CHAPTER-V

DEVELOPMENT OF COMMODITY PRODUCING SECTORS

AGRICULTURE SECTOR

Agriculture is a major activity in the Tribal Areas. It includes such activities, as cultivation, forestry, animal husbandry and sericulture etc. As an important sector of the economy, it has occupied a central position in the national development strategy.

Most of the Tribal Areas consist of barren and snow covered mountains, which receive rainfall in varying degree ranging between 300 and 400 mm annually.[1] Low rainfall and scarcity of water hinder agricultural development. Cultivation is carried out in a very small proportion of the total area. Owners of the land are not ready for land development. Some times, the land belongs to many tribes and as its distribution is inequitable, it increases the difficulties in land development. Lower parts of the Valleys are the areas, best suited for cultivation in this hilly region.

Agricultural Development statistics about the Tribal Areas were not available upto 1973-74.[2] However, after 1974-75, a number of schemes and projects were initiated to accelerate agricultural growth in the Tribal Areas. Schemes for the land development, afforestation and road-side plantation, the control of insects, pests and fungal diseases, the establishment of vegetable farm, fruit nursery farms, extension of cattle breeding and mass multiplication of sheep breeding, award of scholarships to tribal students for DVM degree courses and the opening of veterinary

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1 FATA Development Statistics 1988-89, PP.60-62.

2 Hassan Habib, Pakistan Public Policy: Formulation and Review, Karachi, 1976, P.61.

dispensaries, are some of the important projects initiated for the development of agriculture sector in FATA.

Land Utilization

According to the figures of 1984-85, the total reported area of FATA is 2722042 hectares, out of which 140586 hectares are cultivated and 2581456 hectares uncultivated.[1] The area sown more than once during 1984-85 is, 64773 hectares.

The un-cultivated area consists of 188986 hectares of agriculturable waste land which is fit for cultivation but was not cultivated, 3187 hectares of forest area and 2389283 hectares of barren and mountainous land which is not utilized for agricultural purposes. Thus the total cultivated area in FATA is about 5 percent as against 31.1 percent in NWFP and 35.8 in the country.[2] Forests cover only 0.2 percent of the reported area as against 22.5 percent in NWFP and 6 percent of the national level.[3]

According to the 1974-75 figures, the total irrigated area, irrigated by various sources i.e. canals, tanks, wells and tubewells in FATA was 38425 hectares, which increased to 77597 hectares during 1985-86.[4]

As far as Mohmand Agency is concerned, its agricultural economy can be divided into two geographical zones. The first part of the Agency lies in a low rainfall zone of mountainous region with a few sources of water and low production area. The second part of the Agency lies on the administrative border of Peshawar District, with distinguished characteristics of high productivity because of its proximity to the Left Bank Canal System of Warsak Dam constructed on Kabul river.

In the mountainous zone, the land cultivation is confined

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1 FATA Development Statistics 1988-89, PP.66-67.

2 NWFP Development Statistics 1990, P.496.

3 Ibid., 496.

4 FATA Development Statistics 1988-89, P.71.

TABLE-21

AGRICULTURAL STATISTICAL ABSTRACT OF PAKISTAN, NWFP AND FATA

(Area in Million Hectares)

Variables	Pakistan	NWFP	FATA
Geographical Area.	79.61	10.17	2.72
Reported Area.	57.78	5.36	2.72
Cultivated Area.	20.80	1.93	0.14
Un-Cultivated Area.	36.98	3.43	2.58
Forest Area.	3.15	0.69	0.04
Forest Area as percentage of Geographical Area.	4.30	17.00	0.20
Irrigated Area.	16.06	0.73	0.08
Population per Cultivated Hectare.	5.1	8.1	19.6
Population per Irrigated Hectare.	6.7	18.3	34.4

Sources:-

(i) Vital Socio-Economic Trends NWFP 1984.

(ii) NWFP Development Statistics 1989.

(iii) FATA Development Statistics 1988-89.

to the valleys, where water can be derived from surface drainage, natural springs and streams, tanks, wells and tubewells. With the exception of some parts of the Gandhab and Daniskool valleys, the cultivated land is mainly dry and has to depend on rains. In the lower Mohmand Zone, half of the cultivable land in Michni area is irrigated by Warsak Dam canal system while the remaining half is almost dry.

According to the 1985-86 figures, the total area of Mohmand Agency is 229620 hectares with only 13337 hectares of cultivable land. [1]

The sown area in 1985-86, was 7000 hectares. The cultivated area was thus 5.9 percent of the total area. The irrigated area was 50.4 percent of the cultivated area. The area of current fallow is 6337 hectares which was cultivable but could not be cropped during the year.[2] The remaining 216283 hectares area is uncultivated with 17837 hectares of cultivable waste, 1581 hectares of forest area and 197895 hectares of barren and mountainous land which can not be utilized for agricultural purposes. [3] The forest area is thus only 0.4 percent of the total area.

According to the 1986-87 figures, there were 8805 farms in Mohmand Agency covering an area of 13887 hectares.[4] The average land holding in the Agency is between 2.5 to 5 hectares. The farms ranging between 5 to 25 hectares are 44 percent, occupying 71 percent of the area. Whereas land holdings, larger than 25 hectares are only 2 percent with 10 percent of the area under it.

The land tenure situation, in Mohmand Agency is that, 90 percent are owner farms with the same proportion of the area. The

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1 FATA Development Statistics 1988-89, P.68.

2 Socio Economic Indicators of FATA 1990, P.3.

3 FATA Development Statistics 1988-89, P.67.

4 Director Agriculture FATA, Letter No. 2248/DA/FATA, dated 29.3.1989, to the Ministry of States and Frontier Regions, Islamabad.

owner cum tenant and tenant farms are 8 percent and 3 percent respectively, with the same proportion of the land area. Accordingly, there are 8505 total farms in Mohmand Agency, out of which 7630 are owner farms, 650 are owner cum tenant farms and only 225 are tenant farms.[1]

The land holding and tenancy position in Mohmand Agency is summarized in the table on the following page.

Agricultural Production

Agriculture in Mohmand Agency, is still carried out according to traditional methods and techniques. Nevertheless in the recent years, certain modern methods have also been introduced in the area in the form of improved seeds, pesticides, tubewell technology, artificial fertilizers and machinery etc.

The Mohmands, in general, organize their lives, by living on unirrigated, low productive lands, supplementing their incomes by non-agricultural sources such as business, transportation, smuggling and allowances,paid by the Political Agent.

The shortage of water and uncertainty of rainfall diminish the value of agriculture as a reliable source of income. The land placed in bits and pieces of one or two acres on the foothills is not used to the optimum. Land is treated more as a political factor in laying a claim to the tribal rights, rather than a source of agricultural production. In the mountainous region, relatively less importance is given to cultivation of land and thus agriculture is practiced at a subsistence level.

The lower Mohmand region, which exploits the canal water system of the Warsak Dam and Swat River on the Peshawar border,is productive. The major crops in the canal irrigated region of Michni and Ekka Ghund are, Sugarcane, wheat and maize. Rice and fruit are not cultivated due to the scarcity of water. Sugarcane is the major cash crop and fetches good money. The poor crops grown in the mountainous and low rainfall region are wheat, barley and maize.

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[1] FATA Development Statistics 1988-89, P.80.

