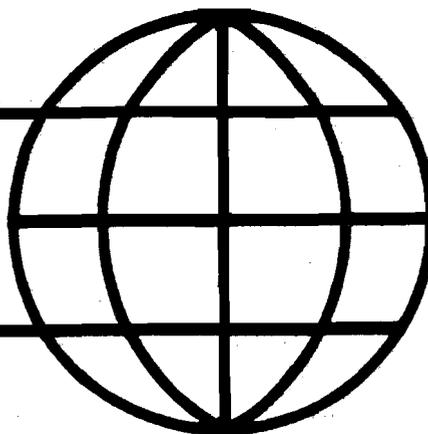


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**COOPERATIVE AGREEMENT ON HUMAN SETTLEMENTS
AND NATURAL RESOURCE SYSTEMS ANALYSIS**

BALUCHISTAN: AN INTRODUCTION
Area Development Working Paper

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Area Development Cooperative Agreement on Regional Development
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ABSTRACT

The prospect for economic development in Baluchistan starts from a number of historical and geographical disadvantages, of which the most immediate are sparseness of both human and natural resources, inaccessibility and isolation. A review of the available information, published and unpublished, supplemented by interviews and site visits during a 15-day tour of the Province, leads to the conclusion that among a variety of possibilities the provision of water, roads and electricity vie for top priority both in local community thinking and in Provincial and Federal Government planning. Both planners and non-government personnel have already thought out in considerable detail, and in many cases formally proposed, most of the projects that are likely to be feasible. However, the total cost stands estimated at over one billion dollars and (at least among the projects that involve water, power and roads) no criteria are offered for the selection of particular projects. Given the amount allotted to the current project, the general policies and constraints under which USAID operates, and the existing portfolio of USAID national projects, it is possible to work out selection criteria that would lead to an initial focus on flood water management and control in Baluchistan. The same criteria suggest that the effort should be divided into as many schemes as is logistically feasible in each of the four Divisions of the Province. Such a policy is most likely to achieve maximum effect for the largest number of the rural poor. It may be complemented usefully by the provision of carefully selected technical assistance in one or two areas which are already strong points in the economy of Baluchistan (in the private sector), but which are held back by inadequate skills and lack of access to technological advances outside the country. This combination of water-related development interventions and carefully chosen assistance to the private sector is calculated to achieve the broadest and most lasting impact for the money available. Furthermore, it has the advantage that it will build on existing skills (as in the exploitation of flood waters for cultivation and range improvement) and will minimize the amount of possibly disruptive social change that might be caused by a more concentrated effort.

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PREFACE

In September 1982, the United States Agency for International Development (USAID) in Pakistan requested the assistance of the Clark University/Institute for Development Anthropology Area Development Cooperative Agreement toward formulating a rural development program for Baluchistan Province. The following report presents preliminary findings of a field mission to Pakistan in October 1982, and is based upon the work of Area Development Associates, Drs. Brian Spooner and Allen Jones.

The terms of reference for this report are included in an appendix. We have interpreted them as a request for:

- (1) A guide to all the materials and persons that might be useful in the development of the Project;
- (2) A digest of all relevant information; and
- (3) The development of an argument--a rationale--for determining what the Baluchistan Area Development Project should consist of and what the Project Identification Document (PID) team should do.

In the short time available to us (we were asked to spend 24 days in Pakistan, as a sequel to 15 days spent by one of us on a review of the literature available in the United States), we have attempted to put together in this report everything that the PID team might need in order to orient themselves towards the task at hand, signposted by an argument for a project of a particular type (in terms of focus, aim, justification, feasibility), leaving open the details of what should be done but providing a set of questions, general and specific, which the PID team should address.

Even in ideal conditions twenty-four days would be a short time for the physical accumulation of all the necessary materials, let alone for their digestion and supplementation by interviews during a tour of the Province. Consequently, it is not surprising that some of the materials we needed did not reach us until the end of the mission. However, all the materials we collected which appeared useful are both listed in an appendix and held in a special collection at the Agriculture and Rural Development office (USAID/Islamabad) for future reference.

In planning our tour through the Province, we were obliged to give more consideration to logistical constraints than was desirable. For the most part, therefore, we saw only district centers and the routes between them. Although we visited 14 out of the 16 districts and agencies, we should ideally have also seen the district of Panjgur (which according to the available statistics is the poorest in the Province) and we should have seen more of the predominantly pastoral areas of the Province, especially in Zhob (Kakar Khorasan) and in Khuzdar and Kharan. We hope that appropriate members of the PID team will be able to visit these areas.

Wherever we went we were well entertained, lodged and fed, sympathetically listened to and helped in our task. We had interesting discussions in most districts with both government officials and local people (mainly, but not only, council chairmen). We were generally impressed with the caliber of the people we met and with the degree of thought that had already gone into the planning for development. The persons we had formal discussions with are listed with the

itinerary in an appendix. We should like to thank all of them for their time and the enthusiasm with which they explained their situations and showed us their field sites. This report would not have been possible without their positive cooperation. We are also particularly grateful to Mr. Richard Scott, Mr. G. M. Marri, Mr. Masood H. Khan and Mr. Abdul Salam Kakar who accompanied us on the tour and helped to create the necessary environment for fruitful discussions, and especially to Mr. Marri and Mr. Khan who made both the physical and social arrangements for the tour. We congratulate them warmly on the smoothness and gentility with which it was achieved. Finally, we hope that the immediate result of this report will serve its purpose in due course for the PID team and lead to the formulation and implementation of a significant Baluchistan Area Development Project of lasting and beneficial impact.

CHAPTER I - INTRODUCTION

The prospect of a USAID Baluchistan Area Development Project presents a challenge. The area has been effectively isolated and neglected by its neighbors since the 12th century when political events on the Iranian Plateau led to the abandonment of the arterial route that passed through the middle of what is now Baluchistan to India. From then until the creation of Pakistan, Baluchistan achieved importance beyond its borders only in the role of border territory to larger neighboring regions. As long as international borders in the region were unquestioned, no attention was paid to Baluchistan. It was the perception of a threat to the borders of India that brought the British into Baluchistan in the 19th century. Similar international instability is now causing an unprecedented interest in the economic development of the Province.

This unaccustomed attention entails dangers as well as advantages--not only for the Baluch, Brahui, Pathans and other ethnic and linguistic groups that form the population, but for Pakistan and the region as a whole. There are mounting pressures for fast development, but fast development tends to accentuate and increase socio-economic differences, which may be counter-productive and lead to social disruption. The demand for speed also tends to lead to over-simplification of the problems, especially in the neglect of variation in local conditions and in lack of attention to the social and economic factors which alone can ensure the long-term success of any project.

CHAPTER TWO
THE POTENTIAL FOR DEVELOPMENT

1. Overview

From the conventional point of view of development planning, resources in Baluchistan--both human and natural--are sparse, irregular and unreliable. Settlements in the greater part of the Province are few and far between, depending on the coincidence of cultivable soil and relatively reliable surface flow or shallow groundwater. Apart from Quetta (the seat of the Provincial Government), the largest town, Turbat, has a population of only 27,000, and the vast majority of settlements are very small. Outside the settlements, nomadic pastoralism has been important historically but is in decline, and the density of human activity is so low over much of the Province that the figures become almost meaningless. Apart from a few relatively small favoured areas mostly in the north-east and on the eastern boundary, vegetation cover is low, often below five percent, and of poor quality. Rainfall is low and irregular. Precipitation patterns are influenced by both the Mediterranean and Monsoon regimes. Drought is frequent, but rain when it comes is often violent and causes erosion and damage to property and engineering that can be not only very dangerous but spectacular! How to harness this intractable water supply situation has always been the key problem for human enterprise in Baluchistan. The history of this enterprise is interesting and significant for the present development effort--which must at least grapple with and should probably be focused on the same problem. There are also mineral resources--mostly in isolated pockets--which present a rather

different problem, and there are fisheries along the coast, but neither of these resources have so far been significant for the economy of the Province as a whole.

The traditional life of the Province has been affected very little by development planning, but it has undergone significant transformation in terms of economic context--which now conditions the available development options. For example, because of the attraction of the labor market in the Gulf States and traditionally strong ties with Oman, the amount of remittances from migrant laborers has become a major factor in the economy of the Province, especially in the southwest. Such conditions complicate the development challenge.

2. Basic Features

2.1. Natural Resources. Baluchistan has an area of 347,000 square kilometers, which amounts to 44% of the total area of Pakistan, though its population is only 5% of the total national population.

2.2. Climate. The climate is generally arid. Variations are largely due to differences in elevation. The mountains and valleys in the northeast and the central highlands receive up to 350-400 mm of average annual rainfall, while in the remaining two thirds of the Province--the west and south--the mean drops below 200. Except for the northeast, which falls under the influence of the summer monsoons, rainfall occurs mostly in winter (some as snow at the higher altitudes), and is characterized by wide annual variations. It is quite common

for the total annual rainfall to occur in one or two unpredictable storms. Temperatures are extreme, very high in summer, particularly in the southern and western plains, and falling below freezing in the north in winter (see tables in appendix). The combination of low rainfall, poor distribution, low humidity and high temperatures results in high rates of evapotranspiration and generally low effectiveness of rainfall.

2.3. Agro-ecological regions. Baluchistan is divided into five physiographic zones which broadly coincide with the main agro-ecological regions.

a) Northeastern region. This area consists of a number of parallel ranges and associated narrow valleys merging into the Quetta-Pishin uplands (over 1700m). Alluvial sorting and sedimentation have given rise to distinct physiographic units recurring in each valley: (i) alluvial fans consisting of coarse materials; (ii) an evenly sloping piedmont plain below the alluvial fans composed of finer material; (iii) basins or playas, which are depressions with closed drainage in which fine sediments have collected and where salinity is frequently high; (iv) nearly level flood plains formed by the deposition of fine silty material by slow-moving river spills and (v) loess deposits which occur in certain valleys. In this region summer temperatures are moderate, but winters are generally long and cold.

b) North-central plateau. This area, which may be considered the core of the Province from a historical point of view, slopes down from around 1700 m in the east around Kalat to less than 1000 m

in the west at Panjgur and Nok Kundi, and includes the depression of the Mashkel inland drainage system which terminates on the Iranian border. Climatic conditions are similar to (a) above in the east and tend to increasing aridity and barrenness to the west.

c) Southwestern region. This area comprises a number of parallel east-west valleys which constitute steps from the Iranian Plateau down to the Coastal Plain. Several of the rivers in this region have intermittent surface flow for part of their courses, and shallow groundwater is often available elsewhere, often in combination with alluvial deposits. Alluvial sorting and wind action have resulted in recurring landforms of alluvial, piedmont and desert plains and basins. Most of the region is characterized by extreme summer heat and aridity.

d) Kacchi Plain. This is a piedmont plain of about 2,000 km² sloping from an elevation of about 150 m near Sibi in the northwest to 60 m at the southeastern margin near Jhatpat. Wedged between the Kalat and Khirtar ranges on the west, and the Marri and Bugti hills on the east, the plain merges into the Indus plain toward the south. Agriculturally, since the recent introduction of a canal from the Indus, it has become the most productive part of Baluchistan, and produces a large proportion of the Province's wheat, rice and sorghum.

e) Coastal Plain. The coastal plain stretches about 350 km along the Arabian Sea, from the Iranian border to Sind, varying in width from a few kilometers to as much as 50 km in the fertile Las Bela district at the eastern end.

2.4. Soils. The soils are typical for desert conditions. They are mostly alkaline, very low in organic matter, and derive from the sediments of bordering shale, sandstone and limestone formations. The mountain slopes are mostly bare or covered with thin, rocky, skeletal soils. Hill torrents deposit coarse material along the foot of the slopes. Out on the plains there is a gradual change of soil particle size from coarse to fine.

The best agricultural soils vary from heavy loams to silty clays, except towards the western part of the Province where sandy soils tend to predominate. (Salinity is a problem in some low-lying basins.) These soils are reasonably productive despite their heavy texture. Although they are low in nitrogen, they respond to the application of phosphorus. Soil depth in the valleys, although variable, is generally adequate, but heavy texture and low permeability cause water management problems in some places.

2.5. Vegetation. Although vegetation is sparse throughout most of the Province, especially the west, there are exceptions. Certain areas, which either receive higher rainfall because of altitude, or though lower are closer to groundwater, have preserved quite dense stands of vegetation despite the increasing pressure of human use in recent decades. The Juniper in the northeast and on the eastern boundary are well known and to some extent protected. But the Tamarix forests on the plain below Kharan, and stands of Zizyphus, Prosopis and Accacia elsewhere, which may amount to hundreds of square miles, are relatively unknown. A vegetation mapping effort is urgently needed in order to provide a better guide to the potential of this important

resource. As satellite imagery interpretation becomes increasingly more sensitive, it will probably provide the most economical and efficient means towards this end.

2.6. Water. Water is generally scarce throughout the Province. Although it is available in relatively large amounts in ephemeral floods and in groundwater reservoirs, only a small proportion is utilized. Increased and more efficient utilization of them involves considerable engineering problems and demands considerable investment. Two of the first steps towards this end should be careful study of traditional techniques and the institution of systematic recording of major flows. With modern technology it is possible to increase considerably the efficiency of water management, irrigation and farming by building on the already considerable local experience and social arrangements. But so far there is no general plan for water development in the Province, no records of flow in the major drainages, and WAPDA's hydrological survey has so far covered only parts of the major basins.

3. Human Resources

3.1 Society and Culture. Despite linguistic distinctions between the majority Baluchi-speaking areas in the west, south and east, the Pushtu-speaking areas of the northeast, Brahui-speaking areas in the central highlands, the Persian-speaking communities between Kalat and Mastung and the other minority languages such as Lasi and Jadghali

on the eastern and southeastern borders, the Province is in cultural terms quite homogeneous. But there are significant social--economic and political--distinctions (which are described in the Literature Review). The distribution of these various distinctions--classes and social types--is an important factor in the consideration of the human resources of Baluchistan. Moreover, the overall tribal structure which has comprehended them in recent history has been affected by the contextual changes mentioned above, and has gone into decline to different degrees in different parts of the Province according to the degree of external influence. In some places, therefore, tribalism remains intact a force to be reckoned with and worked with in any project, while in others it may have lost most of its significance.

- 3.2. Demography. According to the latest census (1981) the population of Baluchistan is 4,305,000, which amounts to only 5% of the nation's population. This total represents a 77% increase, or a rise of 1,876,000 over the 1972 figure of 2,429,000. This abnormally large increase is generally put down to certain limitations in the 1972 census. The most marked increase was in the Makran Division which registered a jump in population of 112%--although in an interview the Deputy Commissioner in Gwadar claimed that the population of Gwadar town had increased only 27% to roughly 23,000 today. In the case of Makran another reason offered for the exceptionally high growth rate is the return of workers who had gone to work in Iran before the revolution. In any case the figures for 1982 are offered as a more realistic enumeration of the current population of Baluchistan than those of the preceding decade.

As the 1982 census is still incomplete, the statistics for most other population indices come from the 1972 census. The proportion of males in Baluchistan increased slightly in the 1970's. In 1972 they numbered 1,291,000 or 53% as opposed to 1,138,000. As with the rest of Pakistan, the age groups with the largest numbers are those under 15 years of age, which comprise 42% of the population. According to the 1981 census figures, the urban population of Baluchistan is 16% of the total or 688,800. The largest urban center is Quetta with a current population of 286,000 followed by Turbat (27,671), Sibi (19,989), Zhob (17,191), Gwadar (15,794) and Pasni (15,737).¹ The remaining towns are 10,000 or less.

Pakistan has a current annual birthrate of more than 3% which is among the highest in the world, and Baluchistan's growth rate is generally believed to be about the same.

Unfortunately, there is no current information available on either internal or external migration--which is probably an even more significant factor than the growth rate.

- 3.3. Health. As with education, Baluchistan has a network of health facilities spread throughout the Province. These range from hospitals in the towns and district headquarters to rural health centers, maternal and child health centers, TB clinics and dispensaries, located in rural areas. As of 1979-1980, there were 35 hospitals, 14 rural health centers, 53 maternal-child health centers, 10 TB clinics and 335 dispensaries to serve the health needs of the

¹The Quetta figures are from 1981; the others are from 1972.

Province's population. In terms of staff for these facilities there were a total of 148 doctors--126 male and 22 female--and 103 nurses--78 female and 25 male. In addition, there were 79 lady health visitors posted to positions in the Province and 393 dais or midwives.

