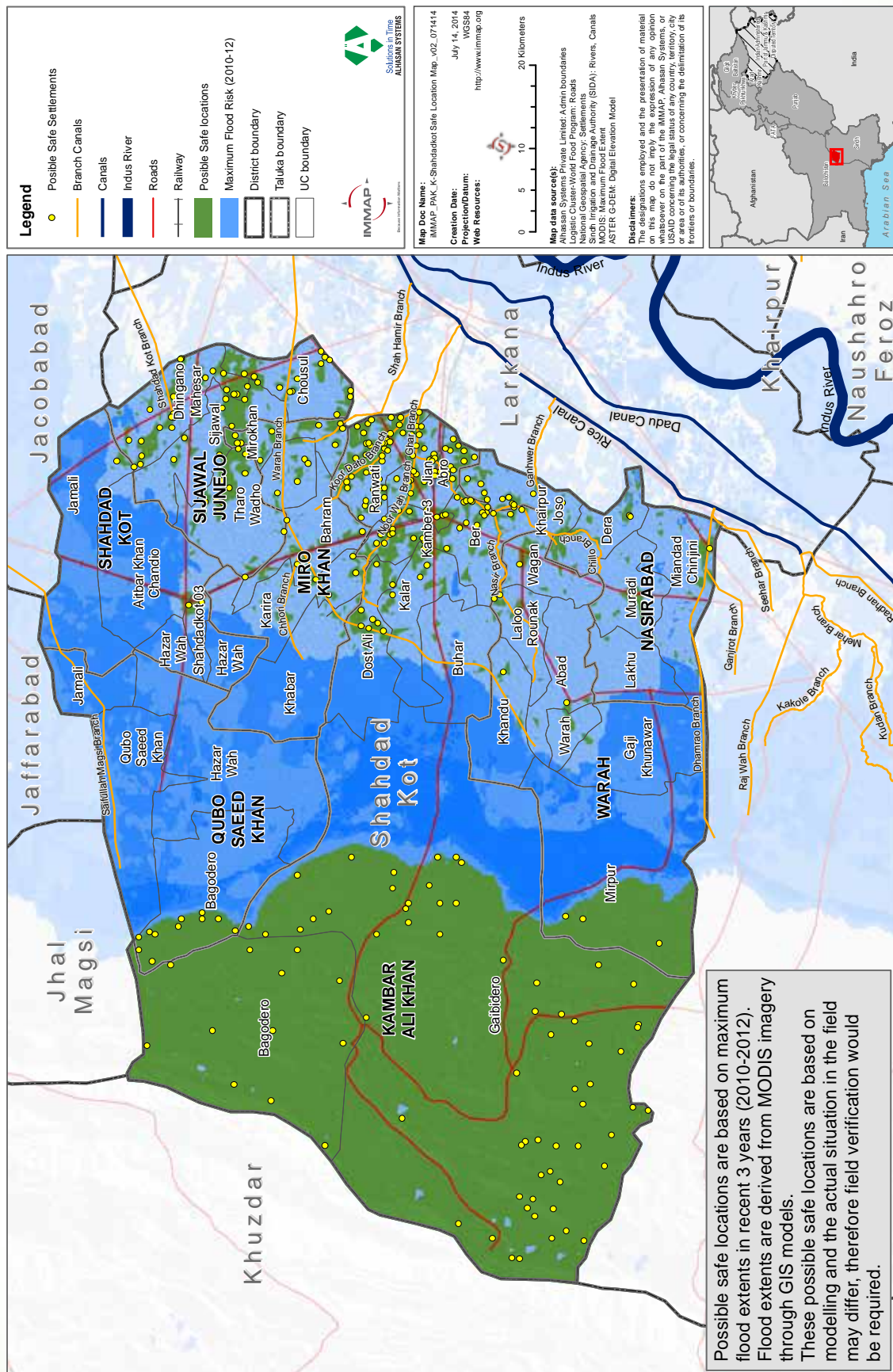
Web Resources: <http://www.immap.org>

Map data sources:

- Ahmad Shah Khan, United - Admin boundaries
- United Nations World Food Programme
- National Geospatial Agency, Settlements
- Sindh Irrigation and Drainage Authority (SIDA) : Rivers, Canals, Branch
- ASTER G-DEM, Digital Elevation Model

Disclaimers:

The designations employed and the presentation of material on this map do not imply the endorsement of the USAID concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.



2.1.2 Demography

Kamber Shahdadt district is unfortunate in the sense that, as mentioned earlier, it was consecutively hit by heavy floods both in 2010, 2011, and now in 2012. In 2010's floods³⁶ 133 revenue villages of 18 union councils in 6 talukas were affected. A population of 892,500 persons was affected and there were 16 casualties. Moreover, 74,945 houses were affected. As compared to 2010, in 2011, floods affected Kamber Shahdadt district to a lesser extent and a population of 145,030 persons and 545 village/settlement of 25 UCs were affected³⁷. A total of 6 casualties and 15 injuries were reported during 2011 floods. In addition, 7,177 houses were partially damaged and 262 houses were completely destroyed. Table 2.2.1 shows the losses and damages summary.

Table 2.1-1: Summary of Losses and Damages

Attribute	Figure 2011	Figure 2010	Source
Total Households 2010	209,020		Estimated
Affected Households	24,749	152,304	
Total UCs	40		PDMA
UC Affected	25	18	NDMA/OCHA
Total Revenue Villages	283		Mouza Stats 2008
Revenue Villages Affected	543 Villages/Settlements	133	NDMA/OCHA
Total Houses Affected	7,439	117,879	NDMA
Partially Damaged	7,177	n/a	
Destroyed	262	n/a	
Kacha	n/a	74,945	OCHA/PDMA
Pakka	n/a	-	
Total Population	1,221,283		Estimated
Affected Population	145,030	892,500	PDMA/NDMA
Death	6	16	NDMA/PDMA/OCHA
Injuries	15	30	
Total Area	1,402,486		UNOCHA
Total Affected Area	150,600	559,441	NDMA/PDMA/OCHA
Crop Area Affected	4,192	497,380	

The latest situational update for the District (floods 2012)

As of 23rd January 2013, 1,847 villages were reported to be affected. A total of 243,249 persons affected, besides 15 deaths and 31 injuries were reported. 27,508 houses were damaged and 7,376 houses were destroyed. 11, 330 acres of crop affected³⁸.