TABLE-22

LAND HOLDING AND TENANCY POSITION IN MOHMAND AGENCY

S.No.	Size of Farms	Government Farms.	Private Farms.
1	Under 1.0 acre.	-	105
2	1.0 to 2.5 acres.	-	1550
3	2.5to 5.0 acres.	-	2275
4	5.0 to 7.5 acres.	-	1930
5	7.5 to 12.5 acres.	-	1760
6	12.5 to 25.0 acres.	-	735
7	25.0 to 50.00 acres.	-	140
8	50.0 to 150.0 acres.	-	10
9	Farms above 150 acres.	-	-
	Total Farms	-	8505

Sources:-

(i) Government of Pakistan, Pakistan Census of Agriculture, 1980.

(ii) FATA Development Statistics, 1988-89.

TABLE-23

LAND USE STATISTICS IN FATA AND MOHMAND AGENCY 1989-90

S.No	Variables	FATA	Mohmand Agency
1	Population in (000) Persons.	2793	202.0
2	Geographical Area in (000) Hectares.	2722	229.600
3	Cultivated Area in (000) Hectares.	140.6	13.5
4	Cultivated Area as % of Total Area.	5.200	5.9
5	Irrigated Area in thousand Hectares.	77.0	6.8
6	Irrigated Area as % of Cultivated area.	54.8	50.4
7	Population per Cultivated Hectare.	19.9	15.0
8	Population per Irrigated Hectare.	36.3	29.7
9	Forest Area as % of Total Area.	0.200	0.4
10	Government Tractors.	10	-
11	Private Tractors.	1069	150
12	Cultivated Land Per Tractor in (000) Hectares.	0.1	0.09
13	Fertilizer per Cultivated Hectare in kgs.	47.6	171.9
14	Nitrogenious in (Kg)	40.9	148.9
15	Phosphatic in (Kg).	6.7	22.9

Sources:-

(i) Director, Agricultural Development Authority, Government of NWFP, Peshawar.

(ii) Important Agency-Wise Socio Economic Indicators of FATA 1990.

Vegetables are grown on a very limited scale which are consumed locally. In terms of cropped area, wheat is the predominant crop followed by maize and barley.

The food grain production meets only 25 percent of the requirements of the area. Per capita production of food grain is one maund as compared to 4.7 maunds of the national average. Similarly the yield per hectare is much below the national average, because of the absence of controlled irrigation system, dependence on rainfall, lack of fertilizer inputs and plant protection. Population per cultivated hectare is 15 persons as against 8.1 persons in the settled districts of NWFP and 5.1 persons in Pakistan.[1] Population per irrigated hectare is 29.7 persons as against 18.3 persons in NWFP and 6.7 persons in Pakistan.[2] The production of various crops, vegetables and fruits grown in Mohmand Agency is summarized in the tables on the following pages.

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1 NWFP Development Statistics, 1990,, P.496.

2 Socio Economic Indicators of FATA, 1990, P.3.

TABLE-24

PRODUCTIVE AREA OF FOODGRAIN CROPS
IN MOHMAND AGENCY 1970-85

(Thousand Acres)

S.No.	Year	Wheat	Maize	Barley	Total
1	1970-71	6.0	2.2	2.1	10.3
2	1971-72	7.5	2.2	2.3	12.0
3	1972-73	21.0	3.5	2.7	27.2
4	1973-74	21.1	3.6	4.4	29.1
5	1974-75	32.5	4.7	7.5	44.7
6	1975-76	24.5	4.0	2.5	31.0
7	1976-77	24.5	3.5	2.5	30.5
8	1977-78	22.5	3.7	-	26.2
9	1978-79	22.5	4.4	-	26.9
10	1979-80	23.0	4.9	-	27.9
11	1980-81	23.0	4.9	-	27.9
12	1981-82	23.0	4.9	-	27.9
13	1982-83	22.7	4.9	-	27.6
14	1983-84	23.4	4.9	0.7	29.0
15	1984-85	24.0	5.1	0.5	29.6
	1970-85	321.2	61.4	25.2	407.8

Source :-

Institute of Development Studies, NWFP Agricultural University, Publication NO. 186, Peshawar, 1987, P. 18.

TABLE-25

PRODUCTION OF FOODGRAIN CROPS
IN MOHMAND AGENCY 1970-85

(Thousand Ton)

S.No.	Year	Wheat	Maize	Barley	Total
1	1970-71	1.3	1.2	1.0	3.5
2	1971-72	2.2	1.2	0.5	3.9
3	1972-73	7.9	1.3	0.6	9.8
4	1973-74	6.3	1.6	1.3	9.2
5	1974-75	8.2	2.3	1.6	12.1
6	1975-76	7.2	2.2	*	9.4
7	1976-77	7.2	2.3	*	9.5
8	1977-78	9.2	2.4	-	11.6
9	1978-79	9.3	2.9	-	12.2
10	1979-80	9.5	3.3	-	12.8
11	1980-81	9.5	3.4	-	12.9
12	1981-82	9.5	3.5	-	13.0
13	1982-83	9.7	3.5	-	13.2
14	1983-84	9.1	3.5	-	12.6
15	1984-85	9.4	3.7	-	13.1
	1970-85	115.5	38.3	5.0	158.8

* Less than 50 ton.

Source:-

Institute of Development Studies, NWFP Agricultural University, Publication No 186, Peshawar, 1987, P.41.

TABLE-26

PRODUCTION OF MAJOR CASH CROPS IN MOHMAND AGENCY 1984-85

(Thousand Ton)

S.No	Year	Sugarcane	Sugar-beet	Tobacco	Fruits	Vegetables
1	1970-71	1.3	-	*	-0-	-0-
2	1971-72	8.0	-	*	-0-	-0-
3	1972-73	8.0	-	-	-0-	-0-
4	1973-74	13.1	-	0.1	-0-	-0-
5	1974-75	39.0	-	0.1	-0-	-0-
6	1975-76	39.2	-	0.1	0.1	0.5
7	1976-77	35.0	-	0.1	0.1	0.2
8	1977-78	50.0	-	0.1	0.2	0.3
9	1978-79	50.0	-	-	0.2	0.3
10	1979-80	50.0	-	-	0.2	0.4
11	1980-81	50.2	-	-	0.2	0.4
12	1981-82	54.5	-	-	0.2	0.1
13	1982-83	54.6	-	-	0.2	2.1
14	1983-84	54.6	-	-	0.4	2.2
15	1984-85	54.8	-	-	0.4	2.5
-	1970-85	562.3	-	0.5	2.2	9.0

(*) Less than 50 ton.

(-0-) Not available.

(-) Nil.

Source:-

Institute of Development Studies, NWFP Agricultural University, Publication No. 186, Peshawar,1987, P.177.

TABLE-27

AREA UNDER VEGETABLE CULTIVAITON IN MOHMAND AGENCY 1970-85

(In Acres)

S.No	Year	Tomato	Turnip	Carrot	Spinash	Radish	Onion	Others
1	1970-75	-0-	-0-	-0-	-0-	-0-	-0-	-0-
2	1975-76	1.4	9.9	7.4	2.5	4.9	49.4	27.2
3	1976-77	1.7	9.9	7.4	2.5	4.9	39.5	28.5
4	1977-78	2.3	10.4	8.2	3.0	5.2	49.4	29.6
5	1978-79	2.3	10.4	9.4	3.8	5.7	49.4	29.6
6	1979-80	3.4	8.6	11.3	4.2	6.2	69.2	32.8
7	1980-81	3.2	8.8	12.8	4.8	6.4	74.1	32.8
8	1981-82	3.8	9.5	15.4	5.3	7.5	29.6	34.4
9	1982-83	3.8	12.8	15.7	6.4	7.5	370.6	36.4
10	1983-84	4.5	14.4	16.8	8.9	8.2	395.4	36.4
11	1984-85	5.8	15.3	18.4	10.5	8.2	415.6	40.5

(-0-) Not available.