But with these figures a caveat must be made; for instance, listed for Sibi Division are four posts for female doctors, but when we visited the Commissioner of Sibi Division we were told that there is not one female doctor presently working in the whole division. The problem is a relatively common one--postings are made but they are not always filled. Trained medical staff exhibit reluctance to take jobs in remote rural areas devoid of basic social services and amenities even though they are among those responsible for providing an important part of those services. Even were all the posts to be filled, the numbers of medical staff are not adequate to provide sufficient health coverage for the Province's population: the ratio of doctors and nurses to population works out to approximately one doctor for every 29,000 population and one nurse for every 42,000.

Thus the need is great for more trained medical staff and for more health facilities and it is heartening to note that in some measure this need is being responded to at the local level in the priority given by district councils to the construction and maintenance of rural health facilities.

A word needs to be mentioned about water, a critical need in health as well as in other sectors. A key priority for the local councils in most of the districts is the construction of safe drinking water supply schemes. By promoting the public's health, these schemes will make it possible for the population to engage in

productive activity in other sectors thus contributing to the Province's overall development.

Other serious problems in the health sector are the incidences of such diseases as malaria and to a lesser extent, TB. These diseases, particularly malaria, affect significant numbers of the population and efforts need to be undertaken such as USAID's national project for malaria eradication by spraying.

3.4. Education. There is a network of educational institutions in Baluchistan ranging from primary schools at the bottom to a university at the top. As of 1979-1980 there were a total of 2531 primary schools in the Province (2087 for boys and 444 for girls) with a total enrollment of 151,942 (128,764 boys and 23,178 girls). There were a total of 326 middle schools (284 boys' and 42 girls') with an enrollment of 25,138 (21,007 boys and 4,131 girls) and 160 high schools (121 male, 39 female) with 8,271 students enrolled (6,720 male, 1,551 female). Despite these figures, a major effort is under way in Baluchistan to increase the number of schools at this level (education receives the fourth priority in the Province's Annual Development Program budget), and in a number of districts in the Province much of the work of the district councils involves the repair and construction of school buildings.

At a higher level, there are 18 inter-colleges in Baluchistan (15 male, 3 female) with a total enrollment of 3,239 (2,345 males, 894 females). Nine degree colleges enroll 331 males and only one degree college for women has an enrollment of 110 females. Not counting the university, there are a total of 11 other institutions of higher education such as Polytechnics, Commercial, Vocational

and Teachers Training Schools with a total enrollment of 1,118. (More complete statistics about these various institutions according to sex and district follow in Appendix 5.)

While there is a genuine commitment to develop the educational sector in Baluchistan, the task is fraught with fundamental problems. One is the difficulty in some districts of staffing the schools. In Gwadar, for instance, they have trouble recruiting science teachers. Another is the problem of keeping enrollments up; this is especially true among female students. There is a report that a female college recently closed in Khuzdar because they had only one student. And then there is the daunting challenge which the educational sector faces in its responsibility to a largely uneducated and illiterate adult population. There are no precise figures for literacy in Baluchistan but given the Province's comparative under-development, it would be safe to assume it is below the national figure of 24%. In a recent sample taken in a tehsil in Quetta District, for instance, out of 230 women only one had any education and that being only some primary education.²

This finding is particularly striking when one considers that Quetta is the most advanced district in the Province by virtue of having the provincial capital city.

One bright spot in the educational sector is the concept of mosque schools. As part of a nation-wide policy, efforts are under way in a few districts such as Kacchi to develop mosque schools for primary school education. As there is already a respectable

²Dick Johnson, UNICEF Quetta Office.

tradition of education in local mosques, and as they provide a ready-made physical facility, these are proving successful where they are being attempted. These may well prove beneficial for female education, as well as for reading and writing skills which can be imparted through Quranic instruction. The resistance to female education appears to stem from fears of modernity and social change on the part of male elders, but it is felt that their opposition will lessen if females are brought into the educational sector through mosque schools. UNICEF is currently trying this approach in Baluchistan.

- 3.5. Administration and Local Government. The Province is fragmented historically by both the topography and tribal political structure, which is now to a large extent reflected in the administrative framework of four divisions, each divided into three, four, or five districts or agencies. This framework dates from 1970, but it is only since 1977 that there has been a serious attempt to build up an administrative structure in each of these administrative centers. In the present situation the provincial administration interacts formally with elected local representatives in the form of a local council in each administrative center from the district down. The effectiveness of these nested local councils in balancing the administration and representing their constituencies depends in the final analysis on the effectiveness of the local tribal structure, or perhaps more correctly on the personalities of the local figures whom that structure defines for political responsibilities. Where the tribal structure remains strong, with strong leaders, the local councils are simply a reflection of it and can be effective promoters

of local interests. But where the structure or the personalities are weak, the administration is obliged to continue in all its traditional roles.

Administrative infrastructure which could be utilized in the administration of projects includes the Departments of Irrigation, Agriculture and Livestock, the Baluchistan Development Authority, and local councils which are elected every three years and receive limited fiscal responsibilities from the Government.

4. Economy

Economic productivity in Baluchistan is concentrated in the agricultural and pastoral sectors. Per capita income for the Province as a whole is Rs. 1160. By district, Pishin has the highest at Rs. 2300; and Quetta has Rs. 1700; the lowest is Panjgur at Rs. 900. Land is the major resource: holdings range for the most part from 1.7 to 24 acres.

4.1. Industry. Industrial activity is concentrated on estates at Quetta and at Hubb on the border close to Karachi. Also close to Karachi are the Gaddani ship-breaking yards. Elsewhere in the Province there are only a few industrial activities such as rice-husking plants, and mills. Government carpet-weaving and other handicraft centers are listed in an appendix.

Proposals are under consideration for chemical industries based on berytes in Las Bela, for poultry production close to Karachi, for oil expellers and a fertilizer plant at Dera Murad

Jamali, for lime-silicate brick production, and for salt, chromite (low grade) and fluorite plants in the north and northeast, where most of the significant mineral deposits are located. There are negotiations with Germany (FRG) for assistance in the establishment of two centers of vocational training. But all industrial activity and planning in the Province is hampered by the lack of infrastructure and of trained manpower.

4.2. Minerals. Four or five agencies, including the GOP, are responsible for mineral development in Baluchistan. The most significant minerals are coal and chromite, with the possibility of copper, iron, aluminum, titanium and gypsum. So far only coal is economically significant, but the coal is low grade and the mining operations require modernization (see below).

4.3. Land use. Of the total land area in Baluchistan of 34.7 million ha, over 11.2 million ha are unsuitable or otherwise not available for agriculture. Most of the remainder is grazed. The cultivated area is estimated at 1.38 million ha, with an annual net sown area of about 470,000 ha (almost all of which depends on irrigation) and the remaining area in fallow. The cropped area is thus little more than 1% of the total area, and fluctuates sharply from year to year according to rainfall; 94% of the total area is classified as rangelands and, therefore, livestock is of considerable importance to the Province's economy.

4.4. Land tenure. Since large parts of the Province have not been surveyed or "settled" (sc. issued with land titles), the statistics on land tenure are incomplete. Census data on land tenure indicate three principal categories: owner-occupied, owner-cum-tenant occupied, and tenant occupied. Tenants are share-croppers. The extent of tenancy varies in different parts of the Province and, because of the generally scattered nature of agricultural settlements, tends to be localized. In the untitled areas, tribal rights and customs still prevail. Even in the titled areas, tribal influence may still be strong in determining land rights and tenancy patterns. A whole village may be registered in one name, and the village may practice a type of rotational farming with no apparent ownership assigned to any particular piece of land.

4.5. Agriculture. The primary importance of the agricultural sector in Baluchistan's economy is shown by the following indicators: about 65% of the total labor force derives its livelihood from agriculture, and approximately 56% of the Province's gross domestic product was contributed directly by the agricultural sector in 1978-1979, as compared to 55% and 30% respectively, for Pakistan. Out of agriculture's total value of production, crops contribute 70%, livestock 28%, and fisheries and forestry together 2%.

The principal crop grown is wheat--35% of total cultivated area--followed by sorghum, rice, fruits, and vegetables. The Province produces about 50% of Pakistan's total fruit production. Livestock production is a major source of income for much of the rural population. Baluchistan has about 18% of the national herd

of sheep and goats (5 million sheep and 4 million goats), which are distributed throughout the Province in sedentary, transhumant, and nomadic flocks.

The Province's agricultural output levels are low relative to national averages. The average cropping intensity of 71% is well below the national average of 111%. Fertilizer use is negligible, averaging about 2.8 kg per ha of cultivated area in 1979; agricultural extension services cover only a small proportion of the area. Large annual fluctuations in yields make it difficult to discern trends except for fruit, wheat, and rice which have increased in both area and yields. As a result of the Province's low output levels, Baluchistan still has to import substantial volumes of food to meet its subsistence requirements. The Province has considerable potential to increase agricultural production by developing existing water resources for irrigation and introducing improved agricultural practices.

The basic orientation in most of the Province is still predominantly pastoral, although farming is becoming an increasingly important part of rural life. Villages are established wherever an adequate perennial water source occurs, with surrounding gardens, orchards, and cropped fields. Sheep and goats are grazed on adjoining range areas and on crop residues. Water is the most limiting resource, and dictates the spatial division of the three major agricultural activities: rainfed farming (barani and khushkaba), irrigated farming (both through diversion of floods by means of bunds, and perennial), and grazing. In sailaba or flood-irrigated farming, the farmers construct high bunds around fields and divert flood

waters from rivers and hill torrents into these fields. Floodwaters flow from field to field and when the soil profile is considered saturated, the bund is breached to release the water into another field. The lack of leveling leads to very uneven distribution of the water. Crop stands are often reasonably close to the lower bunds where the water has collected, but almost nonexistent in the upper parts of the field. Because of the uncertainty and irregularity of floods, the fluctuations in their quantity, and the primitive methods of diverting and guiding them over the fields, considerable erosion and bund breaches are common. A large part of the production cost in flood agriculture consists of continuously repairing and reconstructing bunds. Perennially irrigated land (whether by tubewell, karez, infiltration gallery or river) is mainly used for orchards and other high value crops, and only to a relatively small extent for annual crops. In the case of annual crops in the perennially-irrigated schemes, a system of rotation is often practiced in which the entire command area is moved so that crops may be sown on the same land only once in four years. Because the land has been fallowed for three years, its fertility has been raised and the need for fertilizer is less. However, this often leads to inefficient use of scarce water resources because of the relatively long delivery channels needed to convey the water to the various parts of the command and the limited investments in land development. Farmers tend to sow more crop than their allotted share of irrigation water can support during periods of peak demand. This tends to reduce both crop yield and quality, unless rain happens to fall during the high demand periods. Pastoralism is also limited by the scarcity

of water. The only detailed information on traditional pastoral technologies in the Province is in the work of Warren Swidler (see Literature Review). Much more needs to be done before it will be possible to design appropriate development strategies for this sector of the economy.

- 4.6. Power. The degree to which access to electric power has already led to a transformation of agriculture in parts of the northeast is impressive. Out of a total of some 7,000 villages, 296 now have access to electric power; a further 300 will gain access under a project financed by the Kuwait Fund, and an unspecified number under other proposed projects listed below in Chapter Three. The grid was extended to Quetta in 1977 and is now being extended to Loralai, Khuzdar and Chaman. The Karachi Electricity supply is being extended to Bela. There are also some 40-50 small generators in settlements which do not have access to the grid. The total capacity of the grid in the Province is 200 MV, but the current supply is only 100 MV which will not suffice for any significant further extensions unless it can be supplemented by local generation. Consideration is being given to the possibility of using the local low-grade coal for this purpose in the northeast (based on Dutch experience), and bunker sea oil in the southwest.
- 4.7. Communications. Roads, railways, power lines and gas pipelines are shown in the accompanying map. Apart from the railway they are all very recent, and still minimal. There are presently 5 miles of road for each 100 square miles of territory, as against the national average of 14-16. The total comes to 1978 miles of metalled road and 5244 unmetalled.

5. Major Constraints

Baluchistan suffers from sparseness of soil, water, and people and lack of infrastructure. But it suffers even more from social constraints which are a function of its history and its present economic and political context. Before Independence, the British only invested in the areas they administered directly--British Baluchistan--and then only to a limited extent. The States of Kalat, Kharan and Las Bela were untouched. Since Independence, a few bridges and dams were built in the late fifties, but they have mostly been destroyed by floods. It is not an exaggeration to say that development in Baluchistan has begun only in the late seventies. Many Baluch still feel that they do not have sufficient voice in the planning process and that there should be more Baluch in local civil service positions. Non-Baluch, even if they have settled in Baluchistan, are often suspected of channeling money out of the Province.

Development planning must take account of this cynicism, and work with the existing structure and orientation of the Baluch. Unfortunately, neither their community structure nor their orientation towards development is uniform. The degree of tribalism, in particular, varies greatly from one district to another, and the rate of social change is probably accelerating as a result of the increase in exposure to exogenous influences. Every effort must therefore be made to investigate local social conditions before designing a project.

6. District Profiles

6.1. Quetta Division. This division covers the northern zone of the Province along the Afghan border from Iran to the North West Frontier Province. It comprises five districts: QUETTA, CHAGAI, LORALAI, PISHIN, and ZHOB, which before Independence constituted the major part of British Baluchistan. The direct British involvement in these districts led to a certain amount of investment before Independence, which was aimed at increasing productivity, especially by the control and management of flood water mainly for agricultural purposes. Some of the results can still be seen and can serve as the basis for renewed development activity.

The Division is mountain and plateau, and lies mostly above 3000 ft., much of it above 5000 ft. Generally, altitude and precipitation increase gradually from the west, which is desert, to the northeast, which is among the best semi-arid rangeland in Pakistan. The districts of Quetta, Pishin, Loralai and Zhob are ethnically and linguistically Pathan (Pushtun), and contain few Baluch, while most of the Pathans in the rest of the Province (with the exception of the immediately adjacent areas in Sibi and Kohlu) are traders and small businessmen in the larger settlements.

The adjacent districts of QUETTA and PISHIN share basically the same characteristics. They are dominated by the city of Quetta, the fastest growing capital of a Province that was created only in 1970 and has attracted development attention only since 1977. Averaging 5000-6000 ft. in the valleys, these districts enjoy 8-10"

average rainfall with cold winters. Connection to the national grid and subsidised electricity has recently facilitated access to abundant supplies of underground water and led to the spectacular development of fruit farming--which is presently the strongest point in the Province's economy. Apples--the most successful crop--are said to earn rps. 40,000-80,000 per acre. There is also plenty of scope for the development of surface water. The largest project is Band-i Khushkil Khan in Pishin. It was first built in 1890. Since then, from the original depth of 38 ft., it is silted up to within 8 ft. of the top. Work will be started on remodeling it next year by WAPDA with the assistance of the Asian Development Bank (ADB). Apart from such "bands," and the tubewell development that has followed on electrification, traditionally irrigation in this area has depended on karez, some of which require repair and extension. The combination of a number of factors including altitude and precipitation, proximity to Quetta and some attention by the British have made these two districts and the neighbouring areas of Zhob and Loralai the most progressive and richest in the Province. Development work here is likely to have the biggest returns per dollar. There is also significant scope for mineral development. Coal mining requires modernisation. Although the coal is not of high quality, there are plans to use it for the generation of thermal power which would underwrite participation by the whole Province in the national grid network.

The districts of ZHOB and LORALAI are similar in climate and resources, and only slightly less promising because of relative

isolation--especially in their eastern reaches. Zhob, which is an agency rather than a district, falls into three topographic units. The eastern, Koh Soleiman, is rich forest bordering on Punjab and marking the eastern edge of the Iranian Plateau. The southern is the Zhob river valley containing the narrow gauge railway and the route of the grid extension which makes it ripe for agricultural development. The northern is Kakar Khorasan, rich but isolated rangeland which is used (but by all reports not abused) by pastoralists from all around including Afghanistan. Given the completion of the grid up to Zhob (formerly Fort Sandeman) as planned in the near future, the most immediate need of the Zhob agency would seem to be roads that would open up the northern and eastern areas. The management and development of surface water flow is, however, equally important (private investment is likely to suffice for tube-wells) both for range improvement and for agriculture, and offers the most profitable opportunities for development in the long term. The situation in Loralai differs little from Zhob, except that mining opportunities are also available.

CHAGAI, which is an agency, is significantly different from the rest of the Division. It is arid and Baluchi-speaking, and apart from an ambitious mineral development project at Saindak in the far eastern corner, is dependent on a combination of extensive pastoralism and floodwater and karez farming based on a more dispersed, oasis pattern of settlement.