³⁶ District Profile Kamber Shahdadt as of December 2010, UNOCHA

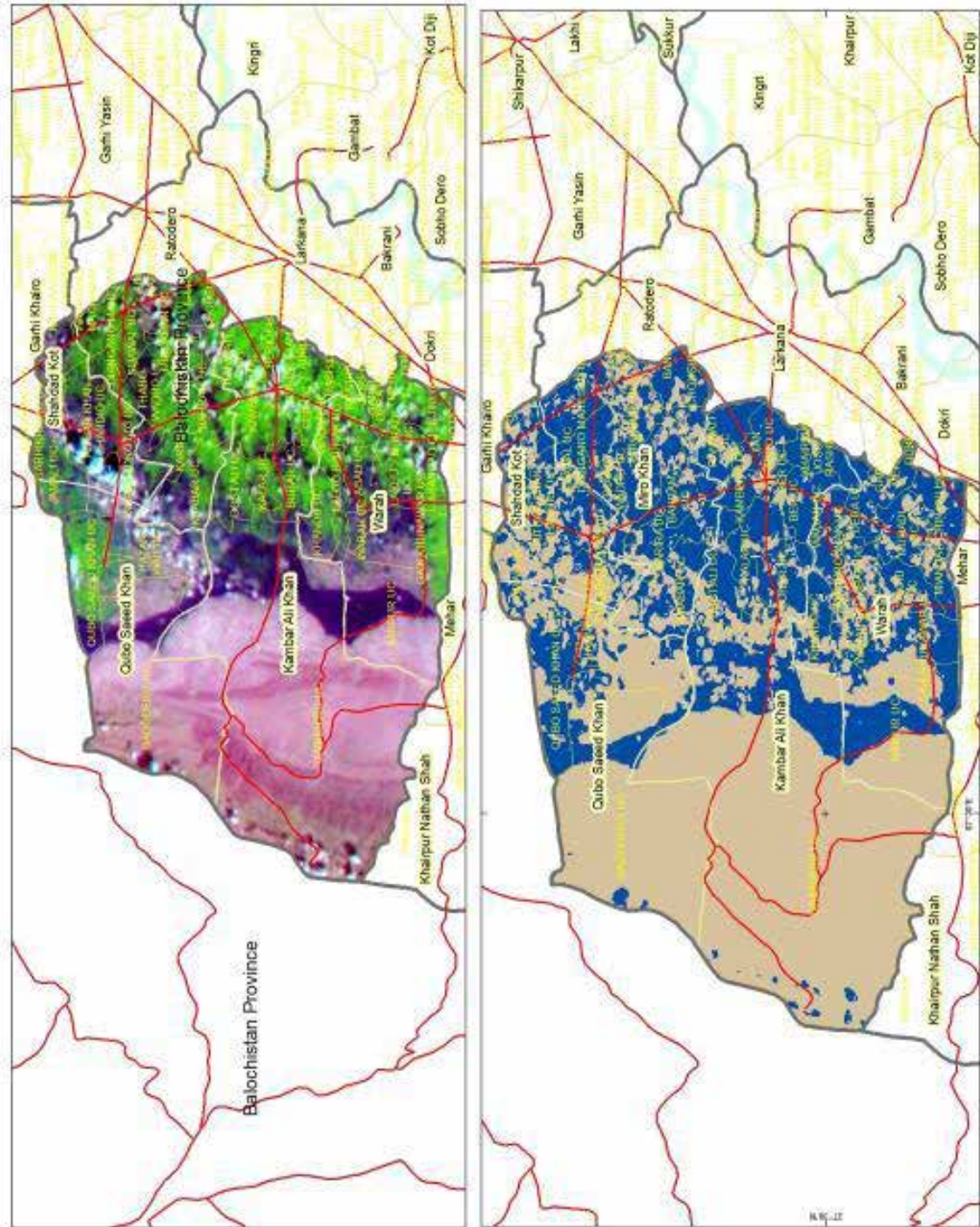
³⁷ NDMA Losses and Damages Data as of 30th November 2011

³⁸ Losses and Damages Update as of 23rd January 2013

Flood 2012 Extent Map for the District

Sindh - Water Extent Map of District Qamber Shahdadkot

Date 19 09 2012



2.1.3 Impact of Disaster on Agriculture and Livelihood

Impact of Floods 2010

According to the official statistics, 550 out of 750 villages in this district were affected and fully/partially inundated (PDMA), causing 60,000 households to end up in 145 IDP camps, established in the district. Thousands of households escaped to the highlands of Balochistan for safety³⁹. Due to the inundation caused by 2010's floods, significant changes in livelihood of the people have occurred. The percentage of households claiming to be without a main source of livelihood has increased to almost 60%. Due to 2010 floods, agriculture farming, which is the main source of livelihood, has reduced from around 50% to 10%⁴⁰.

Also, non-farm livelihoods were heavily affected by the floods. 55% of the households, not engaged in agriculture, reported that their business or employment situation has been adversely affected by the floods. Only 19% of the households reported that their non-agricultural livelihood had not been impacted. 40% of the people had been displaced and 39% of them were unable to return to their usual place of residence. As a result, 25% of the affected people were unable to afford to rebuild their homes. Overcrowding, lack of money and security issues were the most often mentioned concerns of both the male and female community members. The highest priority in terms of the restoration of community infrastructure for both male and female community groups were mosques⁴¹.