Source:-

Institute of Development Studies, NWFP Agricultural University, Publication No.186, Peshawar, 1987, P.235.

TABLE-28

PRODUCTION OF VEGETABLES IN MOHMAND AGENCY 1970-85

(In Ton)

S. No	Year	Tomato	Turnip	Carrot	Spinach	Radish	Onion	Others
1	1970-75	-0-	-0-	-0-	-0-	-0-	-0-	-0-
2	1975-76	2.3	35.4	45.3	14.8	23.6	286.4	47.2
3	1976-77	2.3	35.4	45.3	14.8	23.6	228.3	48.8
4	1977-78	3.4	36.8	44.2	12.6	22.4	285.4	54.4
5	1978-79	3.4	37.2	46.4	13.4	22.2	286.4	58.2
6	1979-80	5.8	37.4	47.5	13.8	24.4	400.6	58.4
7	1980-81	6.5	38.8	47.5	14.2	24.4	429.1	60.5
8	1981-82	9.2	38.8	48.3	15.8	25.5	126.0	62.8
9	1982-83	11.8	39.2	47.5	16.2	25.8	2145.7	84.5
10	1983-84	12.2	39.2	48.8	16.8	26.8	2214.6	120.2
11	1984-85	12.8	40.5	48.5	17.5	26.8	2410.5	120.2

(-0-) Not available

Source:-

Institute of Development Studies, NWFP Agricultural University Peshawar, Publication No. 186, December 1987, P. 229.

TABLE-29

AREA UNDER FRUIT CULTIVATION IN MOHMAND AGENCY 1970-85

(In Acres)

S.No.	Year	Apricots	Plums	Pears	Total
1	1970-75	-0-	-0-	-0-	-
2	1975-76	9.9	12.4	-	22.3
3	1976-77	9.9	12.4	-	22.3
4	1977-78	9.9	14.8	-	24.7
5	1978-79	9.9	14.8	-	24.7
6	1979-80	9.9	24.7	-	34.6
7	1980-81	9.9	24.7	-	34.6
8	1981-82	9.9	24.7	-	34.6
9	1982-83	12.4	29.6	-	42.0
10	1983-84	24.7	49.4	12.4	86.5
11	1984-85	26.5	55.9	14.8	97.2

(-0-) Not available

(-) Nil

Source:-

Institute of Development Studies, NWFP Agricultural University, Peshawar, Publication No. 186, December, 1987, P. 107.

TABLE-30

PRODUCTION OF FRUITS IN MOHMAND AGENCY 1970-85

(In Ton)

S.No.	Year	Apricots	Plums	Pears	Total
1	1970-75	-0-	-0-	-0-	-0-
2	1975-76	52.2	88.6	-	140.8
3	1976-77	52.2	88.6	-	140.8
4	1977-78	58.1	102.4	-	160.5
5	1978-79	58.1	102.4	-	160.5
6	1979-80	58.1	102.4	-	160.5
7	1980-81	58.1	102.4	-	160.5
8	1981-82	58.1	102.4	-	160.5
9	1982-83	72.8	123.0	-	195.8
10	1983-84	145.7	204.7	88.6	439.0
11	1984-85	186.5	267.4	96.4	551.3

(-0-) Not available.

(-) Nil.

Source:-

Institute of Development Studies, NWFP Agricultural University, Peshawar, Publication No 186, December 1987, P.132.

Agriculture Development Strategy

The development strategy for agriculture sector in FATA is based on the consideration of chronic food shortage due to low agricultural production. The Government has undertaken a number of measures to bring additional land under cultivation for increasing the production of wheat, maize, fruits and vegetables. The Government also took measures to overcome the shortage of water by developing surface and ground water resources, sinking of tubewells, popularization and introduction of modern techniques like use of fertilizers, improved seeds, pesticides and agricultural machinery. To give maximum push to agricultural development, an amount of Rs. 48.097 million was allocated during the Annual Development Plans 1971-78.[1] The allocation for the first year 1971-72 was Rs. 1.653 million, which was increased to Rs. 12.451 million during 1977-78.[2] As a result, the cultivated area increased from 1,67,000 acres in 1971 to 7,23,470 acres in 1978.[3]

This increased agricultural production of wheat from 17,200 ton to 50400 ton, maize from 16,400 ton to 21,700 ton, rice from 1700 ton to 3,343 ton and barley from 2700 ton to 4000 ton.[4] Similarly the area brought under fruit cultivation increased from 4,870 acres to 8,700 acres. In addition to this,the distribution of fertilizer increased from 12080 bags to 19,000 bags. During the same period, 39 persons were sent for training programmes in sericulture.[5]

The 5th Five Year Plan (1978-83) proposed to increase cropped area to 0.40 million acres by 1982-83 in FATA.

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1 Todate Investment in FATA, P.5.

2 Economic Review of FATA 1970-80, Peshawar, 1980, PP.117-144.

3 Ibid.,PP. 62-93.

4 Ibid., PP. 62-93.

5 Ibid., PP.62-93.

TABLE-31

YEAR-WISE ALLOCATION OF FUNDS FOR THE DEVELOPMENT OF AGRICULTURE SECTOR IN MOHMAND AGENCY AND FATA 1974-89

(Rs. in Million)

S.No.	Financial Year	Allocation Mohmand Agency	Allocation FATA
1	1974-75	0.207	6.260
2	1975-76	0.532	18.306
3	1976-77	0.235	17.013
4	1977-78	0.483	12.451
5	1978-79	0.685	21.104
6	1979-80	1.152	24.574
7	1980-81	0.813	20.000
8	1981-82	1.200	14.877
9	1982-83	0.900	22.400
10	1983-84	2.663	33.100
11	1984-85	2.369	41.306
12	1985-86	1.680	41.700
13	1986-87	2.552	46.053
14	1987-88	3.709	44.534
15	1988-89	2.884	23.841
	Grand Total	22.064	387.519

Sources:-

(i) FATA Development Corporation, NWFP, Peshawar.

(ii) Planning Cell, Ministry of Finance, Islamabad.

The table on the following page gives the crop production targets for major crops during the 5th Five Year Plan.

It was also proposed to increase the gross consumption of fertilizer from 2.74 thousand nutrient ton in 1977-78 to 7.92 thousand nutrient ton in 1982-83. Fertilizer per acre was proposed to be doubled during this period. The plan also proposed to implement small schemes for production and distribution of fruit plants.

In FATA, due to the difficult terrain, there is a considerable scope for land development and by levelling the land, additional areas could be brought under cultivation. It was proposed to bring an additional 16800 acres of land under cultivation annually. This necessitated a large machinery operation in FATA.

Scholarships are awarded to B.Sc. (Agriculture) students of the Tribal Areas who pursue their studies in other parts of the country. This policy has been continued so that the extension services can be improved and strengthened.

For the development of Agriculture sector in FATA during 1978-79, 4473 acres of land was developed while 41,891 acres was rodent-controlled and 18.154 acres sprayed. A total of 153304 fruit plants were raised and distributed amongst the farmers. At the same time, scholarships were awarded to 17 B.Sc. agriculture students of the Tribal Areas.[1]

During the year 1979-80, 4613 acres of land was developed, 45152 acres rodent-controlled, 24272 acres sprayed and 163, 466 fruit plants were raised and distributed amongst the farmers. Scholarships were awarded to 21 B.Sc. agriculture students of the Tribal Areas.[2]

During the year 1980-81, 16580 hectares of land was developed, 16580 hectares rodent-controlled, 10401 hectares of cropped area

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1 Pakistan An Official Handbook, 1978-81, Islamabad, P.580.