6.2. Sibi Division. This division, consisting of the districts of SIBI, KACCHI, NASIRABAD and KOHLU, includes the remainder of the former British Baluchistan. It constitutes a transition zone between the Baluchistan heartland of Makran and the Plateau on the one hand, and the lowlands of the Indus Valley on the other. Kohlu--an agency comprising the territories of the Marri and Bugti tribes--has had a different history from the rest of Baluchistan and (since special arrangements are now being made for its development) was specifically excluded from this study. The remaining three districts are geographically a northward extension of the Indus plains, and are surrounded on three sides by the mountains that mark the southeast corner of the Iranian Plateau. Two of the districts, SIBI and KACCHI, extend up into those mountains and are economically related to them by the migratory cycle of nomadic pastoralists who traditionally provided the dominant economic activity in the area. The Division as a whole has a reputation for oppressive heat, but SIBI district includes not only the hottest town in Pakistan (Sibi) at some 300 ft., but also one of the coldest (Ziarat) at over 8000 ft. The major development prospects in the Division depend on the extension into it of the Indus irrigation system from the southeast, but the management of flood waters in the north also presents significant opportunities. The waters of the most important river, the Nari, are shared between Sibi and Kacchi districts (which both receive considerable drainage from the surrounding mountains) according to an agreement made in 1917 when a diversion weir was constructed. The weir ensures 120 cusecs throughout the year for Sibi, and leaves the excess including the irregular flood water for use

downstream in Kacchi. The weir requires rehabilitation. A significant area in Kacchi district depends in a similar way on the Bolan River. The dam, which was completed in 1957, was washed away in 1976, and plans to rebuild it are presently held up by differences of opinion among the local population, some of whom who have access to groundwater but not to the floodwater would prefer to see the money spent on electricity. The district headquarters of KACCHI, Dhadar, was traditionally the winter quarters of the Khan of Kalat, and the warm Kacchi plain provided the winter grazing for large numbers of nomadic pastoralists not only from the highlands of Kalat or Sarawan immediately to the west, but also from further afield.

The fourth district, NASIRABAD, was created out of Kacchi and Sibi in 1975. It is entirely flat plain or pat, a large proportion of which has been brought under intensive irrigated cultivation by two canals from the Indus. The Kirthar canal was built in 1933 and the Pat-feeder canal was started in the 60's, though it is not yet developed to its full capacity. Both canals flow east-west and the eastern section of the commanded area between them is already badly waterlogged. A channel has now been constructed to drain the land between the two canals. Where it would need to cross the southern canal it has been feasible only to raise and empty the drain water into it. Some 2-3 thousand cusecs of saline water (estimate of ppm was not available) is thus emptied into some 10 thousand cusecs in the Kirthar canal--which should not produce excessive salinity for agricultural use. Unfortunately, as is commonly the case in developing countries, the people downstream use the water for domestic

as well as agricultural purposes and therefore complain of the salinity. The Kirthar canal water is shared with the neighbouring district of Sind. The division is made according to the respective command areas. But for political reasons the measurement at the point of division is based on the original canal capacity even though everyone concerned knows that the divided canals are differentially silted with the result that Sind consistently receives more than its recognised share. Both these examples may be explained as reactions of traditional social systems to modern technological systems whose design derives from a different social experience. A similar problem is reflected in the persistence of traditional cropping patterns with extensive fallowing and little use of agricultural inputs. Improvement and development of this system requires attention to the whole system from water delivery through to marketing.

- 6.3. Kalat Division. Kalat Division comprises the highlands of the former Kalat State (the districts of Kalat and Khuzdar, or Sarawan and Jhalawan), the depression that comprised the major part of the territory of the former state of Kharan, and the coastal plain area of the former state of Las Bela.

KALAT and KHUZDAR contain some of the coldest parts of the Province in a tongue of high country extending from Afghanistan and the high northern plateau almost to the coast of the Sea of Oman. The majority of the population are Brahui-speaking and traditionally pastoral, nomadic, and more persistently tribal than much of the

rest of the Province. With the extension of the grid through Kalat to Khuzdar, soon to be completed, the typical shift to tubewell-based cultivation is occurring, but there is also plenty of scope for flood management and range improvement projects.

LAS BELA is of all the districts of the Province the closest to Karachi. The burgeoning industrial estate of Habb and the ship-breaking yards of Gaddani profit from this locational advantage. But the district is mostly coastal plain with ample scope for the agricultural development based on the control of flood water from the surrounding hills of Khuzdar. The coast itself suffers from lack of drinking water but offers good prospects for fishery development (see below under Makran).

Finally, KHARAN comprises an inland drainage basin with quite spectacular possibilities for the development of both groundwater and floodwater resources. The southern part of the district, Rakhshan, is an important grazing area.

- 6.4. Makran Division. Makran Division comprises three districts, Gwadar, Turbat and Panjgur, which were created out of a single district in 1977. Access to it is still difficult except by air. Until 1958 the port of Gwadar belonged to Muscat, and the whole Division maintains close ties with the Gulf.

The district of GWADAR comprises almost half of Pakistan's coast, and its scattered isolated settlements are particularly in

need of drinking water supplies, roads (the plain is often impassible after rain) and floodwater development, and jetties to facilitate fishing and sea traffic.

To the north beyond the first two low ranges lies the Kech river valley and the district headquarters of TORBAT, which with a population of 27,000 is the largest town in Baluchistan after Quetta. Turbat is the centre of the Division and of the largest date-growing area in the country (one of the largest in the world).

Finally, PANJGUR, to the north across the next set of ranges at an altitude of some 3000 ft., is also an important centre for date cultivation. It is shown in the provincial statistics as the poorest district in the Province. As a whole, Makran shows the influence of large scale movement backwards and forwards to the Gulf Emirates and close connections with the Baluch across the border in Iran.

The most obvious opportunities for development in Makran lie in the coastal fisheries and in improving the management of the inland water supplies, primarily the Kech and Nihang Rivers, the Panjgur karez system, and the bund systems that utilize the irregular floodwaters.

CHAPTER III - EXISTING PLANS

Information concerning previous development efforts in Baluchistan is not readily available, but during the tour the team found little evidence of earlier projects with continuing impact. With respect to development projects undertaken in Baluchistan in past decades by various donor agencies, the team was unable to consult documents and materials that described or dealt with such projects.

1. Donor Activity

Today there are a number of international agencies and organizations involved in Baluchistan development. The following is a brief discussion of the projects of each donor group (for fuller details consult: Donor Assistance in Baluchistan, G. M. Marri, December 20, 1981):

- 1.1. Kuwait Fund (KF). The Kuwait Fund has one project to provide rural electrification for 300 villages of Baluchistan. KF is also developing water supply schemes for Quetta city and Gadani town. Finally, KF is involved in 40 minor irrigation schemes located all over the Province.
- 1.2. Government of the United Kingdom (GUK). The UK Government is involved with Canada in a project to extend the national grid from Kalat to Khuzdar. GUK also plans to extend electrification from Qilla Saifullah to Zhob, from Khanozai to Ziarat (nearly completed), and from Kashmor to Dera Bugti.

- 1.3. European Economic Community (EEC). The EEC is involved in four flood irrigation schemes located on the Kacchi plain. EEC is also involved with the Asian Development Bank in a Livestock Development Project in several districts of Baluchistan to increase especially dairy and meat production. EEC also plans to establish small irrigation schemes along the lower Nari River and to construct rural roads in the Marri-Bugti Agency.
- 1.4. UNICEF. UNICEF has a Baluchistan Integrated Area Development Project to provide potable water, and education, health and social welfare services, to 640 villages in Baluchistan. UNICEF is also cooperating with the government's expanded poly-immunization program.
- 1.5. Asian Development Bank (ADB). ADB is involved with the EEC in a livestock project (see above) and it is also undertaking a feasibility study for the construction of landing jetties at Pasni and Somniani. ADB has also expressed an interest in further developing the Bund Khushdil Khan reservoir in Pishin district.
- 1.6. UNDP and FAO. The UNDP is cooperating with IDA in the Baluchistan Agriculture Development Project (see above) and with the FAO in two projects: the setting up of a Karakul Sheep Breeding Farm and a Fruit Development Project. In addition, UNDP has independently established a coastal fisheries project along the Mekran coast.
- 1.7. Canadian International Development Agency (CIDA). As mentioned above, CIDA is providing assistance along with the UK government

for electrification of the national grid and the Canadians also are assisting with the electrification of 62 villages.

1.8. World Bank (IBRD) and International Development Association (IDA).

The World Bank has one project to develop 28 minor irrigation schemes. IBRD is also involved with IDA in two projects, one a Primary Education Project and the second the establishment of a Teacher's Training Institute. IDA also has three projects of its own: a Vocational Training Project, a project to develop an Agriculture Training Institute, and a Seed Industry Project. IDA also is cooperating with USAID in an On-farm Water Management Project, with UNDP on Baluchistan Agriculture Development Project (Underground Water Investigation) and with the UK and Canada on the extension of a 132 KV Arid Line from Khuzdar to Sibi.

1.9. Japanese Government. The Japanese Government plans to undertake construction of a road from Sibi through Tuli, Kakar, Kohlu and Rakha. The Japanese also plan to provide 150 bulldozers, 120 road graders and 10 transporters along with mobile workshops.

1.10. West German Government. The West German government is providing assistance to establish vocational training centers, principally in the two districts of Khuzdar and Loralai.

1.11. World Food Program (WFP). While the team did not find evidence of WFP project activity in other districts, the Deputy Commissioner in Loralai reported the WFP assistance is partially financing 27 schemes

for agricultural purposes, 4 schemes to provide flood protection and one scheme to build a Katcha road.

- 1.12. UNHCR. The UNHCR is providing assistance with the special problem of Afghan refugees in Baluchistan. While the UNHCR continues to provide basic assistance to the refugees in the form of shelter, clothing and food, increasingly the UNHCR is involved in projects such as reforestation to repair the damaged environment, the setting up of crafts training centers and the provision of safe drinking water supplies.

2. Appraisal of Government Development Plans

Among the government plans, both federal and provincial, which present the development needs of Baluchistan and outline projects that are to be undertaken or that are proposed include the Federal Annual Development Plan for PFY 1982/83, the Baluchistan Annual Development Plan for PFY 1982/83 and the Baluchistan Special Development Plan. In addition, the Planning and Development of the Baluchistan Government has recently published two booklets that set out the planning priorities for the Province and to some extent provide a rationale. These are entitled Baluchistan in the New Development Perspective (Quetta, September 1982) and Development Plan and Strategy for Development of Baluchistan (Quetta, 1982). The Special Development Plan outlines high priority schemes and areas for foreign donor project activity. These are to supplement the annual development program schemes, and their express purpose is to "confer quick

economic and social benefits on the inhabitants of Baluchistan and at the same time to construct such physical infrastructure facilities as are to be found essential for the development of the natural resources. This, in turn, would bring socio-economic development (in Baluchistan) to a level comparable with the more developed parts of the country."³ In short, the majority of project schemes and areas that have been proposed focus on the development of water resources (for the purpose of agriculture, livestock and drinking water supplies), power resources, the construction of new roads and the promotion of industrial and mineral development.

In the strategy statement it is clear that emphasis is being placed on development of the Province in as rapid a fashion as possible. A warning is sounded here that there is a possibility that with rapid economic change, social instability and unrest is often a byproduct. And there is also a strong possibility that certain areas and social classes will benefit disproportionately from the planned investments.

Of the two annual development plans, the federal plan reflects more the needs of the federal government in the Province, though it does include projects in such infrastructural sectors as transportation and energy which will also prove of great benefit to the people of Baluchistan. The Baluchistan annual development program gives priority to projects of short gestation which will produce quick results in raising living standards. Another emphasis in the provincial ADP is on projects that will involve local councils in the

³Baluchistan in the New Development Perspective, Quetta, September 1982:13.

identification and implementation of projects. In terms of budget allocations the ADP provides the most funds to the agricultural sector (including livestock and fisheries) (Rs. 133,894,000) followed by water (Rs. 67,302,000). The third priority is given to education (Rs. 67,302,000) and the fourth is transport and communications (Rs. 67,302,000). This listing reflects the federal priorities for development under the ADP.

The Special Development Plan, with a budget of Rs. 20 billion (\$1.8 billion), is the centerpiece of development plans for Baluchistan. Although it has been said that the SDP contains just a "wish list" of projects on the part of the government, it is felt that such a characterization is unfit because the plan does a good job of defining feasible projects and that the schemes are practical, well thought out, and if completed would, in most cases, benefit a significant number of the population. However, while it is felt that the government knows what its priorities are, there is a need to integrate the development priorities into an overall approach that provides consistency and complementarity (in both the short and long term) to Baluchistan's development plans.

3. The USAID Portfolio

USAID has several on-going and proposed projects of national scope and as such they will extend to Baluchistan as well. Included among these are On-Farm Water Management (with the World Bank), Rural Farm to Market Roads, Rural Electrification, Malaria Control, and Primary Health Care. Though most of these projects have yet to

be developed (the Primary Health Care Project is on-going and already has a presence on the ground in Baluchistan), the project goals appear to be consistent with the high priority development schemes of the Baluchistan Government. Beyond that, however, it is felt that the USAID portfolio suffers the limitation of not providing an overall rationale for what is hoped to be accomplished by U.S. economic assistance to Pakistan. There are separate policy concerns such as the refugee issue, but these have yet to be integrated into a clear, coherent and logical framework of policy for USAID project assistance to Pakistan.

In order to decide what project activity should be undertaken by the Baluchistan Area Development Project, it is important to select an activity or activities that are not yet being undertaken but that, if undertaken, are feasible, can be implemented, given the constraints of the development environment in Baluchistan, and will have a lasting and beneficial impact on the largest number of people. In addition, the project activities that are identified should be consistent with national and provincial priorities and if possible should complement the activities of other donors as well as other USAID projects. The next chapter (IV) sets out a rationale for the Baluchistan Area Development Project which identifies possible project activities informed by the above concerns.

CHAPTER IV

TOWARDS AN AREA DEVELOPMENT PROJECT FOR BALUCHISTAN

Although very little development was carried out in Baluchistan until recently, it is clear from the previous chapter that a significant amount of development activity has begun in the last few years. Most projects before 1977 were initiated either during the British period (in British Baluchistan only) or during the Ayub regime. They were all concerned with the control and management of flood water and run-off with the exception of two USAID projects which, between the mid 1950's and mid 1960's, focused on range improvement and livestock. Since most of the earlier projects have lost their value, in most cases due to serious water damage or siltation, there should be lessons to be learned apart from the value of the information that was gathered before the implementation of the projects. When we visited earlier project sites in Baluchistan the local population noted that the rehabilitation of the project was a major priority.

Water is the basic resource in Baluchistan. Without it nothing can be done. There is never enough of it except infrequently at irregular intervals when it rains. During these few hours or days there is too much water, often causing physical and infra-structural damage. People watch helplessly while the water they desperately need escapes uncontrollably beyond their reach, often taking with it their second most basic (and often scarce) resource--soil.

It is worth enumerating the benefits that accrue from the control and management of flood water and run-off in Baluchistan:

- (1) It recharges the water table, improving the level of wells, karez and infiltration galleries.
- (2) It captures fertile soil.
- (3) It prevents erosion and damage to land and property.
- (4) It provides an inexpensive source of water.
- (5) It allows the provision of water in places where it is unlikely to be possible by any other means, where power lines will never be extended.
- (6) It allows the broadest possible distribution of development activity.
- (7) It enhances the environment, the standard of living and security generally, but especially for the most isolated, poorest people.
- (8) Since with traditional materials it is one of the oldest technologies in the region, it encourages people to build on the environmental skills and technical knowledge they already have, rather than requiring them to learn imported technologies.
- (9) It serves the purposes of both cultivation and pastoralism, which have always been complementary pursuits in these areas.
- (10) It facilitates the maximum long-term viable use of the total territory.
- (11) It provides maximum deterrence to rural depopulation.
- (12) It fits existing community values and organizations.
- (13) The number of sites where it can be profitably introduced is very large. The Government of Baluchistan has enumerated 123 irrigation projects, most of which deal with flood water. They range in cost from five-figure to seven-figure amounts, but a large percentage of them are below one million dollars each.

Other types of irrigation projects involve wells, tubewells, karez (see Baluchistan Literature Review), or infiltration galleries. Of these the first three are commonly undertaken by private enterprise, whereas efficient flood control is rarely achieved in the private

sector. Furthermore, when it is achieved the opportunities and incentives for the private sector to develop these other types of irrigation schemes are enhanced.

