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PROF. DR. EHSAN RASHID MEMORIAL LECTURES

VISION AND STRATEGY FOR REGIONAL DEVELOPMENT: The Case of Balochistan Province, Pakistan

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I. Introduction

Despite seven decades of independence of Pakistan, large parts of the country remain woefully undeveloped with poor infrastructure and limited income generating opportunities. Balochistan stands out in this respect. However, development is possible. Balochistan has a manageable population, comprising just 1.5 million families. At one job per family, Balochistan needs to provide just 1.5 million jobs. This is eminently feasible and it is possible to create an almost zero-unemployment economy in Balochistan.

There are a number of theories of under-development and of growth. The theories that best fit Balochistan are 'Big Push' and 'Unbalanced Growth'. The two theories postulate that the injection of a large project in any one sector creates an imbalance with respect to other sectors. However, the project performs the role of an 'engine of growth' and propels growth in other sectors.

Balochistan is, as yet, a primary sector economy of Pakistan; more specifically, it is essentially a pastoral economy. As such, it is prudent for the province to concentrate scarce fiscal resources in selected sectors and aim to obtain maximum impact. More importantly, it is necessary to chart a vision and set a direction. A vision sets the direction, which – sequentially – enables a strategy to be formulated, a policy to be framed, plans to be drawn and, accordingly, schemes to be prepared and implemented. Today, the development process has been turned on its head. Schemes are prepared and (half) implemented without the context of a plan, a policy, a strategy, a direction, or a vision. The result is expenditure of billions of rupees in the name of development, without any meaningful development.

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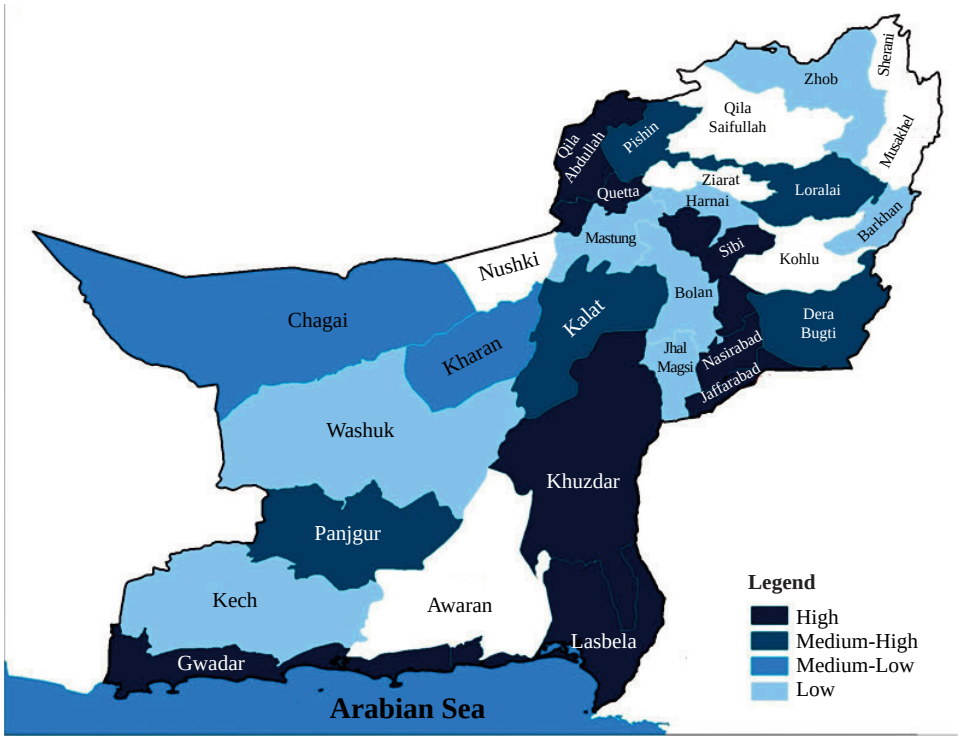
Chart 1
Planning Sequence