Agriculture was worst-hit as approximately 1/3 of arable land was affected, resulting in inundation of rice fields ready for harvesting. Farmers were not able to cultivate wheat. 99,577 HHs, representing 78 percent of the affected population, remained unassisted with respect to dire humanitarian needs particularly related to agriculture. Almost 60,000 families were in need of food, out of which 50,000 were provided food, yet the 6,000 families were left unassisted⁴².

Impact of Floods 2011

The severity of floods 2011 was less as compared to the 2010 floods. However, 543 villages were affected in seven talukas. A total of 145,030 people were affected, which included 74,777 male and 70,253 females. Out of a total of 209,457 acres of land sown in the district, 4,192 acres (2%) were affected. In addition, 218 heads of livestock were lost⁴³.

³⁹ Provincial Disaster Management Authority (PDMA), Government of Sindh

⁴⁰ Multi Cluster Rapid Humanitarian Need Assessment (2010), UNOCHA

⁴¹ Pakistan Floods (2010), Kamber Shahdadt District, UNOCHA

⁴² *ibid*

⁴³ Sindh Flood Situation Update (Sep 2011), FAO

2.1.4 Analysis of Food Security Situation

As established in the previous section, district Kamber Shahdaskot is a food secure district of Pakistan. However, floods of 2010 and 2011 upset that situation and the indicators of food security i.e. availability, access, utilization and stability showed dismal situation in this district. Now the floods of 2012 are further exacerbating the situation.

Previously, due to floods 2010, food availability and access had become critical as 85% of the crop area and 85% of the roads were damaged⁴⁴. Resultantly, high inflation, due to the shortage of food grains, worsened the purchasing power of the poor.

Due to the floods, many flood affected households had shifted their consumption to less preferred foods and borrowing was practiced by more than one third of the households across the district. The low level of consumption of non-nutritious foods affected proper food assimilation.

2.1.5 Health

According to WHO, during 2010 floods, 7 BHUs, 10 dispensaries, 2 Maternal and Child Health Centres and 2 rural health centres were affected.

During 2011 floods, 4 BHUs were reportedly damaged⁴⁵. According to the 2012 floods initial rapid assessment, no damage has been reported to any health facility. However, Women, children and elderly people need immediate health support. The environment is ideal for mosquitoes and flies, which will aggravate the already worsening situation of malaria in the area. Poor hygiene, sanitation and unsafe water are also contributing to the poor health status of rain hit communities. Mobile teams and camps can serve the purpose. Pregnant and lactating women need special attention and nutrition.

2.1.6 Education

In 2010, out of a total of 1,680 schools, 187 schools were damaged by floods, 5 were damaged by torrential rains, 507 schools were used as IDP camps and 1 school was reportedly damaged as a multiple impact of floods, rains and IDP camps⁴⁶. Thus total affected schools reported were 700. The following is a breakdown of the 192 damaged schools:

- Primary: 185
- Middle: 7
- Secondary: 0
- Higher Secondary: 0

However, UNOCHA reports, in Kamber profile, as of December 2010 that according to education cluster, 154 schools were partially damaged or destroyed. In response, education cluster planned to establish 571 temporary learning centres (TLC) with educational kits. UNICEF

⁴⁴ Multi Cluster Rapid Humanitarian Need Assessment (2010), UNOCHA

⁴⁵ WHO, G. N. (8th to 12th September, 2011). Health Initial Rapid Assessment, 22 flood affected districts in Sindh. Islamabad

⁴⁶ Flood Report 2010-11, RSU Sindh

planned to establish 460 temporary learning centres for northern Sindh. But due to non-availability of funds, as of December 2010, there was a gap of 400 TLCs with educational kits. During the same period education cluster reached 10 percent of the school going children who dropped out of schools due to flood related reasons. In 2011, no major damages to schools were reported

No reports for the educational facilities' damage for 2012 floods have been shared as of 20th September.

3 Sectoral DRR Mitigation Measures

3.1.1 Education

- The NGOs should work on awareness building programs for encouraging enrolment in schools, by incorporating teachers, students and youth in their community based programs. Increased enrolment would lead to enhanced literacy and literate people can easily be mobilized and made aware of the different disaster risks.
- NGOs working in the education sector should organize community-based programs that provide girls with opportunities to develop their skills (i.e., livelihood skills), providing information to parents about their children's learning or about the benefits of education.
- Affected or damaged schools should be repaired and reconstructed on priority basis with DRR principles in view.
- Government should introduce disaster risk reduction courses for teachers' training and should add DRR in the curriculum to support large-scale awareness.
- Local Philanthropists should be encouraged to take initiative to raise an emergency fund for immediate repair of infrastructure, support to affected poor students and parents after any disaster.
- Government should introduce a 'School Safety policy' taking all locally relevant hazards into account and adopting DRR measure for the existing schools and construction of new schools.
- From pre-school to secondary school, Integrate DRR trainings into the formal and non-formal education curricula.
- NGOs and other organizations working in the education sector should organize workshops to provide teachers with training on disaster preparedness and early warning signs.
- Education department should produce support materials linked with disaster risk reduction for teaching and learning.
- The Government and NGOs should invest in DRR sector and should incorporate DRR measures in improving school buildings as these can be used as shelter and evacuation centres in case of emergency.
- Incorporate disaster risk reduction measures i.e, ensure their suitable location and construction while establishing new schools in order to avoid future hazard threats.
- Humanitarian organizations should take on board the District Education Department and should provide trainings and necessary skills to the education officials to enable them to prepare School Based Disaster Risk Management Plans (SBDRM-Plan) for each school in the district.