The priorities presented to the team were roads, power and water. But the economic justification of most proposals for road building lies in other types of development. Power lines are likely to be introduced only to the most profitable agricultural areas, and experience suggests that in those areas the private sector will do the rest. The control and management of flood water and run-off can serve as a basis for all other more specialized forms of development.

The concept of area development, however, demands attention not only to the total territory, but to the total population--rich as well as poor. The economy of Baluchistan does already have a few strong points based on private sector activities. These need to be encouraged. Development tends to be channelled through government departments. In the material gathered for this report, there were a number of indications of poor communication between the government and local non-government leaders and businessmen. It is particularly important in Baluchistan that the private sector, and especially its leaders, be encouraged. The strong points in the private sector include fruit farming and coal mining in the north, dates in Makran, fishing along the coast and the industries along the provincial border close to Karachi. For many of these activities, carefully chosen technical assistance, probably in the form of periodic technical assistance of an expert combined with occasional exposure to more advanced situations in the same industry in another country,

could achieve considerable returns with expenditures of only five-figure amounts. Fruit farming north of Quetta, where returns are particularly high but there is great fluctuation because of lack of certain skills, may be the best candidate for such an approach.

A program to build both on selected strong points in the economy and on the widespread local experience in using flood water is likely to achieve the broadest impact for the money available. The major limitations are likely to be USAID's ability to administer and monitor, and in the costs of project development, rather than in actual project cost. For these reasons, the Akra Kaur project on the coastal plain northwest of Gwadar--which for an investment of a ten million dollar dam (according to the feasibility study) should supply drinking water to Gwadar and other coastal settlements, and a surplus of water for agriculture and pastoralism for a period of 50 years--should be looked into carefully. The final selection of schemes to be financed through the project might, therefore, be clustered in such a way as to minimize logistical problems of management and monitoring and to complement and support the work of other donors. However, there is a distinct danger in Baluchistan that some areas will never receive attention, and some concession must be made to the problem of avoiding this possibility. For this reason the initial step should be the formulation of a province-wide plan for the control and management of flood water and run-off that would provide a set of criteria for the selection of water management schemes for this project.

APPENDIX I**TERMS OF REFERENCE**

The team will prepare a report, based on field trips, interviews and a review of secondary source information, which shall include, but not be limited to, the following:

- 1) An overview of the social, economic, geographic and demographic profile of Baluchistan;
- 2) A listing of principal public and private sector institutions and names and positions of key public and private sector officials and leading citizens who should be consulted by PID and PP design teams;
- 3) Identification of other donor activities (past, present and future) in Baluchistan;
- 4) A listing of the most reliable sources of published data on the province;
- 5) Identification of the major development constraints, both general as well as by sector, in the province;
- 6) Analysis of the performance of the agricultural sector, including statistics on cultivated area, crop yields and production statistics by crop; use of major agricultural inputs, land use, area irrigated by source; degree of mechanization, and analysis of the livestock sub-sector;
- 7) A description of other economic activities in the province, i.e. minerals, industry, fisheries, etc. including production statistics, revenues earned, geographical distribution, and an assessment of economic potential;
- 8) An inventory and assessment of private sector organizations and industries by sector;

- 9) **Analysis of human resources capabilities including the composition of the labor force, employment by major occupational groups, and level of education;**
- 10) **A description of existing infrastructure, such as roads, railways, power, gas, and the like;**
- 11) **Compilation of data on the major social sectors, namely health, education, and rural development;**
- 12) **Review and analysis of planning documents for Baluchistan, including the Baluchistan annual development program for PFY 1982/83; the Baluchistan Special Development Plan; and the Federal Annual Development Plan for PFY 1982/83;**
- 13) **Recommendations as to possible areas of AID support, based on the above and a review of other proposed and on-going AID projects.**

10/9/82 1430 Meeting with Secretary, Water & Power:

- 1) Mr. A. Razaq Khan
- 2) Mr. Munawar Khan, SE Irrigation, Quetta

10/10/82
Sunday 0800 Meeting with Secretary, Industries, Minerals and Labour/Manpower:

Mr. Elahi Bakhsh Mulghani

0930 Meeting with Chairman, Baluchistan Development Authority:

Mr. Abu Shamim Arif

1100 Meeting with Secretary, Communication & Works:

Mr. Arif Ali
Col. Mushtaq, Chief Engineer

1230 Meeting with Deputy Secretary, Livestock:

Dr. Faqir Mohammed

Note: Secretary was out of country.

1400 Meeting with Secretary, Planning & Development:

Mr. Atta Mohd Jaffar
Mr. Nyar Agha, Chief, Foreign Aid

10/11/82
Monday 0630 Depart from Staff House to Sibi - 105 miles

0930 Arrive Sibi - Stay in Irrigation & Power Rest House

1100 Meeting with Commissioner Sibi Division:

- 1) Mr. Ali Raza
- 2) Mr. Mubashir, D. C.
- 3) Mr. Anwar, A. C.
- 4) Mr. Budder Das, SDO, Irrigation

10/11/82 1230 Field visit to Nari Head Works alongwith
A. C. Sibi and SDO, Irrigation - 21 miles

Field visit to Bio gas plant and an agriculture
farm at Luni village at Sibi - about 8 miles

1600 Lunch at Sibi Irrigation Rest House

1630 Visit to Chakar Khan Fort

1700 Depart for Nasirabad - 80 miles

1835 Arrive Dera Murad Jamali - Stay Irrigation
Rest House

10/12/82
Tuesday 0830 Meeting with Deputy Commissioner:

- 1) Mian Jamil Ahmed
- 2) Mr. Noor Mohd Kohso, XEN Irrigation
- 3) Sub-Divisional Officer, Pat Feeder

0930 Field visit to Pat Feeder alongwith XEN and SDO

1310 Lunch with Deputy Commissioner and XEN
Irrigation/^{at} Rest House, Dera Murad Jamali

1410 Field visit to Keerther Cannal alongwith
XEN Irrigation Baluchistan and XEN Sind and
also visit to Hair Din drainage Water Project

1735 Depart for Usta Mohammed

1830 Arrive Usta Mohammed - visit to Rice Husking
Mill alongwith Assistant Commissioner,
Usta Mohammed

1900 Depart for Dera Murad Jamali

2030 Arrive Dera Murad Jamali

10/13/82

Wednesday

- 0700 Depart from Dera Murad Jamali for Dahdar - 98 miles
- 0930 Arrive Dahdar
- 0940 Meeting with Deputy Commissioner Major Fazal Durrani
Haji M. Ayub, Acting Chairman Dist. Council;
Mr. Muneer, XEN Irrigation;
Mr. Asad Luni, AC Dahdar;
Mr. Habibur Rehman, Asst. Director, Rural Dev;
Mr. Kher Mohd, SDO Irrigation
- 1110 Field visit to Bolan Dam site alongwith XEN Irrigation and SDO Irrigation, A. C. Dahdar and Chairman, Dist. Council
- 1630 Lunch with Deputy Commissioner, Dahdar
- 1735 Depart from Dahdar for Quetta - 82 miles (Bolan Pass)
- 2000 Arrive Quetta - Stay staff house
- 2100 Dinner with Zamindar Association of Baluchistan

10/14/82

Thursday

- 0745 Depart from Quetta for Pishin - 32 miles
- 0830 Meeting with Deputy Commissioner:

Mr. Syed Faisal Saood,
Malik Ghulam Serwar Khan, Chairman, Dist. Council
- 1000 Visit to Khushdil Khan Bund and Barshoor area (about 30 miles) alongwith Deputy Commissioner and Chairman, Dist. Council
- 1500 Lunch with DC and Chairman Dist. Council at Circuit House
- 1630 Depart from Pishin to Ziarat via Khuchlag
- 1900 Arrive Ziarat - Stay Rest House B&R

10/15/82
Friday

- 0900 Depart from Ziarat for Loralai - 72 miles
- 1130 Arrive Loralai - stay irrigation rest house
- 1230 Meeting with Deputy Commissioner alongwith Chairman, Dist. Council at DC residence - Mr. Nasrullah Khan Bazaki
- 1300 Lunch with XEN Irrigation, Loralai District Mr. A. Walid
- 1430 Depart for Killa Saifullah and Muslim Bagh and visit field area and site for proposed dam alongwith Chairman Dist. Council Zhob Haji Mohd Yusuf Jogizai
- 2030 Arrive Muslim Bagh alongwith Chairman Zhob Dist. Council - Stay Irrigation Rest House
- 2035 Meeting with Chairman Dist. Council Zhob and SDO Irrigation Mr. Baqi at Rest House
- 2200 Dinner with Chairman Dist Council Zhob at Rest House.

10/16/82
Saturday

- 0800 Depart for Zhob alongwith SDO Irrigation to Shina-Khura Infiltration Gallery
- 1530 Arrive Zhob - Stay Irrigation Rest House
- 1435 Lunch at Irrigation Rest House
- 1600 Visit to Kapip Infiltration Gallery - 8 miles
- 1730 Arrive Rest House

continued...

10/17/82

Sunday

- 0830 Meeting with Political Agent Zhob
Mr. Rashid-uz-Zafar, D. C.
Haji Mohd Yusuf, Chairman Dist. Council
Mr. M. Naheem Tareen XEN, Irrigation
Assistant Director, Livestock, Zhob
- 1030 Visit to adjacent areas - 10 miles
- 1200 Lunch at Zhob Rest House
- 1230 Visit to Ali Khan Zai Infiltration Gallery
and Zhob River alongwith Mr. M. Tareen
alongwith his staff members - 20 miles
- 1430 Depart from Ali Khan Zai via Muslim Bagh
- 2130 Arrive Quetta - stay Staff House

10/18/82

Monday

- 0800 Depart from Quetta for Mohd Khel and Nushki
- 1000 Arrive Mohd Khel - visit to Refugees Camps
- 1130 Depart Mohd Khel (Mohd Khel-Quetta 46 miles)
- 1400 Arrive Nushki (stay C&W Rest House)
- 1530 Depart for Anan Bostan and site visits to
Anan Bostan river
- 1930 Arrive Nushki C&W Rest House - 25 miles
- 2000 Meeting with Political Agent Chagai at his
residence
Mr. Marjan Khan
- 2200 Arrive Rest House

continued...

10/19/82
Tuesday

- 0830 Depart Nushki for Kharan - 93 miles
- 1230 Arrive Kharan - stay C&W Rest House
- 1230 Meeting at Rest House with
Mir A. Khaliq Khan, Additional Deputy Commissioner
Chairman, District Council,
Chairman Union Council,
SDO, Irrigation,
SDO B&R, ADRD and Zamindars
- 1400 Lunch with Chairman and ADC
- 1500 Field visit to Bado River Flood Protection Site
28 miles
- 2100 Arrive Kharan
- 2200 Dinner - Stay C&W Rest House

10/20/82
Wednesday

- 0700 Depart for field visit with Chairman to
two flood protection dams, along ^{the} Goruk river -
20 miles
- 0900 Arrive Kharan
- 0910 Depart for Basama along with Chairman - 90 miles
and visit 3 sites of flood protection
- 1330 Arrive Basama
- 1400 Lunch at C&W Deptt. with Asstt. Commissioner
and Chairman at Basama
- 1430 Depart from Basama via Gidder Valley, Soorab
and Baghbana - 140 miles
- 2000 Arrive Khuzdar - stay circuit house

10/21/82
Thursday

- 0930 Meeting with Additional Deputy Commissioner Mr. Ghulam Mohd, Mohd. Shahi. Ismatullah Khan Deputy Director, Rural Dev. Assistant Director, Rural Development; Assistant Director, Livestock; Assistant Director Agriculture and XEN Irrigation
- 1100 Visit to River
- 1200 Lunch at Circuit House
- 1430 Depart for Kalat - 105 miles
- 1630 Arrive Kalat - stay C&W Rest House
- 1645 Meeting with Additional Deputy Commissioner
- 2000 Dinner with Chairman Mr. Allah Bakhsh Malik at Rest House

10/22/82
Friday

- 0615 Depart for Quetta via Mangocher, Kad-Kucha and Mastung valleys
- 0930 Arrive Quetta Airport
- 1000 Depart for Turbat by PLA - 2 hours
- 1200 Arrive Turbat - Stay C&W Rest House
- 1230 Meeting with Deputy Commissioner, Vazeerzada Mohd Zaman Khan, Mr. Zainuddin Khan, XEN Irrigation
- 1430 Lunch with Deputy Commissioner Turbat at Rest House
- 1530 Field visit to proposed sites, date farms, date factory etc.
- 2000 Arrive Rest House
- 2200 Dinner C&W Rest House

10/23/82

Saturday

- 0600 Depart from Turbat for Gawadar - 160 miles
- 1230 Arrive Gawadar
- 1235 Meeting with Deputy Commissioner
Major Ali Raza
Mr. Shaukat, XEN Irrigation
Mr. Bashir Ahmed, Assistant Director, Rural Dev.
Mr. Shah Mohammed, SDO C&W
- 1425 Lunch with Deputy Commissioner Gawadar
at his residence
- 1525 Depart for Karachi by PIA via Turbat
2 hours 20 minutes
- 1900 Arrive Karachi - Stay Holiday Inn

10/24/82

Sunday

- 0800 Visit to AID Karachi office and busy with the
report
- 1530 Depart for Bela - 105 miles
- 1900 Arrive Bela C&W Rest House

10/25/82

Monday

- 0830 Visit to Kanki Bridge, Viyaro BDA farm and
depart for Uthal
- 1200 Meeting with XEN Irrigation
Mr. Saifullah Khan Tareen at Uthal and
lunch at Irrigation rest house
- 1430 Depart for Hub
- 1600 Meeting with Deputy Commissioner Uthal
Mirza Mohsin,
Vadera Khuda Bakhsh, Chairman DC and
Town Committee Hub
- 1800 Depart for Karachi - 15 miles
- 1930 Arrive Karachi - stay rest house

10/26/82
Tuesday

0730 Depart for Quetta by PIA

1015 Arrive Quetta

1055 Meeting with Secretary Planning and Development
Mr. Atta Mohammed Jaffar

1230 Meeting with UNICEF Mr. Jonson

1310 Meeting with Mr. Saeed Khan,
Chairman WAPDA, Quetta

1625 Arrive Karachi - stay Holiday Inn

APPENDIX III

LIST OF CENTERS ESTABLISHED IN QUETTA DIVISION

QUETTA DISTRICT

1. Teacher's Training Institute, Quetta
2. Female Carpet-cum-Embroidery Center, Killi Sirki, Quetta
3. Female Carpet-cum-Embroidery Center, Barness Road, Quetta
4. Female Carpet-cum-Embroidery Center, Marriabad, Quetta
5. Female Carpet-cum-Embroidery Center, Kachi Beg, Quetta
6. Female Carpet-cum-Embroidery Center, Kili Sheikhan, Quetta
7. Female Carpet-cum-Embroidery Center, Killi Shahozai, Quetta
8. Female Carpet-cum-Embroidery Center, Killi Shabo Almo, Quetta
9. Female Carpet-cum-Embroidery Center, Killi Kabir Huda, Quetta
10. Female Carpet-cum-Embroidery Center, Killi Deeba, Quetta
11. Female Carpet-cum-Embroidery Center, Sariab Road, Quetta
12. Wood Work Center, Quetta
13. Handicrafts Development Center, Quetta
14. Marble Center, Quetta
15. Sales and Display Depot, Quetta
16. Service Center, Quetta
17. Cotton Handloom Center, Quetta
18. Industrial Estate, Quetta
19. Vocational Training Institute for Women, Quetta

PISHIN DISTRICT

20. Carpet Center, Chaman
21. Carpet Center, Pishin
22. Carpet Center, Khanozai

LORALAI DISTRICT

23. Carpet Center, Loralai
24. Carpet Center, Duki
25. Handicrafts Development Center, Loralai

ZHOB DISTRICT

26. Carpet Center, Zhob
27. Carpet Center, Killa Saifullah

CHAGAI DISTRICT

28. Carpet Center, Nushki
29. Carpet Center, Dalbandin

LIST OF CENTERS ESTABLISHED IN SIBI DIVISION

SIBI DISTRICT

- 30. Carpet Center, Sibi
- 31. Carpet Center, Harnai
- 32. Carpet Center, Zindra
- 33. Wood Work Center, Sibi