1. Vision
2. Direction
3. Policy
4. Plan
5. Scheme

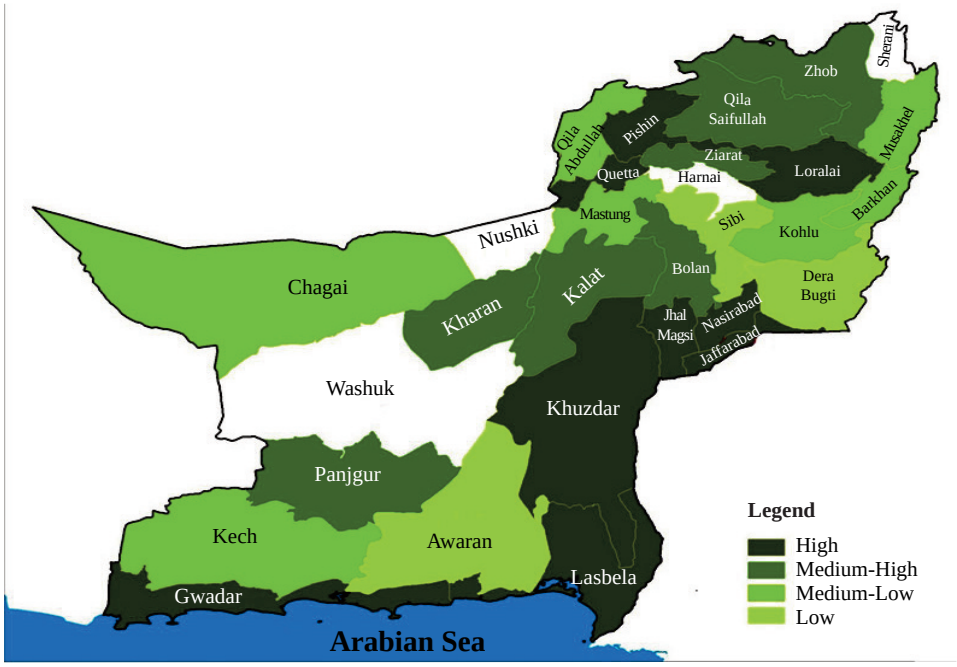
II. Balochistan's Resource Geography

Balochistan province covers an area of nearly 350,000 square kilometres, with population, agricultural and mineral resource densities varying significantly, as can be seen in Figures 1, 2 and 3.