3.1.2 Infrastructure

- Awareness programs should be organized by District Disaster Management Authority about the need of land use planning and building codes so that it can be followed by all the stakeholders, to avoid future threats.
- Awareness programs and projects regarding reforestation should be initiated by NGOs to mitigate the threat of flash floods.
- The Communication and Works department should utilize the available funds on the maintenance of roads and find alternative routes that can be used in case of emergency.
- Active people from the community can be used for disseminating early warning for the local endangered communities because people have lot of trust in informal and locally influential sources of information; e.g. a religious leaders, a teachers, an NGO worker or a local government official. But firstly these active people should also be trained on EWS.
- Organizations that are involved in construction of homes, health, education and other facilities should work with the government to establish and strictly enforce strict construction codes so that of future threats can be mitigated.
- DRR Planners, District and Provincial authorities should identify safe land and location for low income citizens who are living near the flood prone areas.
- Awareness regarding investment in the DRR sector should be initiated in order to avoid future threats.
- Brick lining projects of should be initiated by the government for strengthening the canals.
- Radio can be a very important part of early warning system but care should be taken while transmitting early warnings. It should be in clear words and confirmed through reliable sources to avoid false reports and unnecessary panic.
- Media in District Kamber should expand its role as a watchdog in monitoring and handling of donations in the post disaster phase so that the funds are given to the affected people of the district rather than self interest groups.

3.1.3 Health

- NGOs should encourage the community participation in the awareness sessions, programs and trainings, related to water treatment practices and hygiene practices which will capacitate the vulnerable communities of the area against the communicable diseases.
- Health department should take care of establishment of health facilities focused on certain population. All the health related issues should be dealt by them. But the responsibilities have to be identified.
- Advocacy seminars should be organized at district level for the training of medical staff to implement National Health Programs.
- DDMA should assign the responsibilities of health department to ensure the availability of medical and paramedical personal in hospital, BHU's, MCHC, and RHC's. Moreover,

mobile health teams should be mobilized so that the health facilitators can visit the local areas to provide basic health care especially for the vulnerable group such as people with disabilities, elderly persons, children, females and those who hesitate to go to the hospitals because of cultural constraint and long distance.

3.1.4 Livelihood

- Fodder stocks should be maintained by the livestock department of the district to cope with emergencies.
- Livestock owners should be encouraged to insure their cattle heads.
- Capacity can be built through awareness programs on livelihood diversification.
- Flood control and salinity control projects can be conceived to make more land available for cultivation
- NGO's should organize advocacy seminars, trainings and awareness sessions for improved agricultural practices by incorporating CBOs' chairmen and presidents as they have great influence over the community members.
- Irrigation department should carry out hydraulic studies so that flooding can be avoided and find out catchment areas and water courses for surface run off.

3.1.5 Food

- Number of Food distribution point should be established in the emergency hit area and should be easily accessible to most of the needy population.
- For extremely vulnerable groups such as elderly persons, people with disabilities, female and children, separate desk and queues at food distribution point should be established so that they do not suffer difficulties in attaining food
- Civil administration should look after the availability of food.

Wash

- Innovative approaches are required to ensure the availability of low-cost, simple, and locally acceptable water and sanitation interventions. Integrating these approaches into existing social institutions such as schools, markets, and health facilities is required.
- Taluka Municipal workers should monitor the quality of water and should distribute chlorine tablets for water purification in order to avoid diseases like cholera and hepatitis etc.
- DRR measures should be incorporated in the construction of sewerage system in order to minimize the possibility of over flowing of sewage water in rainy days and to mitigate the hygiene issues.
- NGOs in district Kamber should install raised hand pumps to maintain adequate access to water supplies in the event of a flood.
- Waste Water treatment projects should be initiated in district Kamber to avoid deterioration of aquatic environment.

3.1.6 Government and Humanitarian Sector

- District Disaster Management Authority should coordinate with the NGOs working in different sectors to address the problems of people. The NGOs working on different projects can be invited and can be asked for initiation of DRR projects in the vulnerable areas of the district.
- Coordination among key stakeholders should be strengthened for the implementation of disaster risk reduction measures and effective emergency response through assignment of responsibility to each stakeholder. Stakeholders must have joint meetings to address the issues faced by them.
- District Disaster Management Authority should appeals for assistance through media at the national and international level.
- NGOs should follow the bottom up approach for the initiation of any CBDRM project. The bottom-up approach implies that whole process should start at the community level. Community members should invite to participate in every step of the planning process. It will give a sense of ownership to the community who in turn constructively contribute to achieve project objectives.
- District Disaster Management Authority and NGOs should employ the requisite staff who have a combination of practical experience and up to date theoretical knowledge related to Disaster Management and Sustainable development (Disaster Managers, Rescue and Relief providers etc.), should stockpile equipment (Boats, Jackets, medicine, food etc.) and should build institutional capacity at the district level.

4 Hazard Vulnerability and Capacity Analysis

4.1 Hazard Vulnerability and Capacity Analysis

Prior to analyzing existing hazards; vulnerability to hazards and capacity to cope with the same of the district and its population needs to be understood. An explanation of the terms used is given under each heading, as follows:

4.1.1 Hazard

A hazard is a situation which triggers disaster. But it can be also defined as:

“A potentially damaging physical event, phenomenon or human activity that may cause the Loss of life or injury, property damage, social and economic disruption or environmental degradation”⁴⁷

A hazard is a situation that has the potential to harm the health and safety of people or to damage plant and equipment. Hazards can be divided into two categories.

Natural Hazard

Natural hazards are natural processes or phenomena within the earth system that may constitute a damaging event. For example typhoons, tsunamis, earthquake and volcanic eruption cyclones, earthquakes, floods, landslides, storms are natural hazards.