2 Ibid., P.590.

TABLE-32

PRODUCTION TARGETS IN FATA DURING THE 5TH FIVE YEAR PLAN

Crop	Acreage		Production		Yield per Acre		Increase over Benchmarks		Yield per Acre
	1977-78	1982-83	1977-78	1982-83	1977-78	1982-83	Area	Production	
	Bench-marks	Targets	Bench-marks	Targets	Bench-marks	Targets	-	-	
	Thousand Acre		Thousand Ton		Maund per Acre		-	-	
Wheat	168.5	202.5	49.8	85.9	8.05	11.55	20	72	41
Rice	13.3	26.7	6.9	17.9	14.13	18.25	101	159	29
Maize	48.1	83.2	24.3	50.7	13.76	16.59	73	169	21
Barley	46.6	46.6	10.5	13.76	6.14	8.01	-	31	30
Sugar-Cane	6.8	20.5	64.9	220.2	259.79	292.39	201	239	13

Source:-

CIRDAP Study Series No. 52 Planning and Administration of Tribal Development Programme, P. 37.

sprayed and 127061 fruit plants distributed amongst the farmers. Scholarships were awarded to 20 B.Sc. Agriculture students of the FATA.[1]

The cropped area increased to 27044 hectares in 1981-82 and to 33872 hectares in 1982-83.[2] Besides, 1,50,000 fruit plants were distributed during 1981-82 and 1,80,000 fruit plants during 1982-83.[3] In 1981-82, a total of 114 and in 1982-83 a total of 226 land sprayers were given on 50% subsidized price to the farmers in FATA.[4]

During the year 1981-82, 25 scholarships and in 1982-83, 24 scholarships were awarded to B.Sc.(Agriculture) students from the Tribal Areas.[5]

The 6th Five Year Plan (1983-88), envisaged a public sector programme of Rs. 3.25 billion with an additional amount of Rs. 3 billion under the special programme for the development of the Tribal Areas.[6] For the development of Agriculture Sector, an allocation of Rs. 161 million was made. The growth strategy in agriculture aimed at an increase of 50 percent in the overall crop output over the plan period by increasing the cultivable as well as cropped area. The plan proposed to bring additional land under cultivation and to increase irrigated area from 62,324 hectares to 100,771 hectares through the installation of 265 tubewells, construction of small Dams and lift irrigation schemes. In addition, 241,000 kilometers of irrigation channels were to be

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1 Ibid., P.599.

2 FATA Development Statistics 1988-89, P.65.

3 Director Agriculture FATA, "Information Report" to Ministry of SAFRON, Islamabad, vide Letter No. 2248/DA(FATA) dated 29.3.1989, P.2.

4 Ibid., P.23.

5 Ibid., P.26.

6 Planning Commission, The 6th Five Year Plan, Islamabad, 1983, P.212.

improved, rehabilitated and constructed.[1]

Besides doubling the fertilizer off-take, the plant protection coverage was proposed to increase from 21.65 thousand to 23.1 thousand spray hectares. To strengthen the extension services, about 100 scholarships were given to the Tribal Students in the field of agriculture education.

Land Development programme

The Government has launched various programmes for the development of agriculture sector in the Tribal Areas.

These include reclamation and development of land to increase cultivated area, provision of agricultural inputs such as irrigation water, fertilizers, fruit and plant nurseries and award of scholarships to Tribal Students.

The Department of Agricultural Engineering FATA has so far reclaimed 34711 hectares of land out of 2,580,973 hectares of uncultivated land in the Tribal Areas,[2] while 3000 hectares of land was reclaimed during 1988-89.[3]

In Mohmand Agency, 3203.54 hectares of land was reclaimed during the period between 1970 and 1988, out of a total 216283 hectares of un-cultivated land.[4]

The tractor population in FATA increased from 257 in 1974-75, to 920 in 1986-87. In Mohmand Agency, the number of tractors increased from 7 in 1974-75 to 170 in 1986-87.[5]

The scheme for the reclamation of vast culturable land in

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1 Ibid., P.213.

2 FATA Development Statistics 1988-89, P. 69.

3 Department of Agricultural Engineering (FATA) NWFP, Land Reclamation Report, 1989, P.4.

4 Agriculture Engineering Tribal Areas, Agency-wise Land Reclamation Report to the Ministry of SAFRON, Islamabad, vide Letter No. 1507/AE/TAP, Dated Peshawar 27.3.1989.

5 FATA Development Statistics 1988-89, PP.238-242.

TABLE-33

TRACTOR/ BULLDOZER POPULATION IN FATA 1975-88

S. No	Agency/ Frontier Region	1974-75				1987-88			
		Tractor		Bulldozer		Tractor		Bulldozer	
		Govt	Pvt	Govt	Pvt	Govt	Pvt	Govt	Pvt
1	Bajawar	2	4	-	-	-	60	11	-
2	Mohmand	-	7	-	-	-	170	6	-
3	Khyber	-	25	-	-	-	50	11	-
4	Orakzai	-	-	-	-	-	27	-	-
5	Kurram	-	198	-	-	4	380	10	-
6	N. Waziristan	4	7	-	-	3	135	8	-
7	S. Waziristan	1	9	-	-	1	90	9	-
8	Frontier Regions	-	-	-	-	-	-	20	-
	Total	7	250	31	-	8	912	75	-

Sources:-

(i) Department of Agricultural Engineering FATA NWFP, Peshawar.

(ii) FATA Development Statistics 1988-89.

(iii) Socio Economic Indicators of FATA, 1990.

TABLE-34

LAND RECLAMATION IN FATA 1972-88

S.No	Name of Agency/ Frontier Region	Hours Worked	Land Reclaimed in Acres	Road constucted in Kms.	Embankment in Cubic Feet
1	Bajawar	89867	5799.20	100.00	10022720
2	Mohmand	76793	7916.26	263.50	2101070
3	Khyber	125171	3615.41	40.65	73720
4	Kurram	138742	6120.13	68.20	13045028
5	N.Waziristan	75180	4707.74	113.00	2500
6	S. Waziristan	67259	5115.48	189.65	37000
7	F.R. D.I. Khan	75098	2343.19	194.08	11800

Sources:-

(i) Department of Agricutural Engineering FATA, NWFP, Peshawar.

(ii) FATA Development Section, Ministry of States and Frontier Regions Divison, Islamabad.

FATA started during 1961-62, with the help of 14 small bulldozers. Thereafter, the strength of bulldozers gradually increased and reached to 123 in 1987-88. Out of this total, 48 bulldozers have completed their economic life while 75 were in operation in FATA and 6 in Mohmand Agency.[1]

Since 1970, for the maintenance of bulldozers, tools and other equipments etc, one Divisional Workshop is functioning at Qafila Serai at Jamrud in Khyber Agency. Sub-Workshops have also been established at Para Chinar (Kurram Agency), Khar (Bajawar Agency) and Miran Shah in North Waziristan Agency.

Most of the area in FATA is quite uneven, barren and rocky and therefore cannot be brought under cultivation without the help of heavy earth-moving machinery. At the same time, the tribesmen cannot afford to purchase and maintain the heavy machinery. Thus the Government provides heavy machinery on hire basis, to facilitate the development and levelling of land and to bring additional areas under cultivation. The table on the following page shows the hiring rates fixed by the Government for agricultural machinery in FATA.