NASIRABAD DISTRICT

- 34. Carpet Center, Jhatpat
- 35. Carpet Center, Temple Dera
- 36. Carpet Center, Usta Mohammed

KACHI DISTRICT

- 37. Carpet Center, Mach
- 38. Carpet Center, Lehri
- 39. Leather Embroidery Center, Lehri

KOHLU AGENCY

- 40. Carpet Center, Dera Bugti
- 41. Carpet Center, Kohlu
- 42. Carpet Center, Maiwand

LIST OF CENTERS ESTABLISHED IN KALAT DIVISION

KALAT DISTRICT

43. Carpet Center, Kalat
44. Carpet Center, Mastung
45. Carpet Center, Baranchina
46. Handicrafts Development Center, Kalat
47. Woolen Handloom Center, Mastung
48. Wool Spinning Center, Mastung
49. Vocational Training Institute for Women, Kalat

KHUZDAR DISTRICT

50. Carpet Center, Khuzdar
51. Handicrafts Development Center, Khuzdar

KHARAN DISTRICT

52. Carpet Center, Kharan

LASBELA DISTRICT

53. Carpet Center, Uthal
54. Carpet Center, Bela

LIST OF CENTERS ESTABLISHED IN MEKLAN DIVISION

- 55. Carpet Center, Turbat
- 56. Leather Embroidery Center, Turbat

LIST OF CENTERS ESTABLISHED AT KARACHI

- 57. The Chiltan Handicrafts Shop at International Airport
Karachi
- 58. The Chiltan Handicrafts Shop, Angle Road, Karachi

RELEVANT REPORTS AND PROJECTS IN BALUCHISTAN

| <u>S. No.</u> | <u>Title</u> | <u>Author</u> | <u>Publisher</u> | <u>Year</u> |
|---------------|--|---|--|---------------|
| 1. | Farm Water Mgt in Upland areas of Baluchistan (Report 51) | W. D. Kemper Mazher ul Haq Ahmed Saeed | Water Mgt Research Proj - Engineering Research Center Colorado St. University | Aug. 1979 |
| 2. | Socio-Economic Surveys of Rural Areas of Baluchistan | UNICEF STUDY | Investment Advisory Center of Pakistan Karachi | 1980 |
| 3. | NWFP & Baluchistan Mgt Constraints Study | Dr. R. W. Gable Dr. R. LaPorte A. Hameed Khan | USAID Mission Islamabad | March 1982 |
| 4. | The Economics of Irrigation in Baluchistan | A. Bottomley | Draft Report of the UN Dept. of Tech. Co-op. for Dev. New York | May 1980 |
| 5. | Program for Children and Women in Pakistan 1982-86 | UNICEF | UNICEF Islamabad | Dec. 1980 |
| 6. | Report of the Ground-water Resources of Baluchistan Appendix Vol. I | | Nasir Geotechnics Pakistan | Sep 1973 |
| 7. | <u>do</u> Appendix Vol. III | <u>do</u> | <u>do</u> | <u>do</u> |
| 8. | <u>do</u> Appendix Vol. IV | <u>do</u> | <u>do</u> | -do- |
| 9. | <u>do</u> Appendix Vol. V | <u>do</u> | <u>do</u> | <u>do</u> |
| 10. | <u>do</u> Appendix Vol. VI | <u>do</u> | <u>do</u> | -do- |
| 11. | <u>do</u> Appendix Vol. VII (A) | <u>d-</u> | <u>do</u> | -do- |

| | | | | |
|-----|--|---|---------------------------------------|---------------|
| 12. | Nutritional Status of Infants & Children Gawadar, Kalat & Loralai | Investment Advisory Center of Pakistan | Investment Adv. Center of Pak | April 1981 |
| 13. | Socio Economic Survey of Kalat (Baluchistan) | _____do_____ | _____do_____ | June 1980 |
| 14. | Socio Economic Survey Loralai (Baluchistan) | _____do_____ | _____do_____ | May 1980 |
| 15. | Socio Economic Survey Gawadar (Baluchistan) | _____do_____ | _____do_____ | June 1980 |
| 16. | Public Sector Dev. Program of the Federal and Provincial Govts. 1981-82 | Planning Commission | Govt. of Pakistan | Sep 1981 |
| 17. | Ground Water Reconnaissance survey of Baluchistan | Nasir Geotechnics (Pakistan) | P&D Dept. | |
| 18. | Livestock in Baluchistan | | Agr. Census Org. Govt. of Pakistan | 1972 |
| 19. | Summary Descriptions of Projects for the Pakistan Consortium | Govt. of Pakistan | Govt. of Pakistan | May 1981 |
| 20/ | Development Plan and Strategy for Development of Baluchistan | Plng & Dev. Department | Govt. of Baluchistan | - |

| <u>S. No.</u> | <u>Title</u> | <u>Author</u> | <u>Publisher</u> | <u>Year</u> |
|---------------|--|---|---|-------------|
| 21. | Coal Mining Industry in Pakistan | Report/Recommendations of the Committee for the Development | Pakistan Industrial Credit and Investment Corporation | May 1980 |
| 22. | FY 82 project portfolio - Summary of issues and design guidelines | Linda Lion | Memorandum USAID/IsI. | Nov 1981 |
| 23. | PC II Proforma for Plng for Water Resources Dev. & management in Baluchistan | Planning Division Lahore | WAPDA | Mar 1980 |
| 24. | PC I Form for the Establishment of Pakistan Desertification Monitoring Unit | Irrigation Drainage and Flood Control Research Council | Ministry of Science and Technology | - |
| 25. | Draft Environmental Profile | Arid Land Information Center - Office of Arid Lands Studies | University of Arizona Tucson | May 1981 |
| 26. | Special Dev. Plan for Baluchistan | Planning Commission | Govt. of Pak. Plng. Comm. | Aug 1980 |
| 27. | Housing & Population Census of Baluchistan | Census Bulletin | Population Census Organization Islamabad | Dec 1981 |
| 28. | Housing Census Report of Baluchistan | Census Commissioner | Population Census Organization | Dec 1980 |
| 29. | Pakistan Census of Agriculture for Baluchistan | Province Report | Agricultural Census Organization | 1972 |

| | | | | |
|-----|--|--------------------------------------|--|-----------|
| 30. | Baluchistan in the New Development Perspective | Plng & Development Department | Govt. of Baluchistan Quetta | Sep 1982 |
| 31. | Brief on the Potential and Strategy of Dev. of Baluchistan | Plng & Development Department Quetta | Government of Baluchistan | - |
| 32. | Akrakaur Dam Proj PC I Proforma | Irrigation & Power Department | Government of Baluchistan | June 1981 |
| 33. | Assessment of the Current State and Future Development of the Coal Mining Industry in Pakistan | William I. Watson | Report: USAID Islamabad | Oct 1982 |
| 34. | Small Irrigation Dev. Schemes | Irrigation & Power Department | Government of Baluchistan / National Eng. Services of Pak. | May 1981 |
| 35. | Baluchistan Minor Irrigation and Agricultural Dev. Project | World Bank Staff Appraisal Report | South Asia Proj. Dept. Agriculture Division | Apr 1982 |
| 36. | Pakistan Irrigation Systems Rehabilitation Project | World Bank Staff Appraisal Report | <u>do</u> | <u>do</u> |
| 37. | Karakul Sheep Breeding in Baluchistan | Livestock Department | Government of Pakistan | - |

- | | | | |
|---|---------------|-------------------------------------|-----------|
| 38. Brief Introduction to kinds of rangelands and vegetation as affected by climate, soil and history for use in Pakistan. Proceedings of the Pakistan Forestry Conference. | C. M. A. Khan | Pakistan Forest Institute, Peshawar | 1974 |
| 39. Baluchistan District Gazetteers | - | - | - |
| 40. Donor Assistance in Baluchistan | G. M. Marri | USAID, Karachi | Dec. 1981 |

APPENDIX V

BALUCHISTAN
(Urban Areas by Population size)

GROUP 1 (less than 10,000)

- | | |
|--------------------------------|------------------|
| 1. Loralai Cantt. | 2. Sinjawi T.C. |
| 3. Zhob Cantt. | 4. Harnai T.C. |
| 5. Ziarat T.C. | 6. Jhat Pat T.C. |
| 7. Dera Murad Khan Jamali T.C. | 8. Dhiadar T.C. |
| 9. Mach T.C. | 10. Bagh T.C. |
| 11. Gaddani T.C. | 12. Uthral T.C. |
| 13. Hub T.C. | 14. Ormara T.C. |

GROUP 2 (10,000 - 25,000)

- | | |
|-----------------------|------------------|
| 1. Pishin M.C. | 2. Loralai M.C. |
| 3. Nushki T.C. | 4. Sibi M.C. |
| 5. Usta Muhammad M.C. | 6. Kalat T.C. |
| 7. Mastung M.C. | 8. Kharan T.C. |
| 9. Bela T.C. | 10. Gawadar M.C. |
| 11. Panni T.C. | 12. Chitkan T.C. |

GROUP 3 (25,000 - 50,000)

- | | |
|------------------|-----------------|
| 1. Quetta Cantt. | 2. Chaman M.C. |
| 3. Zhob M.C. | 4. Khuzdar M.C. |

GROUP 4 (50,000 - 100,000)

1. Turbat M.C.

GROUP 5 (100,000 - 200,000)

--

GROUP 6 (200,000 - 300,000)

1. Quetta Municipal Corporation.

GROUP 7 (300,000 and above)

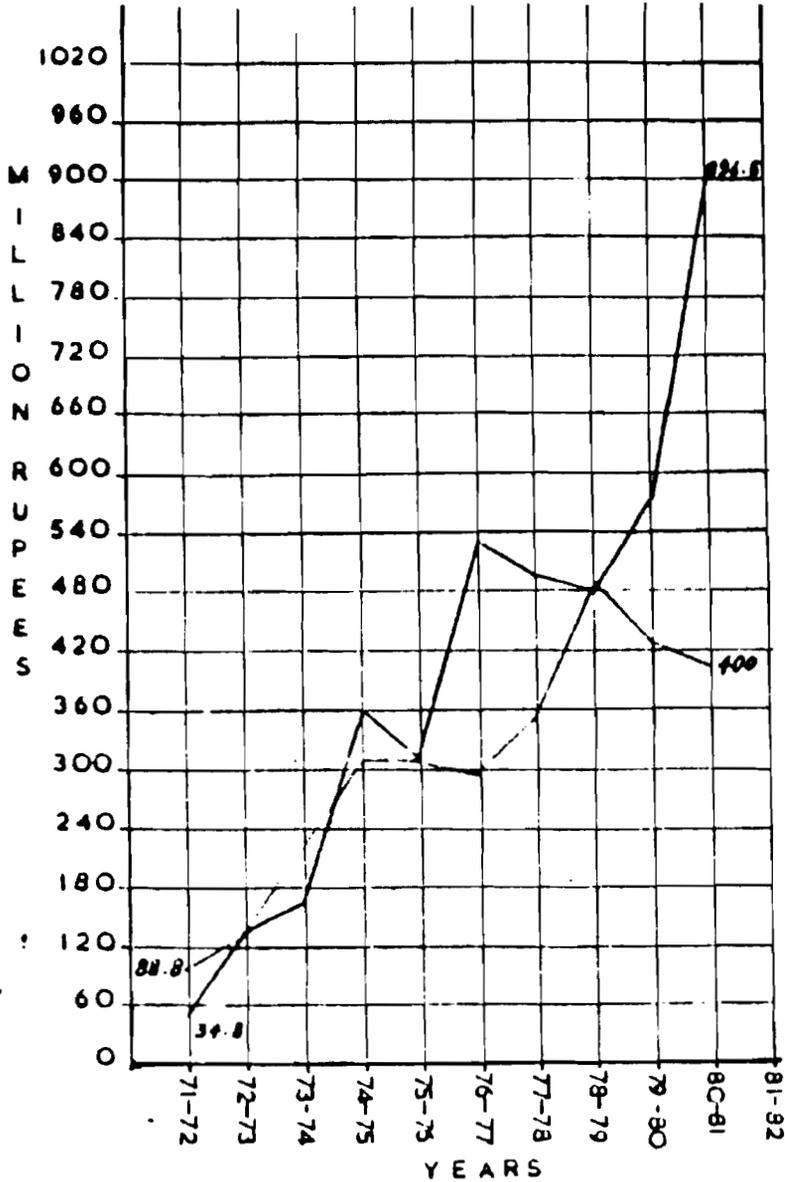
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Abbreviations :

- T.C. Town Committee.
M.C. Municipal Committee.



APPENDIX VI - STATISTICS



LEGEND

FEDERAL GRANT

PROVINCIAL GRANT

PLANNING & DEVELOPMENT DEPARTMENT

ANNUAL
DEVELOPMENT
STATISTICS
OF
BALUCHISTAN

Vol. 1
 No. 10

1980-81

Table: 2.2

-63-

POPULATION

PROVISIONAL POPULATION BY ADMINISTRATIVE DISTRICTS - 1981 CENSUS

| AREA | POPULATION IN THOUSANDS | | percentage change in population 1972-81 | Sex-ratio Males per hundred Females | |
|------------------------|-------------------------|--------------|---|-------------------------------------|------------|
| | September 1972 | March 1981 | | 1972 | 1981 |
| <u>BALUCHISTAN</u> | <u>2,429</u> | <u>4,306</u> | <u>77.23</u> | <u>113</u> | <u>112</u> |
| <u>QUETTA DIVISION</u> | <u>926</u> | <u>1,625</u> | <u>75.48</u> | <u>111</u> | <u>115</u> |
| Quetta District | 262 | 380 | 50.79 | 126 | 127 |
| Pishin District | 279 | 374 | 50.20 | 103 | 107 |
| Loralai District | 188 | 391 | 107.98 | 111 | 114 |
| Zhou District | 172 | 360 | 109.30 | 126 | 116 |
| Chagai District | 65 | 120 | 84.62 | 105 | 103 |
| <u>SIBI DIVISION</u> | <u>660</u> | <u>1,008</u> | <u>52.73</u> | <u>114</u> | <u>101</u> |
| Sibi District | 102 | 129 | 26.47 | 113 | 104 |
| Nasirabad District | 224 | 393 | 75.45 | 115 | 103 |
| Kachhi District | 221 | 308 | 39.37 | 116 | 98 |
| Kohlu Agency | 113 | 178 | 57.52 | 104 | 98 |
| <u>KALAT DIVISION</u> | <u>536</u> | <u>1,020</u> | <u>90.30</u> | <u>114</u> | <u>111</u> |
| Kalat District | 147 | 333 | 126.53 | 112 | 105 |
| Khuzdar District | 187 | 371 | 98.40 | 118 | 112 |
| Kharan District | 77 | 129 | 67.53 | 113 | 120 |
| Lasbela District | 125 | 187 | 49.60 | 113 | 113 |
| <u>MEKLAN DIVISION</u> | <u>307</u> | <u>652</u> | <u>112.38</u> | <u>116</u> | <u>125</u> |
| Turbat District | 161 | 378 | 134.78 | 119 | 132 |
| Gwadur District | 89 | 113 | 26.97 | 117 | 112 |
| Panjgur District | 57 | 161 | 182.46 | 108 | 119 |

Source: - Census of Pakistan, Bulletin No. 1, (d)

Table: 2.4

Population by age and by sex (Urban & Rural) Baluchistan

1972 Census

(000) Number

| Age-group | Total Sexes | | | Urban Sexes | | | Rural Sexes | | | |
|---------------|--------------|-------------|--------------|-------------|-------------|-------------|--------------|--------------|--------------|-----|
| | Both | Male | Female | Both | Male | Female | Both | Male | Female | |
| TOTAL | 26,98 | 4,17 | 12,81 | 4,28 | 2,28 | 2,00 | 22,70 | 11,89 | 10,81 | 110 |
| Below 5 years | 3,13 | 1,28 | 1,85 | 56 | 26 | 30 | 2,57 | 1,02 | 1,55 | 10 |
| 5 - 9 years | 4,56 | 2,15 | 2,41 | 71 | 36 | 35 | 3,85 | 1,79 | 2,06 | 15 |
| 10 - 14 years | 3,70 | 2,08 | 1,62 | 62 | 34 | 28 | 3,08 | 1,74 | 1,34 | 20 |
| 15 - 19 years | 2,57 | 1,52 | 1,05 | 42 | 23 | 19 | 2,15 | 1,29 | 86 | 25 |
| 20 - 24 years | 1,90 | 99 | 91 | 34 | 18 | 16 | 1,56 | 81 | 75 | 30 |
| 25 - 29 years | 2,06 | 1,07 | 99 | 33 | 17 | 16 | 1,73 | 90 | 83 | 35 |
| 30 - 34 years | 1,76 | 94 | 82 | 27 | 17 | 13 | 1,49 | 80 | 69 | 40 |
| 35 - 39 years | 1,74 | 88 | 86 | 26 | 14 | 12 | 1,48 | 74 | 74 | 45 |
| 40 - 44 years | 1,44 | 89 | 55 | 20 | 12 | 8 | 1,24 | 77 | 47 | 50 |
| 45 - 49 years | 1,16 | 62 | 54 | 12 | 10 | 2 | 99 | 52 | 47 | 55 |
| 50 - 59 years | 1,53 | 89 | 64 | 21 | 13 | 8 | 1,32 | 76 | 56 | 60 |
| 60 and above | 1,43 | 86 | 57 | 19 | 11 | 8 | 1,24 | 75 | 49 | 65 |

Source: Population Census of Pakistan, 1972.