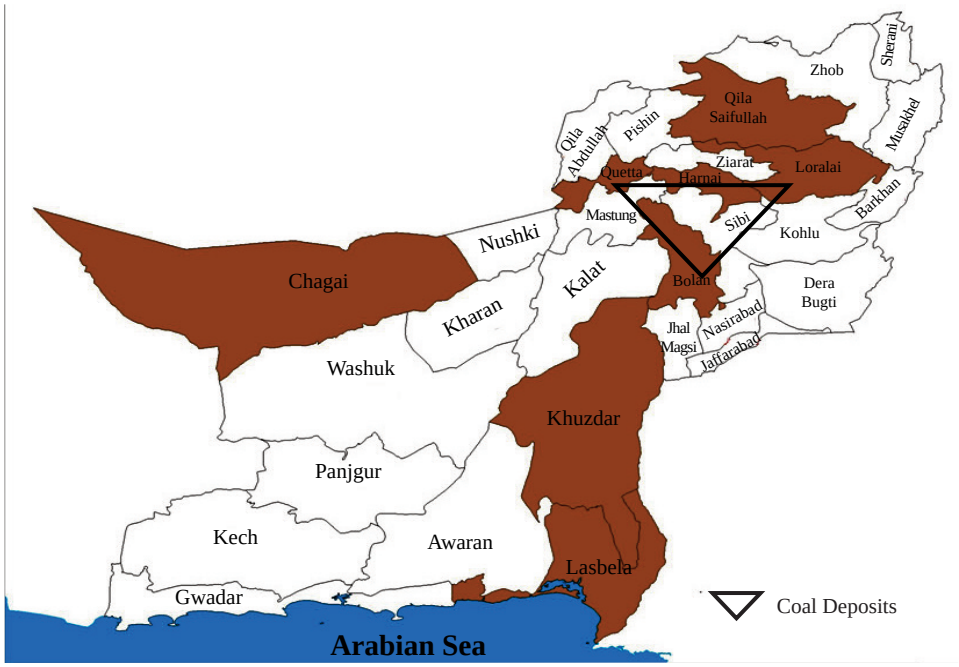
Distribution of Demographics

FIGURE 1



Distribution of Agro-resources

FIGURE 2



Distribution of Minerals

FIGURE 3

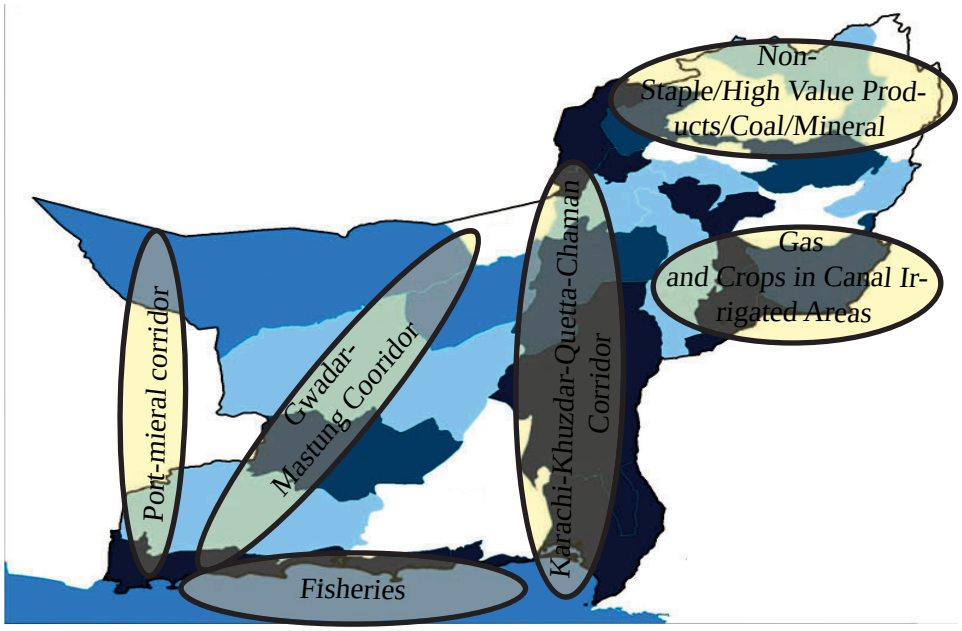
Balochistan is rich in resources, particularly mineral resources. In fact, its minerals wealth is diverse and vast enough for Balochistan to develop as essentially a natural resource economy.

Based on resource geography, the province can be classified into 6 economic corridors:

Chart 2

Economic Corridors

Corridor 1	North-eastern districts of Zhob and Quetta Divisions producing non-staple high-value products, i.e., fruits, vegetables, wool, etc., and minerals, i.e., coal and chromite.
Corridor 2	Canal-irrigated districts of Nasirabad Division producing food and cash crops and Sibi Division, site of gas fields.
Corridor 3	Major trade route along highway NA-25, connecting Karachi port with Chaman and onwards to Kandahar in Afghanistan via Bela, Khuzdar, Kalat, Mastung and Quetta.
Corridor 4	Connecting Gwadar port with Khuzdar and onwards to the rest of the country. Also part of Gwadar-Kashgar corridor (via N-85/N-30 and M-8)
Corridor 5	Link between copper/mineral belt in Chagai district and Gwadar port via Mashkel and Buleda
Corridor 6	Coastal belt, hosting the fishing industry



Potential Development Cooridors

FIGURE 4

III. Identifying Sectoral and Regional Priorities

Given the above, the following sectors emerge as meriting priority:

Chart 3

Priority Sectors

Primary productive sectors	Infrastructure sectors
Crop agriculture	Water
Horticulture	Road/Rail connectivity
Livestock	Energy *(based on local sources)*
Fishing	Education
Mining	Health
Small & Medium industries *(based on local materials for value addition of primary products)*	

Additionally, it is necessary to identify geographical sites (cities, towns) where development investment is to be located in order for these sites to act as 'engines of growth'. Needless to say, the identification of these sites is a function of resources endowments of particular areas (districts) where these cities or towns are situated. These sites have been identified on the basis of 15 criteria, magnitudes for which are provided in Appendix 1.

Chart 4

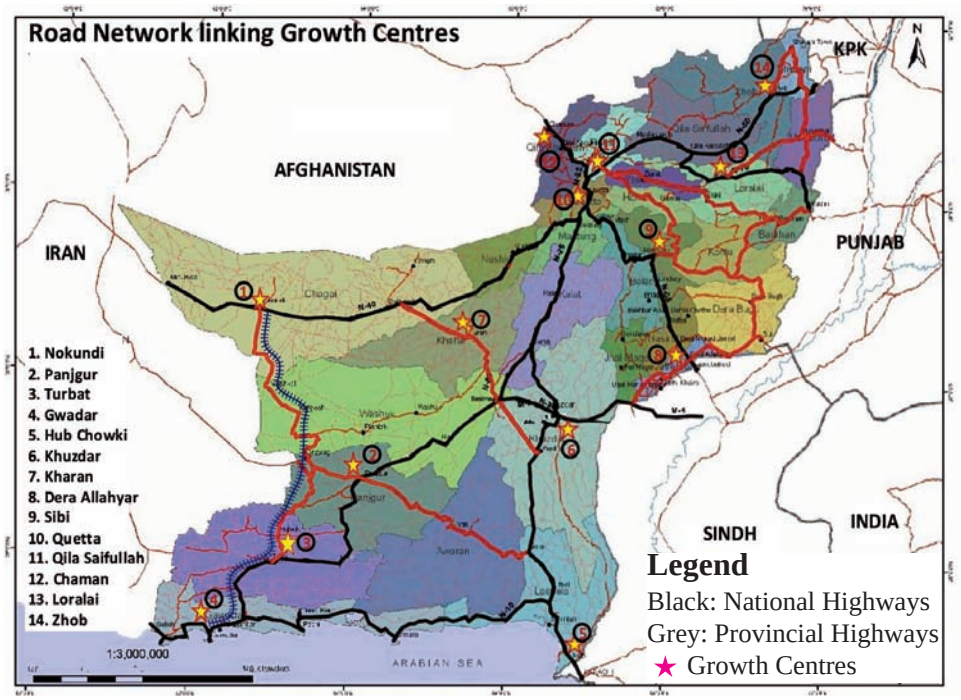
Indicators for Identifying Growth Centres