Man-made Hazard

Any industrial, nuclear, or transportation accident, explosion, power failure, resource shortage, or other condition, resulting from man-made causes, which threaten or cause damage to property, human suffering, hardship or loss of life constitute ‘Man-made Hazard.

Hazard matrix of the District⁴⁸

Hazard	Frequency	Area affected/union councils	Severity/Force	Year
Flash floods	Monsoon	Entire district	Medium	2007,2010 2011,
Heavy rains	Monsoon	Whole district	Medium	2010,2011 2012,2013
Epidemics	Seasonal	Entire district	low	Every year
Drought	Infrequent	Entire district	Low	1999-2002
Earthquake	Infrequent	Entire district	Low	1935

⁴⁷ The “Urban Governance and Community Resilience Guides” (ADPC, 2010)

⁴⁸ Sindh Contingency Plan 2012

4.1.2 Vulnerability

Vulnerability is a situation which is:

“The attributes and circumstances of a community or system that makes it sensitive, vulnerable or susceptible to the damaging effects of a hazard⁴⁹”

Vulnerability precedes disasters, contribute to their severity, hinder and obstruct the disaster response. It is divided into three parts:

Physical/Material Vulnerability

Weakness of the built environment and lack of access to physical and material resources i.e. living in hazard prone areas or in unsafe buildings, lack of savings, insurance and assets constitutes physical/material vulnerability.

Social/Organizational Vulnerability

Social/Organizational Vulnerability refers to inequality in social systems that discriminate against and marginalize certain groups of people from accessing resources and services. People who have been marginalized in social, economic or political terms are vulnerable to disasters. Weakness in social and organizational areas may also cause disasters e.g. deep division can lead to conflict and war. Conflict over resources due to poverty can also lead to violence.

Attitudinal/Motivational Vulnerability

Existence of fatalistic myths and religious beliefs influence people's vulnerability to disaster risks. If people believe that disasters are 'acts of God' and if they have low confidence in their ability to affect change or have 'lost heart' and feel defeated by events they cannot control, these people are often harder hit by disasters.

Vulnerability matrix

Physical/material	Social/organizational	Attitudinal/motivational
Kamber Shahdadkot is prone to heavy rainfalls and flash floods. In monsoon, hill torrents ⁵⁰ (Harahan, Buz, Alkah, Mardan, Narani, Durb and Khenji Nais) bring immense destruction in Shahdadkot and Qubo Saeed Khan talukas. Heavy	According to 1998 census, total population of the district Kamber Shahdadkot was 837,053 ⁵² while its projected population for 2013 is 1,383,832. The district has an estimated growth rate of 3.20% ⁵³ per annum (in 1998), which means	People of the district are unaware of the disaster risk to their lives, livelihoods, property and environment. People consider poverty, lack of health and education facilities and non-availability of food as the biggest

⁴⁹ Participant's Course workbook (ADPC)

⁵⁰ Rapid assessment of disastrous rains and flood effect district kamber Shahdadkot, Sindh, By Pirbhat Women Development Society Shahdadkot Sindh, http://reliefweb.int/sites/reliefweb.int/files/resources/564CD241739E4CFB4925731300195059-Full_Report.pdf, pp. 2

Physical/material	Social/organizational	Attitudinal/motivational
flood hit the district in year 2010. In 2010 flood, 133 revenue villages ⁵¹ of 18 union councils in 6 <i>talukas</i> were affected.	that the population will double itself in 21.88 years ⁵⁴ from 1998. Such rapid growth in population gives birth to many socio-economic problems and makes the area vulnerable to different natural and made-made hazards.	threat to their lives.
The climate of Kamber Shahdadkot district is mainly dry, with rain-fall varying between 5 to 10 inches in a year. ⁵⁵ Higher than normal temperatures are usually associated with drought periods. Droughts affect labour market negatively (daily wages goes very low) and decrease livelihood opportunities which increase poverty and make the people vulnerable against different hazards (floods, heavy rains & earthquake).	Like majority of the other districts in Sindh, district Kamber Shahdadkot is rural by its characteristics. 71 per cent of the population resides in rural areas as compared to the 29 per cent that resides in the urban areas. Most people in the rural areas lack job opportunities or have unsustainable livelihoods (not insured) which escalate the risk against different hazards. [Floods, rains]	The people of the district have a laid back attitude towards disaster risk reduction. They think all these disasters are the Act of Nature/God. There is nothing that can be done to reduce or managing disaster risks.
Climate change is said to be responsible for heavy rains of 2011, 2012 and 2013 in Sindh because usually Sindh province receives very little rains (on average 5 inches ⁵⁶ during monsoon). Kamber Shahdatkots was consecutively hit by rain 2011, 2012 and 2013. Environmental scientists agree that they cannot explain the floods in Sindh as the area that received the rain is normally very dry.	There is a lack of Community Based Disaster Risk Reduction (CBDRM) projects in the vulnerable areas of the district. Focus of the different organizations working in the area is only towards relief side.	There is a lack of training, appropriate skills and awareness on disaster risk management, both at the community and the public servants' level. Skills to handle emergencies are very weak and need to be strengthened.
Absence of disaster risk reduction measures in most of the construction and infrastructure developments is resulting in the formation of poorly managed infrastructures, buildings which lack coping capacity against natural hazard like earthquake, heavy rains	Dependent population (the population that is less than 15 years and more than 65 years of age including widows and divorced women) in the case of Kamber Shahdadkot district is 49.71 per cent of the total population and the working population is 50.29 per	Those who are interested in disaster risk reduction from the vulnerable communities are usually kept away from the process and are discouraged intentionally by the self-interest or influential groups.