POPULATION

Table: 2.6

Population of Cities & Main Towns of Baluchistan

(Number)

✓ 2 Not
 ✓ Dakhlan
 ✓ Pishin
 ✓ Panjgur
 ✓ Turbat
 ✓ Jaholai
 ✓ 198
 ✓ Miran Shah
 ✓ Gwadar
 ✓ Jib Pab
 ✓ Buzdar
 ✓ Alay
 ✓ Gwadar

| Cities & Towns | 1951 | 1961 | 1972 | 1981 |
|------------------------|--------|----------|----------|----------|
| Chaman ✓ | 6,980 | 2,906 | 10,274 | N.A |
| Gwader ✓ | - | 8,146 | 15,794 | N.A |
| Jiwani ✓ | - | 2,855 | 3,350 | N.A |
| Kalat ✓ | 2,009 | 5,321 | 6,481 | N.A |
| Kharan ✓ | 2,589 | 2,692 | 6,093 | N.A |
| Khuzdar ✓ | - | - | 3,362 | N.A |
| Lasbela ✓ | 3,063 | 3,139 | 6,728 | N.A |
| Loralai ✓ | 4,437 | 5,529 | 7,157 | N.A |
| Mach ✓ | 3,211 | 4,921 | 7,350 | N.A |
| Mastung ✓ | 2,792 | 5,962 | 10,397 | N.A |
| Nushki ✓ | 2,142 | 3,153 | 5,329 | N.A |
| Pusni ✓ | 6,168 | 7,483 | 15,737 | N.A |
| Quetta City & Cantt: ✓ | 63,892 | 1,06,633 | 1,58,025 | 2,86,000 |
| Sibi ✓ | 11,836 | 13,327 | 19,989 | N.A |
| Turbat ✓ | 3,549 | 4,578 | 27,671 | N.A |
| Zhob ✓ | 5,932 | 8,058 | 17,291 | N.A |

Source: - Population Census of Pakistan 1972.

Table: 2.7 Employed persons (10 years & above) by Sex and by major occupation - Baluchistan (1972 Census)

| Occupation Major Group | (Number) | | |
|---|----------------|----------------|---------------|
| | Total | Male | Female |
| 1. Professional, Technical & related Workers | 39,176 | 37,530 | 1,646 |
| 2. Administrative & Managerial Workers | 6,685 | 6,385 | 300 |
| 3. Clerical & related Workers | 16,591 | 16,401 | 190 |
| 4. Sales Workers | 72,831 | 71,468 | 363 |
| 5. Service Workers | 19,668 | 18,902 | 766 |
| 6. Agricultural, Animal Husbandry and Forestry Workers, Fishermen and Hunters. | 514,684 | 508,488 | 6,196 |
| 7. Production and related Workers, Transport equipment, Operatives & Labourers. | 117,674 | 114,798 | 2,876 |
| 8. Workers not classifiable by Operation | 19,815 | 17,001 | 2,817 |
| Total:- | 807,124 | 791,973 | 15,151 |

Source:- Population Census of Pakistan, 1972

Table 41

Land Utilization Statistics Baluchistan,
1970-71 to 1979-80

(Million Hectares)

| Year | Total Area | | Cultivated Area | | | Cropped Area | | Un-Cultivated Area | | | |
|---------|-------------------|---------------|-----------------|----------------|----------|--------------------------|-------------|--------------------|------------------|--------|-------------------------------|
| | Geographical Area | Reported Area | Total (5+6) | Current Fallow | net Sown | Area Sown more than once | Total (6+7) | Total (10+11+12) | cultivable Waste | Forest | No. Available For cultivation |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1970-71 | 34.72 | 19.04 | 1.18 | 0.79 | 0.38 | 0.02 | 0.40 | 17.86 | 5.62 | 1.07 | 11.17 |
| 1971-72 | 34.72 | 19.04 | 1.18 | 0.78 | 0.40 | 0.02 | 0.42 | 17.86 | 5.62 | 1.07 | 11.17 |
| 1972-73 | 34.72 | 19.04 | 1.19 | 0.83 | 0.36 | - | 0.36 | 17.85 | 5.61 | 1.07 | 11.17 |
| 1973-74 | 34.72 | 19.19 | 1.34 | 0.83 | 0.51 | - | 0.51 | 17.85 | 5.61 | 1.07 | 11.17 |
| 1974-75 | 34.72 | 19.04 | 1.21 | 0.88 | 0.33 | 0.01 | 0.34 | 17.83 | 5.59 | 1.07 | 11.17 |
| 1975-76 | 34.74 | 19.05 | 1.23 | 0.91 | 0.32 | 0.01 | 0.33 | 17.82 | 5.58 | 1.07 | 11.17 |
| 1976-77 | 34.69 | 19.07 | 1.20 | 0.92 | 0.26 | 0.04 | 0.32 | 17.87 | 5.57 | 1.09 | 11.21 |
| 1977-78 | 34.73 | 19.05 | 1.38 | 0.93 | 0.45 | 0.01 | 0.46 | 17.66 | 5.42 | 1.09 | 11.17 |
| 1978-79 | 34.73 | 19.05 | 1.38 | 0.94 | 0.44 | 0.04 | 0.48 | 17.66 | 5.42 | 1.07 | 11.17 |
| 1979-80 | 34.72 | 19.04 | 1.40 | 0.99 | 0.41 | 0.01 | 0.42 | 17.64 | 5.40 | 1.07 | 11.17 |

Source: - Directorate of Agriculture,
Government of Baluchistan.

Table: 4.26

Consumption of Fertilizers by kind Baluchistan.

1972-73 to 1979-80

(000) Nutrient Tons.

| YEAR | NITROGEN | PHOSPHATE | POTASH | TOTAL |
|---------|----------|-----------|--------|-------|
| 1972-73 | 1.2 | 0.2 | - | 1.4 |
| 1973-74 | 1.6 | 0.3 | - | 1.9 |
| 1974-75 | 1.3 | 0.3 | - | 1.6 |
| 1975-76 | 1.5 | 0.8 | - | 2.3 |
| 1976-77 | 1.9 | 0.5 | - | 2.4 |
| 1977-78 | 2.6 | 0.9 | - | 3.5 |
| 1978-79 | 2.8 | 1.1 | (C) | 3.9 |
| 1979-80 | 3.5 | 1.1 | (C) | 3.9 |

(C) Nominal.

Source:— Directorate of Agriculture,
Government of Baluchistan.

Table 5.5 Livestock Slaughtered outside the Recognised Slaughter House by District Baluchistan.
1978-79 to 1979-80

(00) Number

| District/Division | Total | | Cattle | | Buffaloes | | Sheep | | Goats | |
|-------------------|-------------|---------|---------|---------|-----------|---------|---------|---------|---------|---------|
| | 1978-79 | 1979-80 | 1978-79 | 1979-80 | 1978-79 | 1979-80 | 1978-79 | 1979-80 | 1978-79 | 1979-80 |
| | Baluchistan | 101 | 209 | 4 | 15 | - | - | 87 | 71 | 14 |
| Quetta Division | 21 | 71 | - | 13 | - | - | 5 | 40 | 4 | 28 |
| Quetta | - | - | - | - | - | - | - | - | - | - |
| Pishin | 21 | 71 | 2 | 13 | - | - | 15 | 30 | 4 | 28 |
| Loralai | - | - | - | - | - | - | - | - | - | - |
| Zhob | - | - | - | - | - | - | - | - | - | - |
| Chagai | - | - | - | - | - | - | - | - | - | - |
| Sibi Division | 80 | 138 | 2 | 3 | - | - | 68 | 40 | 10 | 95 |
| Sibi | - | - | - | - | - | - | - | - | - | - |
| Nasirabad | 16 | 68 | 2 | 2 | - | - | 14 | 16 | - | 50 |
| Kachhi | - | - | - | - | - | - | - | - | - | - |
| Kohlu | 64 | 070 | - | - | - | - | 54 | 24 | 10 | 45 |
| Kalat Division | - | - | - | - | - | - | - | - | - | - |
| Kalat | - | - | - | - | - | - | - | - | - | - |
| Knuzdar | - | - | - | - | - | - | - | - | - | - |
| Kharan | - | - | - | - | - | - | - | - | - | - |
| Lasbela | - | - | - | - | - | - | - | - | - | - |
| Mekran Division | - | - | - | - | - | - | - | - | - | - |
| Tutwat | - | - | - | - | - | - | - | - | - | - |
| Panjgur | - | - | - | - | - | - | - | - | - | - |
| Gwadar | - | - | - | - | - | - | - | - | - | - |
| Total :- | 303 | 627 | 12 | 46 | - | - | 249 | 211 | 12 | 369 |

*) Less than 50.

Source:- Directorate of Animal,
Government of Baluchistan.

Table 5.1 ~~...~~ Total Number of Animals in Baluchistan by TYPE
1975-76 to 1979-80

| Animal | (Number) | | | | |
|---------------------------------------|-----------|-----------|-----------|-----------|-----------|
| | 1975-76 | 1976-77 | 1977-78 | 1978-79 | 1979-80 |
| Oxen (Including Cows and Yandu Stock) | 4,81,768 | 6,76,014 | 6,84,230 | 6,94,000 | 6,84,230 |
| Buffaloes | 22,182 | 33,049 | 33,229 | 32,000 | 33,229 |
| Sheep | 38,58,524 | 49,20,883 | 50,74,496 | 69,90,000 | 50,74,496 |
| Goats | 32,38,237 | 44,44,727 | 44,41,513 | 61,30,000 | 44,41,513 |
| Other animals | 1,84,683 | 1,84,683 | 4,80,127 | 5,50,000 | 4,80,127 |
| Poultry | 11,82,894 | 11,82,894 | 19,58,062 | 35,00,000 | 19,58,062 |

Source: Directorate of Animal Husbandary,
Government of Baluchistan.

Table No 1

Marine Fish Production on Makran Coast Baluchistan.
1960- to 1980.

(in Metric Tons)

| Year | Production | Year | Production |
|------|------------|------|------------|
| 1960 | 18.00 | 1970 | 44.47 |
| 1961 | 18.15 | 1971 | 45.33 |
| 1962 | 18.50 | 1972 | 45.82 |
| 1963 | 18.90 | 1973 | 41.57 |
| 1964 | 19.10 | 1974 | 39.79 |
| 1965 | 19.50 | 1975 | 41.12 |
| 1966 | 20.00 | 1976 | 45.57 |
| 1967 | 20.62 | 1977 | 64.35 |
| 1968 | 20.96 | 1978 | 65.10 |
| 1969 | 39.47 | 1979 | 62.42 |
| | | 1980 | 71.67 |

Source:- Directorate of Fisheries,
Government of Baluchistan.

Table: 6.4

Catch of Fish on Mekran Coast - Baluchistan

1977 to 1980

(00) Metric Tons.

| Species group | 1977 | 1978 | 1979 | 1980 |
|---|------|------|------|------|
| 1. Salmon, Trout & Similar species | 1 | 1 | 3 | 3 |
| 2. Teleostean flat fish | 36 | 32 | 25 | 29 |
| 3. Cod, Haks, Haddock & Similar Species | - | - | - | - |
| 4. Herrings, Sardine & Similar Species | 83 | 164 | 120 | 173 |
| 5. Tuna True Mackerel & similar species | 107 | 87 | 93 | 99 |
| 6. Other marine Teleostean (Perches, Croakers bases etc.) | 227 | 205 | 230 | 217 |
| 7. Elasmobranches (Sharks, Skates & Rays) | 164 | 138 | 136 | 123 |
| 8. Crustaceans | 25 | 24 | 17 | 19 |
| Total:- | 643 | 651 | 624 | 717 |

Source:-- Directorate of Fisheries,
Government of Baluchistan

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Table 7.1 Area under Forests by type by District—Baluchistan
1978-79 and 1979-80

| District/Division | Coniferous | | Hill Land Plateau | | Reverian Bela Forest | | Plantation | | Range Lands | | Total | |
|------------------------|--------------|--------------|-------------------|--------------|----------------------|-----------|------------|-----------|--------------|--------------|---------------|---------------|
| | 18-79 | 19-80 | 18-79 | 19-80 | 18-79 | 19-80 | 18-79 | 19-80 | 18-79 | 19-80 | 18-79 | 19-80 |
| BALUCHISTAN | <u>1,156</u> | <u>1,156</u> | <u>5,966</u> | <u>5,966</u> | <u>21</u> | <u>21</u> | <u>25</u> | <u>25</u> | <u>3,717</u> | <u>3,717</u> | <u>10,885</u> | <u>10,885</u> |
| Quetta Division | <u>643</u> | <u>643</u> | <u>4,206</u> | <u>4,206</u> | - | - | - | <u>25</u> | <u>1,070</u> | <u>1,070</u> | <u>5,919</u> | <u>5,944</u> |
| Quetta | 330 | 330 | 4 | 4 | - | - | (a) | 25 | 706 | 706 | 1,040 | 1,065 |
| Pishin | 114 | 114 | 20 | 20 | - | - | - | - | 130 | 130 | 264 | 264 |
| Loralai | 185 | 185 | 227 | 227 | - | - | - | - | 234 | 234 | 646 | 646 |
| Zhob | 14 | 14 | 319 | 319 | - | - | - | - | - | - | 333 | 333 |
| Chagai | - | - | 3,636 | 3,636 | - | - | - | - | - | - | 3,636 | 3,636 |
| Sibi Division | <u>513</u> | <u>513</u> | <u>516</u> | <u>516</u> | <u>21</u> | <u>21</u> | <u>25</u> | - | <u>71</u> | <u>71</u> | <u>1,146</u> | <u>1,121</u> |
| Sibi | 513 | 513 | 306 | 306 | 21 | 21 | 25 | - | 71 | 71 | 936 | 911 |
| Nasirabad | - | - | - | - | - | - | - | - | - | - | - | - |
| Kachhi | - | - | 210 | 210 | - | - | - | - | - | - | 210 | 210 |
| Kohlu | - | - | - | - | - | - | - | - | - | - | - | - |
| Kalat Division | - | - | <u>1,099</u> | <u>1,099</u> | - | - | - | - | <u>2,566</u> | <u>2,566</u> | <u>3,665</u> | <u>3,665</u> |
| Kalat | - | - | 425 | 425 | - | - | - | - | 203 | 203 | 628 | 628 |
| Khuzdar | - | - | 63 | 63 | - | - | - | - | 110 | 110 | 173 | 173 |
| Kharan | - | - | 611 | 611 | - | - | - | - | 662 | 662 | 1,273 | 1,273 |
| Lasbela | - | - | - | - | - | - | - | - | 1,591 | 1,591 | 1,591 | 1,591 |
| Mekran Division | - | - | <u>145</u> | <u>145</u> | - | - | - | - | <u>10</u> | <u>10</u> | <u>155</u> | <u>155</u> |
| Turbat | - | - | (a) | (a) | - | - | - | - | (a) | (a) | 155 | 155 |
| Panjgur | - | - | (a) | (a) | - | - | - | - | (a) | (a) | - | - |
| Gwadar | - | - | (a) | (a) | - | - | - | - | (a) | (a) | - | - |

a) Separate information is not available.