Population of district
Population of major town in district
Population growth rate of district
Population growth rate of the town
Cereals production in district
Onion production in district
Fruit production in district
Vegetable production in district
Fodder production in district
Livestock population in district
Fish harbours in district
Strategic mineral production in district
Site's location on national/provincial highways
Site's location on rail line
Site's location on junction of two or more highways/rail lines

Based on the above, the following 14 sites have been identified as potential growth centres for concentration of development investment:

1. Quetta	2. Chaman	3. Zhob	4. Loralai
5. QilaSaifullah	6. Sibi	7. DeraAllahyar	8. Kharan
9. Khuzdar	10. Panjgur	11. Nokundi	12. Turbat
13. Gwadar	14. Hub Chowki		

Connectivity is to the functioning of the economy as veins are to the human body. Veins carry blood to the various organs, without which the human body will die. Sans connectivity, inputs will not reach farms and factories; and products will not reach markets. If the above growth centres are to become engines of growth and their potential tapped, they will need to be connected with an efficient road/rail network.

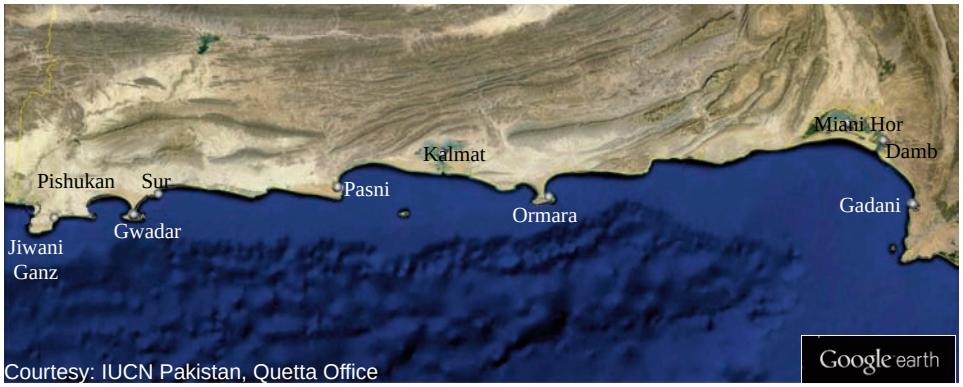


Strategic Road Network

FIGURE 5

IV. Coastal Area Development

There are 38 landing sites on the Balochistan coast where fish catch is brought ashore. Of these, 10 have been identified as possessing potential for development (8 in Gwadar district and 2 in Lasbela district). The average distance between the 8 sites in Gwadar district is 38 km and between the 2 sites in Lasbela district is 41 km. There is an approximately 200 km stretch between Damb in Lasbela district and Ormara in Gwadar district, with no fishing villages and only scattered population on account of virtual absence of water source.



Balochistan Coast

FIGURE 6

There are six key requirements for any landing site: jetty, platform, storage shed(s), fresh water, ice-making plant, and connecting road. A jetty is necessary for fishing boats to berth and unload their cargo, a platform is needed for the catch to be laid out, storage sheds are necessary to clean/process fish catch and to place equipment, and a well-paved road is necessary to transport the catch to the market. The stress on well-paved roads is meaningful as a bumpy road damages the fish at the bottom of the truck and reduces the overall value of the catch.

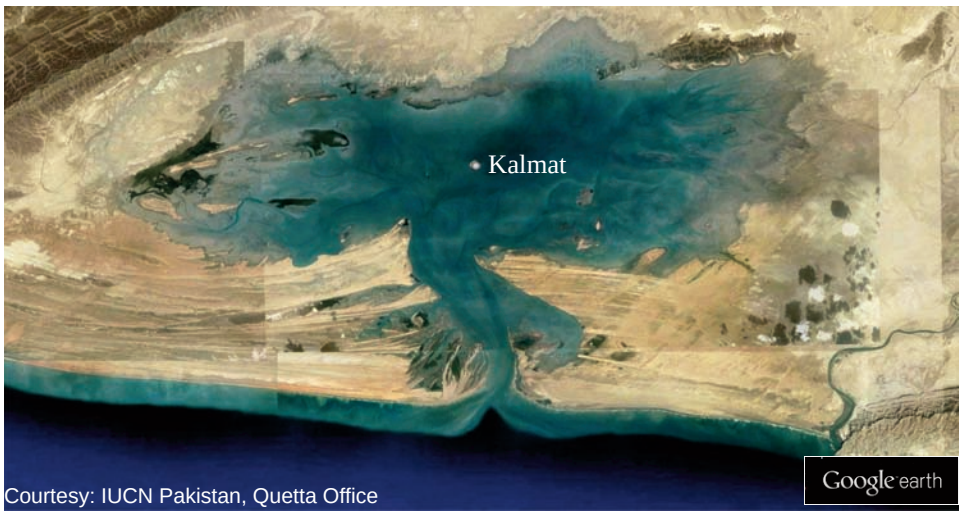
Fresh water and ice are absolutely critical for the fishing industry for two reasons:

Salt water is corroding; as such, as the fish is unloaded onto the jetty and brought onto the platform, the area and all the equipment is permeated with salt. Fresh water is needed to continuously wash the fish catch, the jetty, the platform, and all the equipment. Ice is a key and essential ingredient to store fish on and off the boats and fresh water is the element for making ice.

Further, there are three lagoons on the Balochistan coast – at Jiwani, Kalmat and Miani Hor – which are ideal for high value added marine life breeding, e.g., oysters.

Jiwani, District Gwadar

FIGURE 7



Kalmat, District Gwadar

FIGURE 8

Miani Hor, District Gwadar

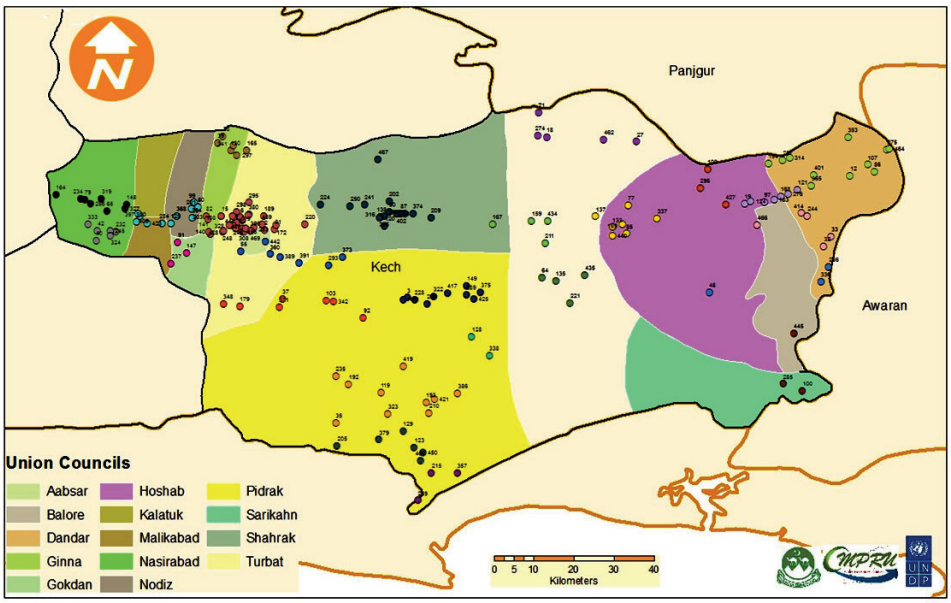
FIGURE 9

V Rural Development

There are about 11,600 rural settlements, including revenue villages, in Balochistan, with size ranging from 14 houses to 8,866 houses. One option is to provide economic and social infrastructure and services to every village, large and small. That however, would not meet the criteria of economic inefficiency. Locating an agricultural services unit (seed, fertilizer, pesticides sale depots, farm machinery repair and servicing shops, etc.,) or a livestock support unit for a small number of farms covering a relatively small area or a small number of heads of livestock, a school for less than 50 children, or a basic health unit (BHU) for less than 100 people would imply under-utilized capital.

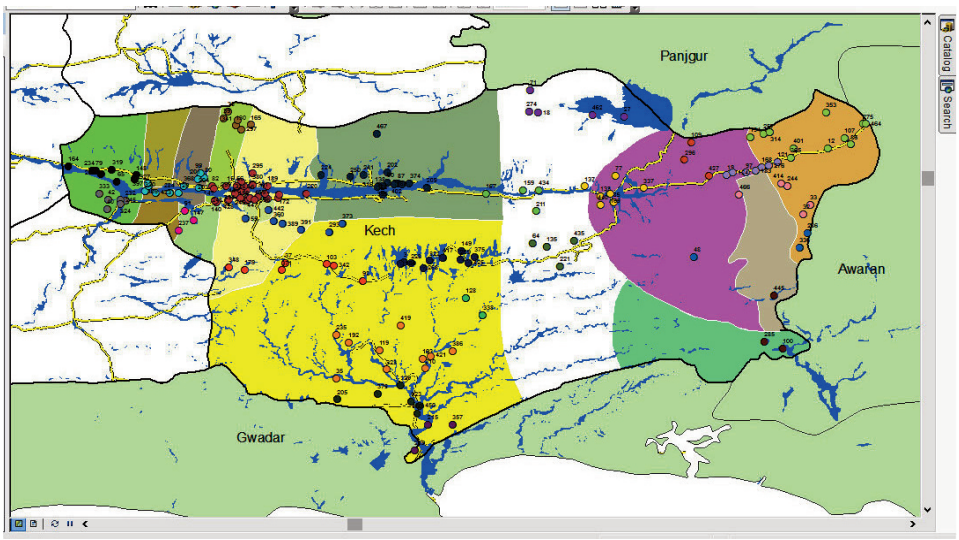
An alternative option is to identify village clusters and a growth point within the cluster, where an agricultural services unit, a livestock support unit, a high school, a rural health centre (RHC), etc., can be located. Given that a cluster will comprise a larger population, the economic and social services will cater to a larger population; thereby, reducing the unit cost of service provision. Of course, the villages within the cluster will need to be connected by a road network to the growth point and to each other.