⁵² Population for the Talukas in Kamber Shahdadkot District for 1998

⁵³ Estimated for the current administrative setup present in Kamber Shahdadkot i.e. 3 *Talukas* using $r = (P_n/P_o)^{1/12} - 1$ using 2010 and 1998 population figures

⁵¹ UNOCHA, Pakistan Floods 2010, Kamber Shahdadkot District Profile, Dec 2010

⁵⁴ Rule of 70 <http://controlgrowth.org/double.htm>

⁵⁵ The-Profile-of-District-Kamber-Shahdadkot-Sindh-Pakistan-2012, <http://www.scribd.com/doc/99575060/The-Profile-of-District-Kamber-Shahdadkot-Sindh-Pakistan-2012>, pp.8

⁵⁶ Disaster Risk Management Plan, Sindh province, (2008), PP. 34

Physical/material	Social/organizational	Attitudinal/motivational
and floods.	cent, which shows that dependency ratio ⁵⁷ in the district is 101 per cent, which is very high and as such makes the population highly vulnerable	
Emergency Stockpile, at district level is important which does not exist in the district. Emergency Stockpile includes resources like boats, life jackets, first aid kits, torches, ropes, tractors, and dewatering machines etc. Stagnant water results in spread of malaria etc. Tractors can be used to pick waste material and dump into far off places.	Non-structural mitigation measures which include trainings, workshops, seminars, land use planning and building codes are not properly implemented by the concerned departments in the district which makes the people vulnerable to different hazards e.g., floods, earthquakes.	Advocacy seminars and awareness campaigns regarding disaster risk reduction are insufficient.
In the whole district, piped water is available to only 22 per cent of the housing units. In rural areas pipe water is available to 21 per cent of the households while 65 per cent ⁵⁸ of rural households have hand pumps inside the housing units. By drinking unsafe and contaminated water people gets vulnerable to hepatitis and other water born disease.	Community-based disaster drills are an important aspect of emergency management yet so very neglected by the district authorities. These drills provide a chance to practice the full spectrum of disaster response.	Conservatism of the remote rural vulnerable communities also hinders the way of social and attitudinal change, brought by the reformers or social workers.
Weak and damaged portions of the canals can, unexpectedly, create a disaster like situation in the district. In monsoon season they can overflow, break and have breaches. There is no monitoring and maintenance mechanism of these already damaged canals.	Lack of coordination amongst all the stakeholders (vulnerable communities, NGOs and local government department) is a major hindrance in implementation and progress of the Disaster Risk Reduction process.	People's attitude of dependency on government and I/NGOs also hinders the process of disaster risk reduction and community empowerment.
Livelihoods of the people are not sustainable that is it cannot cope with and recover from stress and shocks and when disaster strikes; these livelihoods collapse. As a result poor people get poorer and fall under the poverty line.	Immediate response by the government, in terms of relief activities, in emergencies has always been elusive. It always responds in the end and mostly when the situations has somewhat improved.	
Settlements in hazardous zones made of low standard material, with no wise management of land increases the vulnerability of the people to hazards like floods and earthquakes.	There is a Lack of institutional capacity to deal with disasters and development in the district.	

⁵⁷ Dependency Ratio= (Population < 15 Years + Population > 65 Years)/ Population 15-65 Years

⁵⁸ Pakistan Social and Living Standards Measurement Survey (PSLM), 2010-11, pp. 428

Physical/material	Social/organizational	Attitudinal/motivational
Early Warning systems, in Pakistan, lack the basic equipment, skills and resources ⁵⁹ . Similarly, early warning system for the floods in the district is not up to the mark. Monitoring stations from the irrigation department, in some instances, were unable to take the measure of water level and report them, timely.	There are no Disaster Management Committees (DMCs) and Emergency Response Committees (ERTs) in the vulnerable communities of the district. DMC and ERT members are trained (on DRR and first aid) and are first responder to any emergency situation.	

4.1.3 Capacity

Capacities are resources, means and strengths, which exist in households and communities and which enable them to cope with, withstand, prepare for, prevent, mitigate or quickly recover from a disaster. The combination of all the strengths attributes and resources available within a community, society or organization that can be used to achieve agreed goals constitute its capacity to cope with hazards⁶⁰.

Physical/Material Capacity

In most disasters, people suffer their greatest losses in the physical and material realm. Access to physical/material things or objects count as physical capacity. A few examples of physical and material resources are cash, food, land, properties and tools.

Social /Organizational Capacity

When everything physical is destroyed, people still has their skills, experiences and knowledge; they have family and social networks. They have leaders and systems for making decisions. They also have local, collective 'wisdom' reflected in their cultural practices that help them reduce or cope with disaster risks.

Attitudinal/Motivational Capacity

People also have positive attitudes and strong motivations such as the will to survive and willingness to help each other.

Capacity matrix

Physical/material	Social/organizational	Attitudinal/motivational
Kamber Shahdatkot is an agricultural district. Its climate is suitable for production of various food items e.g., maize, rice, sugarcane and wheat etc. Wheat	District Disaster Management Authority (DDMA) of Kamber-Shahdadkot has been established in the DCO's office on a temporary basis. DDMA formulates disaster	Advocacy seminars and trainings regarding disaster risk reduction (DRR) are very limited but have been initiated by different NGOs for the mobilization of vulnerable

⁵⁹ Government of Pakistan (2006), "National Plan: Strengthening National Capacities for Multi-hazard Early Warning & Response System (Phase-I)", Cabinet Division, pp.8

⁶⁰ Participant's Course workbook (ADPC)