Source:— Conservator of Forests,
Government of Baluchistan

Table 7.2 Out Turn Forests Baluchistan,
1971-72 to 1979-80.

| Year | Area (000) Hectare | State Forest (Timber) | | Wastelands outside State Forest (Timber) | | State Forest Firewood | | Wastelands outside State Forest Firewood | | Minor Produce | | | |
|---------|--------------------------|------------------------------|-----------------|---|-----------------|------------------------------|------------------|---|-----------------|------------------------|-----------------|------------------------|-----------------|
| | | Production Cubic Metre | Value (00Rs) | Production Cubic Metre | Value (00Rs) | production Cubic Metre | Value (00Rs.) | Production Cubic Metre | Value (00Rs) | Ephedra | | Muzri | |
| | | | | | | | | | | Production (000 kg) | Value (00Rs) | Production (000 kg) | Value (00Rs) |
| 1971-72 | 1,088 | 1,813 | 320 | - | - | 23,768 | 939 | - | - | 2,101 | 1,760 | - | - |
| 72-73 | 1,088 | 255 | 100 | 3,440 | 606 | 1,107 | 202 | 572 | 668 | 1,086 | 3,600 | - | - |
| 73-74 | 1,088 | 51 | 39 | 4,156 | 742(a) | - | - | 7,316 | 2,297(a) | 179 | 6.4 | - | - |
| 74-75 | 1,088 | 8 | 3 | 1,260 | 855(a) | 119 | 37 | 13,389 | 2,808(a) | 392 | 1,603 | 1,997 | 167 |
| 75-76 | 1,088 | 23 | 5 | 5,289 | 1,232(a) | 195 | 45 | 17,347 | 4,085(a) | 410 | 1,982 | - | 6 |
| 76-77 | 1,088 | - | - | - | 5 | - | - | - | 28 | 4.5 | 2,787 | - | - |
| 77-78 | 1,088 | 553 | 98 | 4,089 | 723(a) | 553 | 98 | 16,733 | 2,955(a) | 411 | 2,446 | - | - |
| 78-79 | 1,088 | - | - | 1,974 | 1,395 | - | - | 11,962 | 2,113 | 1,141 | 9,419 | 18,519 | 2,411 |
| 79-80 | 1,088 | 641 | 670 | 8,063 | 75,500 | 2,375 | 830 | 30,907 | 43,660 | 746 | 2,585 | - | - |

a) Royalty recovered by the Forest Department.
*) Less than 500 Kilogram.

Source:- Conservator of Forests,
Government of Baluchistan.

Table: 8.1

List of Manufacturing Establishment registered under section 2 (J) & 5 (1) of
Factories Act, 1934.

15

| Name of City/ S.No. Town. | | Industry Code | Factory Code | Name and Maling address of Factory |
|------------------------------|---------|----------------|--------------|---|
| 1. | Quetta | Engineering | 5(1) | Ismail Engineering Works, Abdul Sattar Road, Quetta. |
| 2. | Bela | Engineering | 2(J) | Bela Engineering Works, Bela |
| 3. | Uthal | Engineering | 2(J) | Modern Industries, Uthal. |
| 4. | Quetta | Printing Press | 5(1) | Albert Printing Press, Jinnah Road, Quetta. |
| 5. | Quetta | Printing press | 5(1) | Bolan Muslim press, Toghi Road, Quetta. |
| 6. | Quetta | Printing press | 5(1) | Qureshi printing press, Toghi Road, Quetta. |
| 7. | Quetta | Printing press | 5(1) | Islamia Electric printing press, Jinnah Road, Quetta. |
| 8. | Quetta | Flour Mill | 5(1) | Bolan Flour Mill, Tahir Khan Road, Quetta. |
| 9. | Quetta | Flour Mill | 5(1) | Ghaznavi Flour Mills, Sirki Road, Quetta. |
| 10. | Quetta | Cold Storage, | 2(J) | Quetta Cold Storage, White Road, Quetta. |
| 11. | Harnai | Textile Mill | 2(J) | Harnai Woolen Mill, Harnai |
| 12. | Quetta | Textile Mill | 2(J) | Ali Woolen Mills, Sirki Road, Quetta. |
| 13. | Mastung | Textile Mill | 2(J) | Wood Soubuhg Centre, Mastung. |
| 14. | Quetta | Fruit Products | 2(J) | Dittu and Sons Fruit products, Sirki Road, Quetta. |
| 15. | Quetta | Fruit products | 2(J) | Baluchistan Fruit products, Sheikhmandah |
| 16. | Quetta | Pharmaceutical | 2(J) | Marker Alkoliods, Jail Road, Quetta. |
| 17. | Quetta | Pharmaceutical | 2(J) | Quetta Bukigucak Ltd: 7—Jail Road, Quetta. |
| 18. | Quetta | Distillary | 2(J) | Quetta Distillary, Quarry Road, Quetta. |
| 19. | Quetta | Disinfectant | 2(J) | Mohkam-ud-Din Soap Factory, Kasi Road, Quetta. |
| 20. | Quetta | R.C.C. | 2(J) | Bolan F.C.C. Pipe Works, Chaman Road. |
| 21. | Quetta | R.C.C. | 5(1) | Mustafa R.C.C. Pipe Works, Killi Sheikhan, Quetta. |

Table No. 8-2

Summary Statistics of Census of Manufacturing
Industries - Baluchistan,
1975-76 to 1979-80

(Value in Million Rs.)

| <i>Production</i> | 1975-76 | 1976-77 | 1977-78 | 1978-79 | 1979-80 |
|--|---------|---------|---------|---------|---------|
| 1. <i>Number of reporting establishment.</i> | 14 | 6 | 5 | 5 | 5 |
| 2. <i>Value of fixed assets.</i> | 13.4 | 6.0 | 21.0 | 11.26 | 11.26 |
| 3. <i>Average employment.</i> | 1472 | 44 | 3 | 367 | 367 |
| 4. <i>Employment cost during the year</i> | 6.6 | 6.0 | 3.0 | 1.6 | 1.6 |
| 5. <i>Industrial cost during the year.</i> | 25.3 | 45.1 | 59.7 | 243.79 | 243.79 |
| 6. <i>Value of production during the year.</i> | 48.5 | 47.4 | 94.3 | 326.20 | 326.20 |
| 7. <i>Gross Census added during the year</i> | 23.2 | 2.4 | 34.5 | 83.41 | 83.41 |

(a) *Due to non-availability of data, is repeated
previous year's date*

Table: 9.1 Production of Minerals in Baluchistan
1970-71 to 1979-80

| (Tonnes) | | | | | | | | |
|----------|---------|----------|--------|------------|------------|----------|-----------|-----------------|
| Year | Coal | Chromite | Marble | Lime Stone | Barytes | Flourite | Magnesite | Natural Gas (a) |
| 1970-71 | 881,213 | 27,756 | 20,149 | 127 | 252 | 3,331 | 638 | 2,710,191 |
| 1971-72 | 765,742 | 33,582 | 13,409 | 68,740 | 129 | 2,936 | 101 | 2,961,912 |
| 1972-73 | 763,520 | 18,045 | 27,847 | 52,105 | - | 937 | 2,468 | 3,449,713 |
| 1973-74 | 663,145 | 12,522 | 19,328 | - | 571 | 94 | 3,156 | 4,055,033 |
| 1974-75 | 765,411 | 10,121 | 33,007 | - | 2,707 | 272 | 2,479 | 4,382,743 |
| 1975-76 | 569,254 | 7,900 | 27,361 | - | 15,105 | 20 | 790 | 4,485,231 |
| 1976-77 | 631,426 | 8,119 | 23,603 | 22 | 15,000 (b) | 50 (b) | 700 | 4,777,436 |
| 1977-78 | 644,023 | 7,326 | 25,458 | N.A | 13,825 | 148 | 591 | N.A |
| 1978-79 | 749,397 | 1,799 | 56,867 | N.A | 26,322 | 763 | 2,301 | N.A |
| 1979-80 | 903,493 | 1,255 | 26,008 | N.A | 15,435 | 725 | 687 | N.A |

Source: - Statistics Division, Karachi.

- a) Unit in (000) c. meters.
b) Estimated/Provisional.

Table:- 9.5 Industrial and Miscellaneous cost and Indirect taxes by type of Mineral,
BALUCHISTAN.

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(Value in '000' Rs.)

| Type of Mineral | No. of leases and licences covered. | Industrial cost during the year. | | | | | Miscellaneous cost. | Indirect Taxes. |
|---------------------|-------------------------------------|----------------------------------|----------------------------------|-----------------------|------------------------------------|--------------------------------|---------------------|-----------------|
| | | Total | Cost of Fuel and power consumed. | Cost of Raw Materials | Payment for repair and Maintenance | Payment for work done by other | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| <u>All Minerals</u> | <u>159</u> | <u>38020</u> | <u>6607</u> | <u>30961</u> | <u>1452</u> | - | <u>32922</u> | <u>2445</u> |
| Barytes | 2 | - | - | - | - | - | 1 | - |
| Chromium Ore | 27 | 704 | 335 | 362 | 7 | - | 438 | - |
| Coal | 101 | 35269 | 3797 | 30027 | 1445 | - | 26222 | 230 |
| Gravel | 2 | - | - | - | - | - | - 17 | - |
| Marble/Aragonite | 20 | 861 | 623 | 238 | - | - | 5576 | - |
| Natural Gas | 1 | 1186 | 852 | 334 | - | - | 666 | 2215 |
| Others | 6 | - | - | - | - | - | 2 | - |

1980

(Kilometer)

| Division/District | Total | Blacktopped | Shingled |
|------------------------|------------------|-----------------|-----------------|
| BALUCHISTAN | 11,157.75 | 2,628.68 | 8,529.07 |
| Quetta Division | 4,791.97 | 1,361.59 | 3,430.38 |
| Quetta | 484.27 | 193.95 | 290.32 |
| Pishin | 1,015.40 | 251.53 | 763.87 |
| Loralai | 719.74 | 192.33 | 527.41 |
| Zhob | 1,411.28 | 293.14 | 1,118.14 |
| Chagai | 1,161.28 | 430.64 | 730.64 |
| Sibi Division | 1,482.75 | 415.50 | 1,067.25 |
| Sibi | 1,041.63 | 158.25 | 883.38 |
| Nasirabad | (b) | (b) | (b) |
| Kachhi | 441.12 | 257.25 | 183.87 |
| Kohlu | (b) | (b) | (b) |
| Kalat Division | 2,439.47 | 825.49 | 1,913.70 |
| Kalat | 1,645.47 | 564.51 | 1,080.96 |
| Khuzdar | (c) | (c) | (c) |
| Kharan | 599.19 | 26.61 | 572.58 |
| Lasbela | 194.83 | 234.67 | 260.16 |
| Tekran Division | 2,143.53 | 25.80 | 2,117.74 |
| Turbat | (a) | (a) | (a) |
| Panjgur | (a) | (a) | (a) |
| Gwadur | (a) | (a) | (a) |

Separate information is not available.

Included in Sibi District.

Included in Kalat District.

(a) — Due to non-availability of 1980 figures the date of previous year has been repeated.

Source:— Communication & Works Department,
Government of Baluchistan

Table: 10.3

Operation of Pakistan Railways in Baluchistan
1975-76 to 1979-80

80

| Classification | Unit | 1975-76 | 1976-77 | 1977-78 | 1978-79 | 1979-80 |
|--|-----------|---------|---------|---------|---------|---------|
| 1. Routes | Kilometer | 1,328 | 1,328 | 1,328 | 1,328 | 1,474 |
| 2. Railway Stations | Number | 60 | 60 | 60 | 60 | 60 |
| 3. Freight-Tonne-Kilometer | Million | 120 | 149 | 43 | 146 | 139 |
| 4. Passengers Mixed and other coaching Trains Run. | Thousand | 6 | 6 | 7 | 6 | 8 |
| 5. Train kilometer Passenger and mixed Train (including departmental) | Thousand | 873 | 900 | 1,039 | 1,265 | 1,249 |
| 6. Total kilometer travelled coaching vehicles (including departmental) | Million | 40 | 10 | 16 | 12 | 17 |
| 7. Freights-Trains-Runs. | Thousand | 11 | 9 | 8 | 8 | 9 |
| 8. Freight Wagon kilometer (including Departmental) | Million | 26 | 20 | 24 | 22 | 21 |
| 9. Freight Train kilometer (Freight and Mixed) | Thousand | 998 | 800 | 828 | 727 | 794 |
| 10. Persons employed (b) | Number | 7,723 | 7,720 | 7,375 | N.A | N.A |

b) The staff of central office and workshop stationed in Punjab has been excluded.

Source:— Pakistan Railways Lahore.

Table 11.5

Co-operative Societies by type Baluchistan Province.

FINANCE & BANKING

1976-77 to 1978-79.

(000 Rupees)

| Classification | 1976-77 | | | | | | 1977-78 | | | | | | 1978-79 | | | | | |
|--|------------------------------|------------------------|-------------------|-----------|------------------------------|-----------|---------------------------|------------------------|-------------------|-----------|------------------------------|-----------|---------------------------|------------------------|-------------------|-----------|------------------------------|-----------|
| | Profit (+) or Loss (-) | Cost of Management. | Loans advanced | | Receipt from loans repaid | | Profit (+) or Loss (-) | Cost of Management. | Loans advanced | | Receipt from loans repaid | | Profit (+) or Loss (-) | Cost of Management. | Loans advanced | | Receipt from loans repaid | |
| | | | Individuals | Societies | Individuals | Societies | | | Individuals | Societies | Individuals | Societies | | | Individuals | Societies | Individuals | Societies |
| TOTAL | 450 | 87 | 290 | 1,752 | 78 | 585 | (-)99 | 290 | 4,309 | 516 | 4,717 | 1,107 | (-)165 | 248 | 6,666 | 3,141 | 4,649 | 261 |
| 1. Provincial Co-op: Banks & other Provincial Co-op: Societies. | (+) 392 | 76 | - | 868 | - | 365 | (+) 304 | 66 | - | 146 | - | 493 | (+) 47 | 12 | - | 2,928 | - | 112 |
| 2. Central Co. op: Banks. | - | - | - | - | - | - | (+) 53 | 214 | 3,934 | 5 | 4,505 | 47 | (+) 53 | 214 | 3,934 | 5 | 4,505 | 47 |
| 3. Other Central Societies. | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4. Agricultural Co-op. Societies. | (-) 1,063 | 11 | 290 | 830 | 78 | 220 | (-) 404 | - | 375 | 365 | 202 | 551 | (-) 284 | 4 | 2,732 | 207 | 143 | 102 |
| 5. Non-Agricultural Co-op Societies. | (+) 221 | - | - | 54 | - | - | (-) 52 | 10 | - | - | 10 | 10 | (+) 19 | 18 | - | 1 | 1 | - |

**Loans disbursed by Agricultural Development Bank of
Pakistan by term in Baluchistan.**

1972-73 to 1979-80

82

(000 Rs.)

| | Total | Short term | Medium term | Long term |
|---------|--------|------------|-------------|-----------|
| 1972-73 | 6,508 | 4,013 | 1,021 | 1,474 |
| 1973-74 | 13,280 | 6,060 | 3,230 | 3,990 |
| 1974-75 | 13,170 | 3,010 | 2,010 | 6,150 |
| 1975-76 | 28,770 | 1,140 | 440 | 27,190 |
| 1976-77 | 24,010 | 200 | 260 | 23,550 |
| 1977-78 | 1,690 | 30 | 30 | 1,630 |
| 1978-79 | 4,390 | 140 | 120 | 4,130 |
| 1979-80 | 4,390 | 520 | 140 | 3,730 |

Source:— Agriculture Development,
Government of Baluchistan.