A GIS-based exercise carried out in this respect has identified 20 village clusters and a similar number of rural growth points for location of economic and social infrastructure and services. It can be expected that some of these growth points can emerge as towns and, eventually, as growth centres for the region.



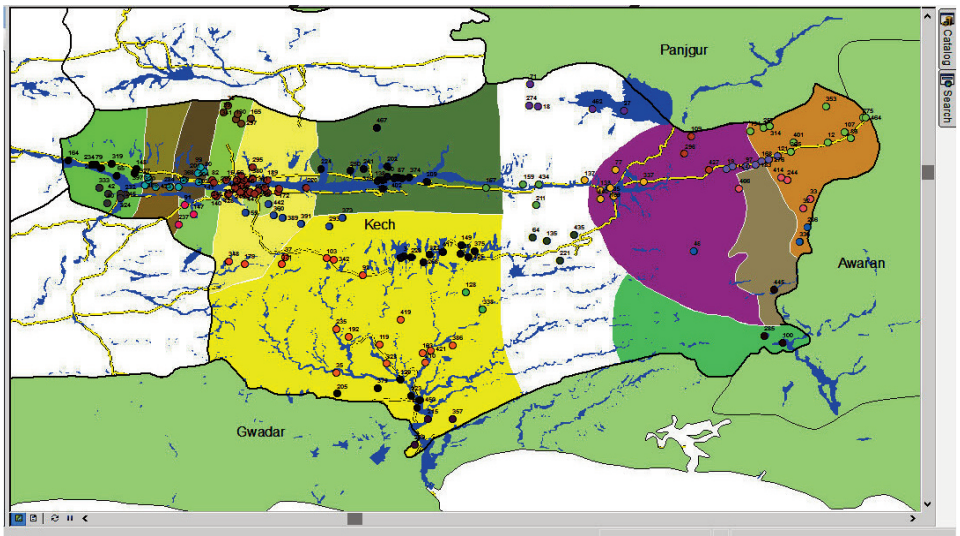
Village Clusters - Tehsil Turbat, District Kech

FIGURE 10



Grouping Analysis for Tehsil Turbat

FIGURE 11



Village Clusters - Tehsil Turbat

FIGURE 12

APPENDIX I

Magnitudes of Indicators for Identifying Growth Centres

S #	Criteria	Magnitudes
1.	Population of district	Less than 250 = 0; 250,000-500,000 = 1; 500,000-1,000,000 = 2; More than 1,000,000 = 3
2.	Population of major town in district	Less than 20,000 = 0; 20,000 -40,000 = 1; 40,000 – 100,000 = 2; 100,000 – 500,000 = 3; 500,000 – 1,000,000 = 4; More than 1,000,000 = 5
3.	Population growth rate of district	Less than 2.5% = 0; More than 2.5% = 1; Less than 4% = 0; More than 4% = 1
4.	Population growth rate of the town	Annual output less than 10,000 tonnes = 0; Annual output more than 10,000 tonnes = 1
5.	Cereals production in district	Annual output less than 10,000 tonnes = 0; Annual output more than 10,000 tonnes = 1
6.	Onion production in district	Annual output less than 10,000 tonnes = 0; Annual output more than 10,000 tonnes = 1
7.	Fruit production in district	Annual output less than 10,000 tonnes = 0; Annual output more than 10,000 tonnes = 1
8.	Vegetable production in district	Annual output less than 10,000 tonnes = 0; Annual output more than 10,000 tonnes = 1
9.	Fodder production in district	250,000-500,000 = 1; 500,000-1,000,000 = 2; More than 1,000,000 =3
10.	Livestock population in district	More than 100,000 heads = 1; Less than 100,000 heads = 0
11.	Fish harbours in district	District with Fish Harbour = 1; District without Fish Harbour = 0
12.	Strategic mineral production in district	Yes = 3; No = 0
13.	Site's location on national/ /provincial highways	Yes = 5; No = 0
14.	Site's location on rail line	Yes = 5; No = 0
15.	Site's location on junction of two or more highways/rail lines	Yes = 5; No = 0