In the Tribal Areas, the farmers use impure and inferior quality of seed which causes low yield per acre. The reason being that due to scarcity of rain, there is uncertainty among the farmers that if there is no rain, their seed will be lost. The farmers store a little quantity of grains for seed in their houses which is damaged by the insects. The tribesmen cannot procure better quality of seed due to shortage of funds. To increase agricultural production, it is important to provide the farmers with good quality of seeds. Therefore, the Government has made some arrangements to provide the tribesmen with improved quality seeds on subsidized rates through the Agricultural Department FATA based at Peshawar. These steps have encouraging effects on production. Besides, the Government established demonstration and seed

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[1] Department of Agricultural Engineering FATA, NWFP, Report to the Ministry of SAFRON, Islamabad, about "Agency-wise Distribution of Machinery, dated 26.3.1989."

TABLE-35

HIRING RATES OF AGRICULTURAL MACHINERY IN FATA 1988-89

S.No	Name of Machinery	Operational hiring rates per hour in (Rs)	Subsidized hiring rates per hour in (Rs)	Contractor hiring rates per hour in (Rs)
1	Cat D4D	209.00	95.00	241.00
2	FIAT AD7D	209.00	95.00	241.00
3	KOMATSU (Old) D40A	222.00	101.00	256.00
4	Komatsu (New) D40A	336.00	150.00	404.00
5	Komatsu (New) D37E	233.00	104.00	280.00

Source:-

Agricultural Engineering FATA's Development Report to the Ministry of SAFRON,Islamabad, vide Letter No.1507/ AE/ TAP Peshawar, dated 27.3.1989, P. 5.

TABLE-36

PHYSICAL PROGRESS OF BULLDOZERS IN MOHAMMAD AGENCY 1970-89

(Total Area 216320 hectares)

Year	Land Levelled in Hectares	Road Constructed in K.ms.	Embankment in Cft.	Hours Worked
1970-71	144.65	-	-	4045
1971-72	113.64	-	-	4281
1972-73	121.90	-	-	2450
1973-74	175.38	-	-	3783
1974-75	014.57	73.6	-	2083
1975-76	119.87	70.40	880000	3146
1976-77	158.54	-	1135550	3550
1977-78	176.54	-	720	3657
1978-79	255.79	-	64800	5103
1979-80	202.03	52.00	-	4411
1980-81	145.76	30.25	-	3596
1981-82	202.84	30.25	-	3907
1982-83	308.53	03.50	10000	4621
1983-84	391.91	03.50	40000	7809
1984-85	242.91	-	-	4793
1985-86	216.18	-	-	4776
1986-87	040.80	-	-	4682
1987-88	171.60	-	-	6100
1988-89	219.05	-	-	6824
Total	3422.49	263.50	2131070	83617

Source:-

Agricultural Engineer Tribal Areas, Land Reclamation Report to the Ministry of SAFRON, Islamabad, vide Letter No. 3757 Peshawar, dated 28.8.89.

TABLE-37

PROVISION OF SEED AND FERTILIZER IN FATA 1970-88

(Seed in Maunds/Fertilizer in Bags)

Agency/F.R		1970-82 N.A.	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
Bajawar	Seed		7924	4284	9380	3738	6744	7343
	Fertilizer		15400	13916	28000	10836	9762	15000
Mohmand	Seed		7924	4284	9352	3738	6744	7246
	Fertilizer		15400	13916	28000	10836	9762	15000
Khyber	Seed		7924	4284	9324	3738	6744	2344
	Fertilizer		15400	13916	28000	10836	9782	8000
Kurram	Seed		9100	17276	7000	9534	9600	8046
	Fertilizer		15400	30044	15000	20234	15750	16446
Orakzai	Seed		9100	17276	7000	9534	9600	4050
	Fertilizer		15400	30044	15000	20254	15750	10000
North Waziristan	Seed		-	-	-	-	2100	7000
	Fertilizer		-	-	-	-	4396	13775
South Waziristan	Seed		-	-	-	-	2100	7000
	Fertilizer		-	-	-	-	4396	13775

Sources:-

(i) Director Agriculture FATA's, Report to the Ministry of SAFRON, Islamabad on Agricultural Development vide Letter No. 2248/DA/FATA, Peshawar, dated 29.3.1989.

(ii) FATA Development Statistics, 1988-89.

(iii) Socio-Economic Indicators of FATA 1990.

multiplication plots through-out the Tribal Areas. In 1970-71, 70 seed multiplication plots were established in the entire Tribal Areas. In Mohmand Agency, there were 15 multiplication plots in 1970-71. In 1975-76, 10 demonstration plots were established in the Tribal Areas which increased to 135, during 1987-88. The number of seed multiplication plots in FATA increased to 377 by the year 1987-88. The number of seed multiplication plots increased from 20 in 1975 to 65 in 1987-88, in Mohmand Agency.[1]

For the protection of agriculture crops from insects, pests and diseases, an area of 13262 acres was sprayed in FATA during the period between 1982-88. The area sprayed during this period in Mohmand Agency is 10374 acres which mainly covered the sugarcane crops in the Ekka Ghund Tehsil.[2] Besides, 1227 hand sprayers were distributed and given to the farmers on 50 percent subsidized rates in FATA. The number of hand sprayers given to the farmers in Mohmand Agency during this period was 189. A total of 84 fruit and vegetable shows were held, at least two shows annually in every Agency during 1982-88.

In 1970, there were only 3 fruit nursery farms which provided 40,000, fruit plants to the farmers in the Tribal Areas. The number increased to 7 fruit nursery farms in 1975 which provided 70,000 fruit plants to the farmers in the region. By 1986-87, there were 20 fruit nursery farms in the Tribal Areas which provided 1,80,000 fruit plants to the farmers annually.[3] In Mohmand Agency, the only fruit farm (5 acres) established in 1982-83 is providing 15000 fruit plants to the farmers annually.[4]

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1 Agriculture Development Report of Agriculture Director FATA, Peshawar, to the Ministry of SAFRON, Islamabad, vide Letter No.2248/DA(FATA) dated 29.3.1989.

2 Ibid., PP.6-22.

3 FATA Development Statistics, 1988-89, P.236.

4 Director Agriculture Report to the Ministry of SAFRON, Islambad, vide Letter No.2248/ DA/FATA dated 29.3.1989, PP.1-3.

To strengthen, the extension services in agriculture sector, 346 scholarships were awarded to the students of the Tribal Areas during the period between 1976 and 1988, out of which 88 scholarships were given to (B.Sc Agriculture) students of the Mohmand Agency, studying in various agricultural institutions of the Country.[1]

Due to these measures, the agricultural production has increased to some extent in the Tribal Areas. A substantial proportion of the farmers is now familiar with the new agricultural technology, namely, the use of high yielding varieties of seeds, chemical fertilizer and mechanization, although in some cases there is a strong resistance to this change. In certain areas, improved seeds and fertilizers are not available in time and according to the needs of the farmers and credit for the purchase of tractors is difficult to obtain. Moveover, many farmers do not have the know-how of the correct use of fertilizer in respect of time and quantity.

Most farmers do not know the importance of plant protection measures and the methods of their proper use. There is a general fear that the chemical fertilizer and pesticides may be harmful to animals and human beings. They also consider the increase in many disease, as the result of the use of chemical fertilizers.

These problems can be solved by properly and timely arrangements for the supplies of agricultural inputs and credit facilities and by the provision of agricultural extension services for the education of farmers in the Tribal Areas.

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[1] Ibid., P.26.