Physical/material	Social/organizational	Attitudinal/motivational
and rice are cropped in 80% and 89% of the <i>mouzas</i> respectively ⁶¹ . Total reported area of the district is 541,000 hectares, out of which 225,000 hectares are cultivated ⁶² .	plan for the district and assigns roles and responsibilities to the local district departments. DDMA carries out emergency response and relief activities in the affected areas.	communities against hazards (floods, rainfalls).
There is no major industrial unit in the district. Small industry of the district includes electronic goods, agricultural tools, construction material. These industries are the source of employment and are also useful in the economic uplift of the people.	District Emergency Operation Centre (DEOC) is usually formed by the DDMA in emergency, which coordinate with different stakeholders and collect data directly from the affected areas. This data is further shared with the other aid agencies and NGOs, which include damage need assessments.	Indigenous knowledge of the local communities is a great asset not only for the vulnerable communities but also for the humanitarian organizations. Humanitarian Organizations do consider suggestions from local communities and incorporate those in their policies.
Road network is considered as a vehicle for economic development. The district is well-connected with other districts through road network. These roads can be used as evacuation point in flood disaster. Good roads are also helpful in carrying out relief activities.	After the 2010 and 2012 floods, different NGOs /INGOs have focused their attentions on shelter, wash, and livelihood activities. These organizations include CARE, NCHD, Muslim Aid, UNICEF, IFRC, IOM and Oxfam ⁶³ . They provide funds and relief stuff to the affected people, to enable them to stand on their own.	In post flood activities, Psycho-Social problems of the people (especially children and women) were addressed by the psychologists, hired by different organizations. Religious scholars (<i>Ulemas</i>) also contribute their part by counselling flood affected people.
The total number of schools in the district is 1,631. The district has 1,520 primary schools. There are 55 middle schools, 46 secondary and 10 high secondary schools. These school buildings are also used as shelter and evacuation centres in emergency.	Community organizations are formed by NGOs in the affected areas to encourage the local representation. Active people from the community are part of these organizations which facilitate the humanitarian organization work at the grass root level.	Old age people are the most experienced of the vulnerable communities. They guide their young ones about local solutions of the expected problems.
The total health facilities in district Kamber-Shahdadkot are 64. There are 4 hospitals, 4 Rural health centres (RHCs), 28 Basic Health Units (BHUs), 2 Maternal Child Centres (MCHs) and 26 General Dispensaries (GD). These health facilities provide health services both in rural and urban areas of the district, not only as a routine but also in extreme circumstances.	Law Enforcement Agencies are important stakeholders in relief activities. <i>Jawans (Soldiers)</i> of Pakistan Army assist the affected communities directly and help them in evacuation, by providing transport facilities. Army doctors provide medicines and other health facilities to the affected people especially to the children and women.	The teachers, students and youth assist the social workers working in their communities. They organize gatherings for mobilization sessions, helps in the assessment and act as a catalyst in the field.
District Kamber-Shahdadkot has an efficient canal irrigation system which helps in agriculture	Political parties are active in the district. Pakistan People's Party holds strong hold in the district. The	

⁶¹ *Mouzas Development Statistics of Sindh*, 2008, Agriculture Census Organization

⁶² *Sindh Development Statistics*, (2008), Lahore University of Management Sciences (LUMS), pp. 80

⁶³ UNOCHA, Pakistan Floods 2010, Kamber-Shahdadkot District Profile, Dec 2010

Physical/material	Social/organizational	Attitudinal/motivational
productivity. Sukkur Barrage is the main source of irrigation in this district. Out of a total of 273 <i>mouzas</i> , 263 (90%) are irrigated by canal irrigation system ⁶⁴ .	member of National and provincial assemblies (MNAs & MPAs) highlight and raise problems of the people on the assembly floors. Mir Amir Ali khan Magsi (former senator) belongs to this district.	
	Traditional family exists in the district. <i>Biradri</i> (Tribal) system of the district helps in solving disputes at the local level. Often, tribal leaders of different tribes/ <i>Biradris</i> form a council and serve their people.	

⁶⁴ Mouzas Development Statistics of Sindh, 2008, Agriculture Census Organization

5 Coordination and Support Services

5.1 Important Contacts

5.1.1 Departmental Focal Points

S#	Department	Office In charge	Designation	Telephone Numbers	
				Office	Mobile
1	Administration	Mr. Asad ullah Ubaro	DC	0744-210074	
		Mr.Sikandar Ali Chandio	ADC1		0300-3410928
		Sanaullah Bhati	ADC2		0342-3964436
		Muneer Abbas	AC		0346-3347754
		Irshad Aman Sheikh	AC		0300-3147870
		Ghulam Ali Laghari	AC		0335-2450114
		Sajjad Haider	AC		0333-7564881
		Asad Ullah Bhutto	AC		0300-3417552
		Imdad Ubaro	AC		0331-3497050
		Maqsood Aman	AC		0331-3271625
2	Social Welfare	Imdad Channo	District Officer		0333-7557443
3	Accounts	Suleman Mirani	District Officer		0300-3426234
4	Agriculture	Ali Akbar	District Officer		0300-3059659
5	Health	Mr. Mehboob Ali	DHO	0744-210486	
6	Education	Farooq Laghari	DEO		0300-3084627
7	Irrigation	Abdul Rasheed Bhutto	XEN		0345-3637732

5.1.2 List of District & Taluka Nazims with Address

District/Taluka	Name	Address
District	Shabbir Ahmed Khan	Village Ghubi Dero, Taluka Kamber
Kambar Ali Khan	Sardar Khan Chandio	Ghaibi Dero Jageer, Taluka Kamber
Miro Khan	Qamar Ud Din Gopang	Village Abdul Sattar Gopang
Nasirabad	Khalid Hussain Tunio	Village Chowdero Taluka Nasirabad
Qubo Saeed Khan	Aziz Ahmed Brohi	Village Mir Ali Hassan Brohi
Shahdad Kot	Ghulam Mustafa Jarwar	Dargah Shareef Muhallah, Shahdadkot
Sujawal Junejo	Manzor Ahmed Magsi	Village Sir Shahnawaz Khan Bhutto
Warah	Manzoor Ahmed	Warah City