APPENDIX II

Districts Producing Agricultural Products in Excess of 10,000 tonnes: 2010-11

District	Cereals	District	Onions	District	Fruits	District	Vegetables	District	Fodder
Nasirabad	265,276	Kharan	117,629	Kila Saifullah	338,121	Ziarat	129,809	Kila Abdullah	130,634
Jafferabad	168,222	Jhal Magsi	76,604	Turbat	104,353	Gwadar	65,456	Jafferabad	127,604
Khuzdar	90,033	Panjgur	53,676	Pishin	94,787	Sibi	47,113	Kalat	116,996
Jhal Magsi	70,040	Zhob	53,400	Zhob	92,945	Loralai	43,306	Kharan	105,866
Loralai	31,216	Quetta	46,820	Panjgur	91,543	Kacchi	38,834	Kohlu	98,177
Kila Saifullah	30,429	Mastung	45,900	Mastung	66,120	Musakhel	33,870	Kila Saifullah	77,765
Sibi	30,267	Pishin	25,830	Loralai	39,244	Panjgur	24,140	Gwadar	38,605
Kacchi	24,520	Musakhel	25,024	Kila Abdullah	33,572	Zhob	19,834	Kacchi	37,025
Barkhan	23,781	Barkhan	19,710	Ziarat	27,855	Quetta	15,598	Lasbela	34,300
Dera Bugti	22,963	Kila Abdullah	16,740	Quetta	27,075	Turbat	14,644	Loralai	29,869
Lasbela	21,168	Dera Bugti	12,870	Kalat	25,073	Nasirabad	14,161	Awaran	25,208
Awaran	20,144	Kohlu	9,520	Lasbela	22,541	Barkhan	13,860	Turbat	20,578
Chagai	18,763	Nasirabad	8,460	Khuzdar	11,266	Chagai	13,718	Jhal Magsi	20,040
Kharan	15,404	Ziarat	5,831	Gwadar	10,900	Kila Saifullah	6,768	Khuzdar	19,128
Pishin	13,048	Loralai	2,892	Barkhan	7,809	Jafferabad	6,364	Pishin	15,604
Kalat	11,950	Jafferabad	2,274	Sibi	6,383	Kohlu	4,532	Ziarat	12,585
Turbat	8,695	Khuzdar	1,474	Kharan	4,231	Pishin	4,500	Mastung	12,087
Mastung	8,313	Kalat	1,241	Chagai	3,951	Mastung	4,269	Sibi	11,715
Kila Abdullah	7,879	Turbat	1,067	Awaran	1,635	Lasbela	4,237	Quetta	11,366
Quetta	6,050	Sibi	679	Kacchi	1,570	Kila Abdullah	3,417	Musakhel	8,829
Zhob	5,030	Kacchi	496	Kohlu	1,055	Jhal Magsi	3,395	Panjgur	7,127
Panjgur	3,857	Kila Saifullah	316	Jafferabad	716	Awaran	3,103	Zhob	4,486
Musakhel	3,576	Lasbela	270	Musakhel	708	Kharan	2,572	Chagai	4,211
Kohlu	3,175	Chagai	168	Nasirabad	417	Kalat	2,049	Dera Bugti	442
Ziarat	811	Awaran	-	Jhal Magsi	197	Khuzdar	531	Barkhan	431
Gwadar	6	Gwadar	-	Dera Bugti	52	Dera Bugti	440	Nasirabad	-
Total	904,616	Total	528,891	Total	1,014,119	Total	520,520	Total	970,678

Notes: Districts where production of cereals, onions, fruits, vegetables and fodder is greater than 10,000 tonnes is marked.

APPENDIX III

Districts with (Productive) Livestock Population in Excess of 100,000 Heads

District	Population*
Lasbela	2,354,257
Kharan	2,278,577
Musa Khail	2,089,859
Panjgoor	1,941,577
Zhob	1,658,481
Gwadar	1,565,094
Kohlu	1,468,684
Quetta	1,434,915
Kalat	1,389,675
Washuk	1,389,675
Khuzdar	1,302,824
Mastung	1,253,848
Pishin	1,080,966
Kacchi	1,080,966
Ziarat	958,766
Jafferabad	958,766
Kila Saifullah	692,642
Awaran	670,755
Noshki	659,950
Loralai	613,697
Nasirabad	613,697
Kech	569,884
Chagai	494,374
Harnai	446,449
Jhal Magsi	446,449
Sibi	322,351
Kila Abdullah	260,469
Dera Bugti	201,256
Sherani	159,669
Total	30,358,572

* Nos.