TABLE-38

AWARD OF SCHOLARSHIP TO B.Sc AGRICULTURE STUDENTS
OF FATA 1976-88

Division	Malakand	Peshawar		Kohat		D.I. Khan		Total
Agency/F.R.	Bajawar	Mohmand	Khyber	Kurram	Orakzai	N. Waziristan	S. Waziristan	
1976-77	1	1	1	1	-	1	1	6
1977-78	2	2	2	2	-	2	2	12
1978-79	2	4	3	3	-	2	2	16
1979-80	2	4	4	3	-	3	3	19
1980-81	3	5	4	3	-	4	3	22
1981-82	4	6	4	3	-	4	4	25
1982-83	4	*7	4	5	-	4	4	28
1983-84	5	7	6	6	-	6	6	36
1984-85	5	7	6	6	-	6	6	36
1985-86	5	7	6	6	-	6	6	36
1986-87	5	19	6	6	6	5	5	52
1987-88	4	19	9	6	6	7	7	58
Total	42	88	55	50	12	50	49	346

* One Student of Mohmand Agency was awarded scholarship when studying in B.Sc Agriculture at Barani Agriculture College, Rawalpindi.

Source:-

Directorate of Agriculture FATA, NWFP, Peshawar.

Forests

Natural vegetation comprises forests, shrubs and grasses, determined by climatic conditions and types of soil. The climate in the Tribal Areas, varies from the continental high type to extreme dry. There are, however, varying degree of aridity. Except for the river valleys, water is generally scarce and limits the natural vegetation. Human activities are closely related to inadequate and fluctuating rainfall and harshness of the climatic conditions. Soil formation on the hill tops is a prerequisite for forest growth but the cattle-rearing, flock-owning and other human practices have contributed to erosion rather than to soil formation on the thin layer of soil on hill slopes in the region.

Ruthless wood cutting, over grazing and continuous cutting of grass from the hills have also handicapped soil formation and the development of forests in the Tribal Areas. Various government development programmes in the area, have suffered from the deficiency of water and lack of people's interest in this field. It is generally accepted that for a balance economy, with an agrarian base, 25 percent of the land should be under the forests.[1]

Most of the Tribal Areas consist of dry mountainous forests. As the region has an arid climate, there are no green forests here. Other factors such as terrain, inequitable distribution of land, and lack of natural resources also hinder the development of forests in the region. There are mostly shrub and thorny bushes with some broad leaf species growing on the lower latitudes. The principal species include, acacia, wild olive, and oak. These are generally used as firewood and for construction of mudhouses. In some tribal areas where water is found, poplar and mulberry trees are grown. The Tribal Areas are also known for Artemisia, which is a herb of great medicinal value. The revenue from this plant increased from Rs.2,000,000 in 1951 to Rs.4,500,000 in 1953.[2] The

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1 K.U.Kureshy, A Geography of Pakistan, Karachi, 1977, P.45.

2 Pakistan Publications, Pakistan 1955, Karachi, 1955, P.269.

demand for this plant has now dropped because of over production through-out the world.

Forests are generally, classified as reserved, protected and unclassified. Reserved and protected forests are owned by the Government. Un-classified forests are owned by private or communal owners and destroyed so badly that large areas of such forests are devoid of tree cover. Destruction of vegetation in the low rainfall hilly areas has led to the loss of top soil and has increased rainfall runoff, aggravating down stream flooding. A number of economic pressures such as need for food and shelter, the urge for better living have led to an increased exploitation of forest resources. Being the only means of survival for an expanding population in the region, the limited land base has become under maximum stress and strain. In the Tribal Areas, with the passage of time, land holdings are subdivided and fragmented, nearly 80 percent of the farms being further subdivided into smaller units. With the increase in population, land holdings have shrunk in size and forest lands extensively cultivated.

Since production from the land is limited, farmers need to supplement income through livestock production. The animals require grazing land and the use of forest area which adversely affects the regeneration of forests. The people willfully misuse and damage the natural resources and destroy any effort of their rehabilitation.

The Forest Department, Government of NWFP is responsible for afforestation programme in the Tribal Areas. During the 5th Five Year Plan (1978-83), it was proposed to extend the afforestation programme with an investment of Rs. 22 million in the Tribal Areas. Accordingly, during 1978-79, an allocation of Rs.4.380 million was made out of a total of Rs.17.253 million for the agriculture sector.[1] As a result, plant nurseries on 25.5 acres were maintained and new block plantation on 1,272 acres of land and linear plantation on 326 avenue miles was undertaken. Besides, Sericulture Centres at Para Chinar (Kurram), Kalaya (Khyber, Orakzai and F.R.

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[1] Pakistan, An official Handbook 1978-81, Islamabad, P.579.

Kohat) and Miran Shah (in North Waziristan) trained, 1,188 families in the art of silk production,for which 38,000 mulberry plants were raised and distributed.

In the Annual Development plan (1979-80),an allocation of Rs. 17.047 million was made for the Agricultural Sector, out of which Rs. 5.284 million were earmarked for the development of forestry in the Tribal Areas.[1]

During the 1979-80, block plantation was carried out over an area of 1,219 acres apart from the other works, which include, linear planation on 346 avenue miles with nurseries on 28.5 acres of land.[2]

In the Annual Development Plan (1980-81), an allocation of Rs.5.500 million was made for the development of forests in the Tribal Areas,out of a total allocation of Rs.19.580 million made for the agriculture sector.[3] As a result, a total of 617 acres were brought under block plantation and 23,000 mulberry plants were raised and distributed. During the year, linear plantation was undertaken on 95 avenue miles while plant nurseries were established on 33 acres and 597 packets of silk seed distributed. The production of dry cocoon during the year was 3387 kilograms.[4]

During the next two years,(1981-82)and (1982-83),afforestation was undertaken on 2,192 acres,with linear plantation on 67 avenue miles. The acreage of plant nurseries increased to 116 while 5,000 mulberry plants were raised and distributed. Besides, 3,287 dry cocoons were purchased, 549 kilograms of silk yarn produced and 44 packets of imported silk seed distributed.[5]

During the 6th Five Year Plan (1983-88), it was proposed to

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1 Ibid., P.590.

2 Ibid., P. 589.

3 Ibid., P.599.

4 Ibid., P.600.

5 Pakistan: An Official Handbook, 1981-83, P.312.

undertake afforestation of about, 1170 hectares in block plantation and to cover 378 avenues kms in linear plantation.[1]

During the period between 1983-86, block plantation was undertaken over an area of 2143.1 hectares in the Tribal Areas.[2]

In Mohmand Agency, forest development was undertaken on a limited area with a limited amount. Between the period from 1971-72 to 1988-89, an allocation of Rs.1.763 million was made for the development of forests in Mohmand Agency.[3] As a result, the area under forest increased to 400 hectares in 1979-80,[4] and to 538.3 hectares in 1985-86.[5]

For the development of forests in Mohmand Agency, a plant nursery was established at Ekka Ghund during 1982-83, which provided 60401 plants upto June 1988. Another fruit/plant nursery was established at Michni, with an area of 4 acres which provided 15970 fruit/ plants during 1987-88.[6]

During the period from 1982 to 1988, 65 Seed multiplication plots were established in Mohmand Agency for the development of forests. Due to low rainfall, this area does not possess a good cover of forests.

Under the existing conditions, it is also difficult to get sound results from the afforestation programme. However the possibility of growing drought resistant trees on the bare slopes of mountains, could be undertaken in consultation with the Forest Department Government of NWFP.

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1 The 6th Five Year Plan (1983-88), P.213.

2 FATA Development Statistics 1988-89, PP 261-62.

3 Todate Investment in FATA, P.20.

4 Economic Review of FATA 1971-80, 1980, P.51.

5 FATA Development Statistics 1988-89, PP 261-62.

6 Government of NWFP, Food, Agriculture, Livestock and Cooperative Department's Report to the Ministry of SAFRON Islamabad, vide Letter No.CPO (AD) V (3)/87/FATA Peshawar, dated 20.12.1988, P.1.