Source: Election Commission of Pakistan

5.1.3 Emergency Response

S.No	Name or Organizations	Office Contact
1	Edhi Ambulance	115
2	Electricity Complaint	118
3	Police Emergency	15
4	Telephone (Complaint)	1218
5	Telephone Enquiry	1217
6	Sui Gas Help line	1199
7	PIA Flight enquiry	114

5.1.4 List of NGOs Working in District

Name	Contact No
Pirbhat Women's Development Society Shahdadkot	03013292893
NGO's Development Society Shahdadkot	03337500544
Sindh Graduates Association Shahdadkot	03337501969
Indus Resource Centre	03322024910
International Rescue Committee	03455014598
Laar Humanitarian Development Programme	03337506076
Muslim Aid Pakistan	03337547766
Health & Nutrition Development Society	03322763691
Mehran Welfare Trust	03003430741
UN Habitat Pakistan	03005858865
Insan Dost Welfare Organization	03322012976
Rahbar Social Development Organization	03337538167
Action for Humanitarian Development	03213741728
Child Rights Committee (CRC) Kamber	03453854917/ 03337537311
Doctors World Wide	03337919368
Roshni Welfare Organization	03342004597
Community Development Network	03013297387
Jagerta Social Welfare & Human Organization	03073172322
Badin Rural Development Society	03342552640
Participatory Effort for Healthy Environment	03003795423
Sahara Educational & Development Organization	03322018869
Social Organization for Justice and Human Rights Observation	03337503111
Hidaya Trust Shikarpur	3337280622
Devolution Trust for Community Empowerment	03325138603
Ehsas Social Welfare	03322010694
Society for Environmental Actions, Re-Construction & Humanitarian Response	03007156554
Sindhu Social Development	03342001755
Children Welfare Organization	03337509203
Marie Stopes Society	03322026907
Soch Development Society	03443093643
Humanitarian Aid Welfare Association	03322775028
Voice of New Generation	03123722871
Sindh Art Welfare Association	03337503126
Sindh Humanitarian Development Programme	03342003657
Action for Peace & Sustainable Development	03343713566
Al-Khidmat Trust	03009271755
National Rural Support Programme	03337504661
Human Rights Organization for Medicine and Education	03333115415/ 03342001682
Universal Social Development Foundation	03009315078
Organization for Rural Development	03337524891
Jot Development Society	03322016373
Sindh Rural Support Organization	03443635847
Batool Welfare Organization	03342014191
Bazm-e-Peeral	03337503354

Source: www.himpakistan.pk

5.2 Health Facilities

List of health facilities are provided by WHO for 2010

Name	Type
PATHAN	BASIC HEALTH UNIT
GAZI KHAN KHUHWAR	BASIC HEALTH UNIT

Name	Type
MIANDAD CHINGNI	BASIC HEALTH UNIT
GAJI KHUHWAR	BASIC HEALTH UNIT
HAMAL	BASIC HEALTH UNIT
WADHO KALHORO	BASIC HEALTH UNIT
KHUDA BUX WAHOCHA	BASIC HEALTH UNIT
DATU TEWANO	BASIC HEALTH UNIT
KHANDU	BASIC HEALTH UNIT
GOGHARO	BASIC HEALTH UNIT
KHABAR	BASIC HEALTH UNIT
LALUROUNK	BASIC HEALTH UNIT
KHAIRPUR JUSO	BASIC HEALTH UNIT
GHATHAR	BASIC HEALTH UNIT
THORI BIJAR	BASIC HEALTH UNIT
MASOODERO	BASIC HEALTH UNIT
GAIBIDARO	BASIC HEALTH UNIT
MOHAMMAD ALI GURHMANI	BASIC HEALTH UNIT
KOT GHULAM SHAH	BASIC HEALTH UNIT
BEHRAM	BASIC HEALTH UNIT
SIDDIQUE MACHI	BASIC HEALTH UNIT
GHLAM ALI MAGSI	BASIC HEALTH UNIT
MIRPUR BURIRO	BASIC HEALTH UNIT
CHAKYANI	BASIC HEALTH UNIT
AITBAR KHAN CHANDIO	BASIC HEALTH UNIT
SHAH ABAD	BASIC HEALTH UNIT
BAMBHO KHAN CHANDIO	BASIC HEALTH UNIT
SAWAI CHANDIO	DISPENSARY
KANDO	DISPENSARY
LAR/BHAN	DISPENSARY
ALLAH RAKHIO JALBANI	DISPENSARY
MIRZA JUNEJO	DISPENSARY
HETAM SOHU	DISPENSARY
ARIJA	DISPENSARY
KHAIR MUHAMMAD KARTIO	DISPENSARY
DAFFAR	DISPENSARY
JAIN ABRO	DISPENSARY
CHHAJRA	DISPENSARY
NOURANG SHARIF	DISPENSARY
DALIL BURIRO	DISPENSARY
GUJHAR	DISPENSARY
GHULAM RASOOL MANGSI	DISPENSARY
ABDUL WAHAB KHOSO	DISPENSARY
MURAD WAHAN	DISPENSARY
TALUKA HOSPITAL, WARAH MATERNAL	HOSPITAL
TALUKA HOSPITAL, KAMBER	HOSPITAL
TALUKA HOSPITAL, MIRO KHAN	HOSPITAL
MIRO KHAN	MATERNAL & CHILD HEALTH CENTRE
SHAHADKOT	MATERNAL & CHILD HEALTH CENTRE
NASIRABAD	RURAL HEALTH CENTRE
WAGAN	RURAL HEALTH CENTRE
QUBO SAEED KHAN	RURAL HEALTH CENTRE
UMED ALI JUNEJO	RURAL HEALTH CENTRE