Note: Districts where livestock population is greater than one million is marked

APPENDIX IV

Districts and Cities with High Population and Growth

S.No.	Major Mining
1.	Districts
2.	Lasbela
3.	Khuzdar
4.	Quetta
5.	Chagai
6.	Kila Saifullah
7.	Kachhi
8.	Loralai
9.	Harnai

APPENDIX V

Ranking of Districts by Economic Potential

City/Town	Population	City/Town	Growth (%)
Quetta	1,031	Hub Chowki	17.2
Hub Chowki	674	Dera Allahyar	10.8
Khuzdar	236	D. M. Jamali	8.8
Dera Allahyar	178	Usta Mohd	7.2
D. M. Jamali	136	Khuzdar	6.6
Mastung	128	Kharan	5.9
Usta Mohd	110	Gwadar	5.9
Gwadar	106	Panjgur	4.9
Chaman	100	Loralai	4.8
Sibi	93	Nokundi	4.5
Turbat	87	Sibi	4.5
Kharan	66	Kalat	4.3
Loralai	60	Quetta	4.1
Zhob	58	Chaman	3.9
Nokundi	46	Pasni	3.0
Pasni	46	Pishin	2.7
Panjgur	43	Mastung	2.3
Kalat	42	Zhob	1.9
Pishin	34	Turbat	1.6
Total	424	Average	5.5

APPENDIX VI

Ranking of Districts by Economic Potential

District	SCORE	Score	* District Population	>2.5%=1 District Pop. Growth	** Major Town	>4%=1 Major Town Pop. Growth	>10,000^ Cereals Output	>10,000^ Onions Output	>10,000^ Fruits Output	>10,000^ Vegetables Output	>10,000^ Fodder Output	*** Livestock Population	Harbour=1 Fish Harbour	>10,000^ Mining Output	Highway Link	Rail Link	Junction
Lasbela	100	29	3	1	4	1	1	1	1	1	1	3	1	1	5	0	5
Khuzdar	93	27	3	1	3	1	1	1	1	1	1	3	0	1	5	0	5
Kila Abdullah	93	27	3	1	3	1	0	0	1	0	1	2	0	0	5	5	5
Quetta	90	26	5	1	5	1	0	0	1	0	1	1	0	1	5	0	5
Kech	90	26	3	0	2	0	0	1	1	1	1	2	0	0	5	5	5
Jafferabad	86	25	1	1	5	1	1	1	0	1	1	3	0	0	5	5	0
Gwadar	83	24	1	1	3	1	0	0	1	0	0	1	1	0	5	5	5
Mastung	79	23	0	0	3	0	0	1	1	0	1	2	0	0	5	5	5
Chagai	79	23	1	1	2	1	1	1	0	1	1	1	0	3	5	5	0
Panjgur	76	22	1	0	2	1	0	0	1	0	1	1	0	0	5	5	5
Nasirabad	72	21	1	1	3	1	1	1	0	1	1	1	0	0	5	5	0
Kila Saifullah	69	20	1	0	0	0	1	1	1	1	1	3	0	1	5	0	5
Sibi	66	19	1	1	2	1	1	0	0	1	1	1	0	0	5	5	0
Kacchi	66	19	1	1	0	0	1	0	0	1	1	3	0	1	5	5	0
Kalat	59	17	1	0	2	1	1	1	1	1	1	3	0	0	5	0	0
Loralai	59	17	1	0	2	1	1	0	1	1	1	3	0	1	5	0	0
Noshki	48	14	0	1	2	0	0	0	0	0	0	1	0	0	5	5	0
Zhob	41	12	1	0	2	0	0	0	1	0	0	3	0	0	5	0	0
Pishin	41	12	2	1	1	0	1	0	1	1	1	3	0	0	1	0	0
Kharan	38	11	1	1	2	1	1	1	0	0	1	3	0	0	0	0	0
Washuk	31	9	0	1	0	0	0	0	0	0	0	3	0	0	0	5	0
Dera Bugti	21	6	1	1	0	0	1	0	0	0	0	3	0	0	0	0	0
Jhal Magsi	17	5	1	1	0	0	1	0	0	0	1	1	0	0	0	0	0
Barkhan	17	5	0	1	0	0	1	0	0	1	0	2	0	0	0	0	0
Harnai	17	5	0	1	2	0	0	0	0	0	0	1	0	1	0	0	0
Awaran	17	5	0	0	0	0	1	1	0	0	1	2	0	0	0	0	0
Ziarat	10	3	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0
Kohlu	10	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
Musakhel	10	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
Sherani	7	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0

* : <250,000=0; 250,000-500,000=1; 500,000-1,000,000=3; >1,000,000=5

** : <20,000=0; 20,000-40,000=1; 40,000-100,000=2;100,000-500,000=3;500,000-1,000,000=4;>1,0000,000=5

^ = Tonnes

*** : 250,000-500,000=1; 500,000-1,000,000=2; 1,000,000+=3