Livestock Production

There are some important grazing areas in every Tribal Agency. Besides agriculture, cattle rearing, flock owning and camel driving are important occupations.

Sheep and goats are far more numerous than other animals. They are important multipurpose animals, supplying a variety of products. Goats and fat tailed sheep are reared in large number and are a good source of producing skins, hides and coarse quality wool which is excellent for carpet making. Other livestock, kept in the Tribal Areas, include bullocks, buffaloes, donkeys, horses, mules, and poultry products, such as eggs and chickens etc. Production is low because of poor quality stock , poor methods of handling and poor natural vegetation.

The human-livestock ratio in the Tribal Areas during 1977-78 was estimated as 1:2 as compared to the 1: 0.8 of overall national ratio. The sheep and goats population is estimated at about 82 percent of the total livestock as against the national figure of 61 percent.[1] The importance of livestock in these conditions can be hardly over emphasized. However the livestock population in the Tribal Areas appears to exceed the carrying capacity of the grazing ground available. It was felt that the effort should be made to improve the livestock production through better disease control and genetical improvement. It was also considered desirable that giving the difficulties in marketing of wool and skin, this activity should receive greater attention.

The 5th Five Year Plan (1978-83), aimed at the extension of disease control programme through more dispensaries and veterinary centers. Similarly artificial insemination was to be introduced for the first time in the Tribal Areas.

In the year 1971-72, there were 17 veterinary hospitals and 27 veterinary dispensaries in the Tribal Areas. The number of veterinary hospitals increased to 22 and veterinary dispensaries to

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[1] Mian Tayyab Hassan Op.cit., P. 38.

TABLE-39

NUMBER OF CATTLE, BUFFALOES, SHEEP, GOATS
CAMELS, HORSES, MULES AND DONKEYS IN FATA 1980-81

S.No	Agency/F.R	Cattle	Buffaloes	Sheep	Goats	Donkeys	Horses/ Mules	Camels
1	Bajawar	277232	29119	124229	129653	14747	4304	42
2	Mohmand	45010	3546	36290	60675	7705	115	25
3	Khyber	45895	1999	29584	108545	4139	1165	-
4	Orakzai	81897	15600	74790	151612	15621	2377	678
5	Kurram	76871	1496	39840	78208	7694	1104	995
6	N.Waziristan	128141	15732	307962	196686	19029	416	1511
7	S.Waziristan	96465	6190	169470	307170	15680	220	7985
8	F.R.Peshawar	13689	136	22616	37163	3972	20	238
9	F.R. Kohat	15647	120	12931	32348	4551	17	319
10	F.R. Bannu	90528	1528	147527	201922	9901	125	6244
11	F.R.D.I.Khan	50753	668	62181	150281	6176	174	4010

Sources:-

(i) Pakistan Census of Agriculture 1980-81, Special Report Malakand and Tribal Areas.

(ii) Bureau of Statistic, P&D Department, Government of NWFP.

75 in 1975-76.[1] For the development of livestock production in the Tribal Areas, Rs.1;639 million were allocated in the Annual Development Plan of 1977-78.[2] As a result, 18 more veterinary dispensaries were established and one scholarship was awarded to a student of Kurram Agency for DVM course.[3]

During the Annual Development Plan 1978-79, an allocation of Rs.2.2438 million was made for the development of this sector.[4] During the year, 15 new veterinary dispensaries were opened in which 97,352 animals, 2,01,164 birds and 36,504 cattle were treated. Fifteen scholarships were awarded for DVM course to the Tribal Students.[5]

In the Annual Development Plan 1979-80, Rs. 2.524 million were allocated for the development of animal husbandry in FATA. During the year, four new veterinary dispensaries were opened,168,167, animals treated and 9,586 gelded.[6] Two scholarships (one each for F.R. Kohat and Kurram Agency) were awarded to the Tribal students who undertook DVM courses during the year. The Annual Development plan 1980-81, envisaged an allocation of Rs.3.427 million for the development of animal husbandry. Four new veterinary dispensaries were opened during the year, besides 130,345 animals treated and 12,580 gelded. In the same year, 15 students were undergoing DVM courses.[7]

During the period between July, 1981 and December 1983, nine

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1 FATA Development Statistics 1988-89, P. 246.

2 Mian Tayyab Hassan, Op. cit., P. 51.

3 Benchmark Data FATA (1971-88) from the Office Record of the Deputy Director, Livestock and Dairy Development Frontier Region Peshawar, NWFP.

4 Pakistan 1978-81, P. 578.

5 Ibid., P.580.

6 Ibid., P. 590.

7 Ibid., PP.599-600.

more veterinary dispensaries were opened and three buildings of the existing dispensaries constructed. During the same period 11 artificial insemination centres were established, 25 stock Assistants trained and 18 scholarships for DVM courses granted to the Tribal students.[1]

The 6th Five Year Plan (1983-88) proposed some new measures for the development of the livestock sector. The major programmes included, the establishment of a Directorate of Animal Husbandry, the construction of 15 buildings for artificial insemination centres with a view to improve the livestock quality.[2] As a result, the number of veterinary dispensaries increased to 111 in 1983-84 as against 97 in 1982-83 and the number of artificial insemination centres increased to 8 as against 6 in 1982-83. Besides, 4 scholarships, were awarded to the students for DVM courses during 1983-84. By June 1984-85, there were 20 veterinary hospitals, 125 veterinary dispensaries, 12 veterinary centres and 14 artificial insemination centres in FATA. Besides 5 scholarships were awarded for DVM courses, and 25 rams were distributed for the improvement of sheep rearing in FATA.[3] By 1986-87, there were 20 veterinary hospitals, 127 veterinary dispensaries, 42 veterinary centers and 16 artificial insemination centres in the entire Tribal Areas.[4]

According to the 1980 figures, the livestock population in Mohmand Agency, included 45010 cattle (cow and oxen), 3546 buffaloes, 36290 sheep,60675 goats, 25 camels, 115 horses and 7705 donkeys.[5] The number of goats is much higher than the sheep in Mohmand Agency. The sheep are generally of the white fat-tailed variety. Some black sheep are kept because of the local demand for

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1 Pakistan 1981-83, PP. 311-12.

2 The 6th Five Year Plan 1983-88, P. 213.

3 Livestock Benchmark Data, FATA 1971-88, PP. 4-6.

4 FATA Development Statistics 1988-89, P. 252.

5 Ibid., P. 253.

its use for the embroidery of coats and garments. Sheep are mostly milked, which may be taken as a liquid, curds, butter and ghee.The sheep are shorn in spring and autumn,producing 2 to 4 pounds of white and yellowish wool. The wool is seldom graded with the result that it is sold on low price and mostly used in coarse carpets and rugs.

Goats are reared for milk, meat, hair and skins. Average goat gives as much as five pounds per milking. They are usually spotted with black, brown and white colours. They are associated with sheep for grazing. They are shorn only in spring, producing about one to two pounds of hair, which is used locally for making blankets, ropes, grain bags, floor-mating, saddle-straps and for stuffing purposes.

The poor handling and grading of skins and guts, reduce its quality and value in the market. Kids and small goat skins are used for making such goods as gloves, and quraquries (caps) while guts are used as strings for tennis and badminton rackets, musical instrument and bows etc. Sheep's guts are also made into catgut, which is used in surgical operations etc.