Table: 11.8 Advances of Taccavi Loans—Baluchistan,
1977-78 to 1979-80.

| Division/District | 1977-78 | | 1978-79 | | 1979-80 | |
|------------------------|---------------------------|------------------------|---------------------------|------------------------|---------------------------|------------------------|
| | Land Improvement Act 1952 | Agriculturist Act 1952 | Land Improvement Act 1952 | Agriculturist Act 1952 | Land Improvement Act 1952 | Agriculturist Act 1952 |
| BALUCHISTAN | <u>1250</u> | <u>1900</u> | <u>2425</u> | <u>3100</u> | <u>1390</u> | <u>200</u> |
| QUETTA DIVISION | <u>480</u> | <u>630</u> | <u>840</u> | <u>758</u> | <u>972</u> | <u>40</u> |
| Quetta | 100 | 130 | 105 | 160 | 150 | 10 |
| Pishin | 100 | 140 | 200 | 170 | 285 | 10 |
| Loralai | 100 | 140 | 280 | 183 | 192 | 100 |
| Zhob | 100 | 140 | 150 | 95 | 190 | 40 |
| Chagai | 80 | 80 | 105 | 150 | 155 | |
| SIBI DIVISION | <u>310(*)</u> | <u>590(*)</u> | <u>485</u> | <u>2027</u> | <u>418</u> | <u>200</u> |
| Sibi | 50 | 50 | 185 | 320 | 114 | 30 |
| Nasirabad | 80 | 160 | - | 1277 | - | 150 |
| Kachhi | 80 | 130 | 150 | 310 | 134 | 34 |
| Kohlu | 50 | 150 | 150 | 120 | 170 | 18 |
| KALAT DIVISION | <u>260(*)</u> | <u>380(*)</u> | <u>770</u> | <u>200</u> | <u>N.A.</u> | <u>N.A.</u> |
| Kalat | 60 | 90 | 320 | 100 | | |
| Khuzdar | 70 | 117 | 250 | 100 | | |
| Kharan | 50 | 73 | 50 | - | | |
| Lasbela | 40 | 53 | 150 | - | | |
| MEKRAN DIVISION | <u>200</u> | <u>300</u> | <u>330</u> | <u>15</u> | <u>N.A.</u> | <u>N.A.</u> |
| Turbat | (a) | (a) | 170 | 9 | | |
| Panjgur | (a) | (a) | 100 | 6 | | |
| Gwadur | (a) | (a) | 60 | | | |

(a) Separate information is not available.
(*) Including the amount reserved with Commissioners.

source:— Provincial Board of Revenue
Government of Baluchistan

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Number of Government
Hospitals and Dispensaries with their bed strength by District Baluchistan
1976-77 to 1979-80

| District/Division | Hospitals | | | | | | | | Dispensaries | | | | | | | |
|------------------------|-----------|-----------|-----------|-----------|-------------|-------------|-------------|-------------|--------------|------------|------------|------------|------------|------------|------------|------------|
| | Number | | | | Beds | | | | Number | | | | Beds | | | |
| | 76-77 | 77-78 | 78-79 | 79-80 | 76-77 | 77-78 | 78-79 | 79-80 | 76-77 | 77-78 | 78-79 | 79-80 | 76-77 | 77-78 | 78-79 | 79-80 |
| BALUCHISTAN | <u>29</u> | <u>30</u> | <u>30</u> | <u>35</u> | <u>1850</u> | <u>1850</u> | <u>1850</u> | <u>1964</u> | <u>398</u> | <u>353</u> | <u>353</u> | <u>335</u> | <u>237</u> | <u>211</u> | <u>211</u> | <u>210</u> |
| Quetta Division | <u>14</u> | <u>15</u> | <u>15</u> | <u>17</u> | <u>1451</u> | <u>1451</u> | <u>1451</u> | <u>1517</u> | <u>152</u> | <u>134</u> | <u>134</u> | <u>131</u> | <u>26</u> | <u>126</u> | <u>126</u> | <u>126</u> |
| Quetta | 6 | 7 | 7 | 9 | 1173 | 1173 | 1173 | 1239 | 25 | 23 | 23 | 22 | 8 | 8 | 8 | 8 |
| Pishin | 3 | 3 | 3 | 3 | 53 | 53 | 53 | 53 | 25 | 22 | 22 | 19 | 18 | 18 | 18 | 18 |
| Loralai | 1 | 1 | 1 | 1 | 59 | 59 | 59 | 59 | 38 | 34 | 34 | 34 | 34 | 34 | 34 | 34 |
| Zhob | 3 | 3 | 3 | 3 | 116 | 116 | 116 | 116 | 38 | 32 | 32 | 34 | 36 | 36 | 36 | 36 |
| Chagai | 1 | 1 | 1 | 1 | 50 | 50 | 50 | 50 | 26 | 23 | 23 | 22 | 30 | 30 | 30 | 30 |
| Sibi Division | <u>8</u> | <u>8</u> | <u>8</u> | <u>11</u> | <u>209</u> | <u>209</u> | <u>209</u> | <u>257</u> | <u>99</u> | <u>90</u> | <u>90</u> | <u>85</u> | <u>95</u> | <u>73</u> | <u>73</u> | <u>68</u> |
| Sibi | 4 | 4 | 4 | 4 | 103 | 103 | 103 | 103 | 27 | 23 | 26 | 23 | 36 | 36 | 36 | 36 |
| Nasirabad | 1 | 1 | 1 | 3 | 22 | 22 | 22 | 52 | 20 | 17 | 17 | 15 | 22 | 25 | 22 | - |
| Kachhi | 2 | 2 | 2 | 2 | 70 | 70 | 70 | 70 | 27 | 25 | 25 | 24 | 25 | 25 | 25 | 21 |
| Kohlu | 1 | 1 | 1 | 2 | 14 | 14 | 14 | 32 | 25 | 25 | 25 | 23 | 12 | 12 | 12 | 21 |
| Kalat Division | <u>6</u> | <u>6</u> | <u>6</u> | <u>6</u> | <u>154</u> | <u>154</u> | <u>154</u> | <u>154</u> | <u>99</u> | <u>88</u> | <u>88</u> | <u>84</u> | <u>12</u> | <u>8</u> | <u>8</u> | <u>16</u> |
| Kalat | 3 | 3 | 3 | 3 | 68 | 68 | 68 | 68 | 34 | 31 | 31 | 29 | 12 | 8 | 8 | 8 |
| Khuzdar | 1 | 1 | 1 | 1 | 56 | 56 | 56 | 56 | 23 | 21 | 21 | 21 | - | - | - | 8 |
| Kharan | 1 | 1 | 1 | 1 | 18 | 18 | 18 | 18 | 29 | 17 | 17 | 16 | - | - | - | - |
| Lasbela | 1 | 1 | 1 | 1 | 12 | 12 | 12 | 12 | 22 | 19 | 19 | 18 | - | - | - | - |
| Mekran Division | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>36</u> | <u>36</u> | <u>36</u> | <u>36</u> | <u>48</u> | <u>41</u> | <u>41</u> | <u>35</u> | <u>4</u> | <u>4</u> | <u>4</u> | - |
| Turbat | (a) | (a) | (a) | 1 | - | - | - | 36 | - | - | - | 24 | - | - | - | - |
| Panjgur | (a) | (a) | (a) | - | - | - | - | - | - | - | 4 | 1 | - | - | - | - |
| Gwadar | (a) | (a) | (a) | - | - | - | - | - | - | - | 7 | 10 | - | - | - | - |

a) Separate information is not available.

Source - Directorate of Health,
Government of Baluchistan.

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Table: 12.4 Number of Doctors, Nurses, L.H. Vs and Dais by District
1979-80.

| District/Division | Doctors | | | Nurses | | | L.H. Vs. | Dais/Midwives |
|------------------------|------------|-----------|------------|-----------|-----------|------------|-----------|---------------|
| | Male | Female | Total | Male | Female | Total | | |
| BALUCHISTAN | 126 | 22 | 148 | 25 | 78 | 103 | 79 | 393 |
| <u>Quetta Division</u> | <u>70</u> | <u>14</u> | <u>84</u> | <u>25</u> | <u>70</u> | <u>95</u> | <u>43</u> | <u>148</u> |
| Quetta | 41 | 10 | 51 | 25 | 65 | 90 | 25 | 21 |
| Pishin | 7 | 2 | 9 | - | 2 | 2 | 5 | 23 |
| Loralai | 10 | 1 | 11 | - | 2 | 2 | 4 | 41 |
| Zhob | 7 | 1 | 8 | - | - | - | 3 | 37 |
| Chagai | 5 | - | 5 | - | 1 | 1 | 6 | 26 |
| <u>Sibi Division</u> | <u>28</u> | <u>4</u> | <u>32</u> | <u>-</u> | <u>4</u> | <u>4</u> | <u>17</u> | <u>100</u> |
| Sibi | 8 | 2 | 10 | - | 3 | 3 | 5 | 28 |
| Nasirabad | 8 | 1 | 9 | - | 1 | 1 | 3 | 27 |
| Kachhi | 8 | 1 | 9 | - | - | - | 4 | 18 |
| Kohlu | 4 | - | 4 | - | - | - | 5 | 27 |
| <u>Kalat Division</u> | <u>16</u> | <u>3</u> | <u>19</u> | <u>-</u> | <u>2</u> | <u>2</u> | <u>14</u> | <u>102</u> |
| Kalat | 5 | 2 | 7 | - | - | - | 4 | 31 |
| Khuzdar | 4 | 1 | 5 | - | 2 | 2 | 4 | 29 |
| Kharan | 3 | - | 3 | - | - | - | 2 | 20 |
| Lasbela | 4 | - | 4 | - | - | - | 4 | 22 |
| <u>Mekran Division</u> | <u>12</u> | <u>1</u> | <u>13</u> | <u>-</u> | <u>2</u> | <u>2</u> | <u>5</u> | <u>43</u> |
| Turbat | 8 | 1 | 9 | - | 2 | 2 | 3 | 27 |
| Panjour | 2 | - | 2 | - | - | - | 1 | 12 |
| Gwardar | 2 | - | 2 | - | - | - | 1 | 4 |

Source: - Directorate of Health Services,
Government of Baluchistan.

Table 13.3

Number of Teachers by District—Baluchistan.

1976-77 & 1979-80

(As on 15th October).

EDUCATION

| Division/District | SETs | | | JETs | | | DMs | | | PTIs | | | JETs(Tech) | | | JTs | | |
|------------------------|------------|-------------|-------------|-------------|-------------|-------------|------------|------------|------------|------------|------------|------------|------------|-----------|------------|-------------|-------------|-------------|
| | 77-78 | 78-79 | 79-80 | 77-78 | 78-79 | 79-80 | 77-78 | 78-79 | 79-80 | 77-78 | 78-79 | 79-80 | 77-78 | 78-79 | 79-80 | 77-78 | 78-79 | 79-80 |
| BALUCHISTAN | 174 | 1235 | 1261 | 1383 | 1439 | 1480 | 397 | 411 | 411 | 332 | 377 | 432 | 89 | 89 | 149 | 4534 | 4715 | 5036 |
| Quetta Division | 624 | 643 | 669 | 613 | 626 | 638 | 194 | 292 | 222 | 133 | 149 | 173 | 46 | 46 | 33 | 2103 | 2155 | 2741 |
| Quetta | 317 | 322 | 329 | 267 | 270 | 274 | 81 | 84 | 38 | 62 | 65 | 69 | 25 | 25 | 40 | 738 | 752 | 772 |
| Pishin | 114 | 119 | 124 | 89 | 93 | 95 | 41 | 43 | 48 | 7 | 11 | 20 | 6 | 6 | 18 | 356 | 351 | 372 |
| Loralai | 84 | 82 | 91 | 105 | 107 | 109 | 35 | 35 | 40 | 26 | 29 | 36 | 6 | 6 | 10 | 455 | 468 | 482 |
| Zob | 63 | 66 | 70 | 87 | 89 | 91 | 21 | 23 | 26 | 22 | 25 | 28 | 8 | 8 | 11 | 356 | 368 | 387 |
| Chagai | 46 | 49 | 55 | 65 | 67 | 69 | 16 | 17 | 20 | 16 | 19 | 20 | 1 | 1 | 4 | 218 | 226 | 235 |
| Sibi Division | 239 | 252 | 211 | 322 | 350 | 362 | 91 | 97 | 109 | 81 | 93 | 98 | 19 | 19 | 33 | 1054 | 1113 | 1173 |
| Sibi | 75 | 78 | 83 | 78 | 80 | 82 | 23 | 25 | 26 | 20 | 23 | 24 | 10 | 19 | 12 | 198 | 207 | 221 |
| Nasirabad | 55 | 58 | 63 | 52 | 83 | 86 | 19 | 21 | 23 | 19 | 20 | 26 | 4 | 4 | 8 | 262 | 275 | 292 |
| Kachhi | 57 | 61 | 65 | 112 | 115 | 117 | 24 | 35 | 38 | 28 | 32 | 29 | 3 | 3 | 7 | 302 | 315 | 333 |
| Kohlu | 52 | 55 | - | 70 | 72 | 77 | 15 | 16 | 22 | 14 | 18 | 22 | 2 | 2 | 6 | 292 | 316 | 327 |
| Kalat Division | 218 | 288 | 257 | 303 | 318 | 394 | 74 | 84 | 112 | 76 | 93 | 131 | 15 | 15 | 24 | 971 | 1018 | 1116 |
| Kalat | 74 | 82 | 89 | 98 | 100 | 105 | 23 | 25 | 28 | 28 | 31 | 37 | 5 | 5 | 7 | 293 | 394 | 385 |
| Khuzdar | 52 | 55 | 59 | 75 | 77 | 79 | 17 | 19 | 23 | 18 | 22 | 25 | 4 | 4 | 5 | 300 | 313 | 327 |
| Kharan | 31 | 31 | 35 | 58 | 80 | 147 | 18 | 21 | 39 | 16 | 21 | 45 | 6 | 6 | - | 176 | 180 | 185 |
| Lasbela | 56 | 60 | 74 | 72 | 61 | 63 | 16 | 19 | 22 | 14 | 19 | 24 | - | - | 12 | 202 | 221 | 219 |
| Mekran Division | - | - | 124 | - | - | 86 | - | - | 28 | - | - | 30 | - | - | 9 | - | - | 506 |
| Turbat | - | - | (a) | - | - | (a) | - | - | (a) | - | - | - | - | - | (a) | - | - | (a) |
| Panigur | - | - | (a) | - | - | (a) | - | - | (a) | - | - | (a) | - | - | (a) | - | - | (a) |
| Gwadur | - | - | (a) | - | - | (a) | - | - | (a) | - | - | (a) | - | - | (a) | - | - | (a) |

a) Separate information is not available.

Source:— Directorate of Education,

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Government of Baluchistan.

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Table: 13.18

Number of Teachers in Polytechnics, Commercial, Vocational & Teacher TrainingSchool/Elementary Education College by District—Baluchistan, 1977-78 to 1979-80.

| Division/District | Total | | | Polytechnic | | | Commercial | | | Vocational | | | Elementary College/ Teacher Training School | | |
|------------------------|------------|------------|------------|-------------|-----------|-----------|------------|----------|----------|------------|-----------|-----------|--|-----------|-----------|
| | 77-78 | 78-79 | 79-80 | 77-78 | 78-79 | 79-80 | 77-78 | 78-79 | 79-80 | 77-78 | 78-79 | 79-80 | 77-78 | 78-79 | 79-80 |
| <u>Baluchistan</u> | <u>143</u> | <u>143</u> | <u>143</u> | <u>31</u> | <u>31</u> | <u>31</u> | <u>8</u> | <u>8</u> | <u>8</u> | <u>45</u> | <u>45</u> | <u>45</u> | <u>59</u> | <u>59</u> | <u>59</u> |
| <u>Quetta Division</u> | <u>97</u> | <u>97</u> | <u>97</u> | <u>31</u> | <u>31</u> | <u>31</u> | <u>8</u> | <u>8</u> | <u>8</u> | <u>23</u> | <u>23</u> | <u>23</u> | <u>35</u> | <u>35</u> | <u>35</u> |
| Quetta | 82 | 82 | 82 | 31 | 31 | 31 | 8 | 8 | 8 | 8 | 8 | 8 | 35 | 35 | 35 |
| Pishin | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Loralai | 15 | 15 | 15 | - | - | - | - | - | - | 15 | 15 | 15 | - | - | - |
| Zhob | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Chagai | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| <u>Sibi Division</u> | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Sibi | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Nasirabad | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Kachhi | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Kohlu | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| <u>Kalat Division</u> | <u>39</u> | <u>39</u> | <u>39</u> | - | - | - | - | - | - | <u>22</u> | <u>22</u> | <u>22</u> | <u>17</u> | <u>17</u> | <u>17</u> |
| Kalat | 17 | 17 | 17 | - | - | - | - | - | - | 7 | 7 | 7 | 10 | 10 | 10 |
| Khuzdar | 15 | 15 | 15 | - | - | - | - | - | - | 15 | 15 | 15 | - | - | - |
| Kharan | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Lasbela | 7 | 7 | 7 | - | - | - | - | - | - | - | - | - | 7 | 7 | 7 |
| <u>Mekran Division</u> | <u>7</u> | <u>7</u> | <u>7</u> | - | - | - | - | - | - | - | - | - | <u>7</u> | <u>7</u> | <u>7</u> |
| Turbat | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Panjgur | 7 | 7 | 7 | - | - | - | - | - | - | - | - | - | - | - | - |
| Gwadur | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

Note:— Due to non-availability of data previous data is repeated.

Source:— Directorate of Education
Government of Baluchistan

Table 13.18