The grazing practice vary with the system of ownership of the land, animals and availability of pastures. Some flocks are owned by single individual or by a family, while others belong to a small number of persons. Since the chief purpose of keeping animals is to have a milk supply, village flocks are kept close enough at hand to be returned to the village for milking. Usually the shepherds leave the village at dawn after milking and return in the evening. The maximum size of a flock is about 20 to 50 animals, tended at least by three shepherds. Many cultivators are herders and many herders are part time cultivators who keep their flocks near their lands, while farming. In this way,they provide fodder to their animals as well as get natural manure for their fields. Animal keeping and grazing occupy an important place in the Tribal economy.

In the past, camel was the most important means of transportation in the Tribal Areas. It was to be extensively used for pulling ploughs and persian wheel, transportation of wood,

TABLE-40

NUMBER OF ANIMALS TREATED AND PROTECTED AGAINST CONTAGIOUS DISEASES IN FATA 1974-87

Year	Number of Animal Treated	Number of Animal Protected	Number of Bird Protected.
1974-75	250841	32456	205126
1975-76	265272	42345	304728
1976-77	238473	117231	333730
1977-78	218514	150822	489839
1978-79	402266	182508	774245
1979-80	536201	90920	735321
1980-81	501678	193337	732047
1981-82	806907	106410	719602
1982-83	438048	28393	86393
1983-84	445073	104029	731086
1984-85	592212	123578	1056462
1985-86	662477	159284	1236106
1986-87	768004	196716	1360708

Sources:-

(i) Directorate of Animal Husbandry, Government of NWFP, Peshawar.

(ii) FATA Development Statistics 1988-89, Bureau of Statistics, Planning and Development Department, Government of NWFP, Peshawar.

crops and other burdens. But due to the improved transportation facilities, the camel herding is gradually declining. The other reasons are scanty pastures, long distances and scarcity of grass in the region.

Other animals which contribute to the agricultural economy of the area, are oxen and working bullocks. The bullocks are found in grey, white, black, and brown colours. They are very tough and suitable for ploughing and doing heavy work. The cows are famous for their milking capacity and economic production. Buffaloes are found, particularly in the lower Mohmand areas, where sufficient water is available for their daily bath, and where milk and meat are in great demand.

Donkeys are important beasts of burden. They are often used for transportation in the less developed and far flung areas of the region. Hens, cocks and chickens are kept and reared both for meat and eggs. As they are poorly fed and breed, their meat is thin, stringy and hard, and their egg production is less than 50 per hen per year. However, eggs and chickens are highly priced items in the diet and are mostly used for guests and on festive occasions such as wedding etc.

Most of the people in Mohmand Agency are dependent on agriculture and livestock. However few of them own animal in substantial number while many do not own any at all. The fact that ownership of animals in the Tribal Areas being in excess of the national average, does not mean a high per capita of ownership in each Agency.For example, the livestock population in North and South Waziristan Agencies is higher than the other Tribal Agencies. Mohmand Agency is not very important in livestock production. It has some production of milk and meat which are utilized within the area.

For the development of livestock production in Mohmand Agency, a number of measures were undertaken by the Government, particularly since 1970. According to the 1971-72 figures, there was only one veterinary hospital at Ekka Ghund with four veterinary dispensaries at Pir Qilla, Michni, Mian Mandi Gandhab and Navi-

-Killi in Mohmand Agency.[1] During 1978-79, two more veterinary dispensaries (one each in Pindiali and Lakarai) were established. In 1983-84, one veterinary dispensary was opened in Danishkool Valley. In the year 1985-86, two veterinary centres/ dispensaries (one each at Sultan Khel and Ghazi Beg) were established. In 1986-87, two more veterinary centres (one each at Chamarkand in upper Mohmand and at Prang Ghar in Utman Khel Tehsil) were opened.[2] The number of veterinary centres increased to 6, by establishing two additional centres one each at Nahqi in Kamali area and the other at Gurbaz in Lakarai Tehsil. Thus by 1987-88, there were, one veterinary hospital, 7 veterinary dispensaries and 6 veterinary centres throughout the Mohmand Agency.[3]

In 1975-76, the Government embarked on a new scheme for the development of sheep rearing in the Tribal Areas, and as much as 180 stud rams were distributed in FATA, out of which 10 stud rams were distributed amongst the farmers in Mohmand Agency.[4] In 1977-78, 12 stud rams were distributed amongst the farmers in Mohmand Agency out of a total of 19 for the entire FATA. In 1978-79, 15 stud rams were distributed in Mohmand Agency out of a total of 61 stud rams for the entire FATA.[5] In 1979-80, 9 stud rams out of 12 and in 1983-84 one stud ram out of 22 were distributed in Mohmand Agency. In 1985-86, one artificial insemination centre was established at Ekka Ghund out of a total of 14 such centres established in all the Tribal Areas.[6]

To strengthen the extension services for the development of livestock, there are three veterinary officers (BPS-17) 21 para-

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1 Livestock Benchmark Data FATA 1971-88, P.1.

2 FATA Development Statistics 1988-89, P. 252.

3 Livestock Benchmark Data, FATA 1971-88, P. 9.

4 Ibid., P.2.

5 Ibid., P.3.

6 Ibid., P.6.

TABLE-41

LOCATION OF STUD BULLS AND RAMS IN FATA 1974-87

Year	Number of Bulls	Number of Rams	Total
1974-75	29	61	90
1975-76	60	167	227
1976-77	208	618	826
1977-78	140	608	748
1978-79	131	655	786
1979-80	122	691	813
1980-81	114	893	1007
1981-82	116	999	1115
1982-83	83	82	165
1983-84	79	856	935
1984-85	-	860	860
1985-86	-	852	852
1986-87	-	875	875

Sources:-

(i) Directorate of Animal Husbandry,Government of NWFP, Peshawar.

(ii) FATA Development Statistics 1988-89.

TABLE-42

AGENCY-WISE VETERINARY CENTRES AND VETERINARY STAFF
IN FATA 1988-89

Agency/F.R	V.H	V.D.	V.C.	A.I.C	V.O	P.V.S	S.S	G.B
Bajawar	2	13	4	2	3	24	47	13
Mohmand	1	7	6	1	3	21	25	4
Khyber	3	9	7	1	4	22	42	6
Orakzai	-	15	5	1	2	24	48	*6
Kurram	4	11	1	3	7	25	44	4
N. Waziristan	4	20	3	2	7	39	66	9
S. Waziristan	3	22	4	1	6	39	76	3
F.R. Peshawar	-	1	3	-	-	6	7	-
F.R. Kohat	1	3	2	1	2	9	15	3
F.R. Bannu	1	15	4	3	2	32	47	•3
F.R. D.I. Khan	1	11	3	1	2	20	40	2
Total	20	127	42	16	38	261	457	53

Note:

V.H- Veterinary Hospital.
V.D- Veterinary Dispensary.
V.C- Veterinary Centre.
A.I.C- Artificial Insemination Centre.
V.O- Veterinary Officer.
P.V.S- Para Veterinary Staff.
S.S- Supporting Staff.
G.B- Government Building.

* 4 Buildings Contructed under Senator/MNA Funds and Rural Works Programme.

• 2 Buildings constructed under Senator/MNA Funds.

Sources:-

(i) Directorate of Livestock and Dairy Development FATA, Peshawar.

(ii) FATA Development Statistics 1988-89, Government of NWFP.

-veterinary staff,including veterinary compounders,Sheep Development Assistants, Cattle Development Assistants,stock Development Assistants,inseminators and 25 supporting staff, including Chowkidars, Behishties,Sweepers, Field Attendants and Cattle Attendants in Mohmand Agency.[1] Besides,7 students from Mohmand Agency were awarded scholarships for DVM courses during the period 1971-1988.Realizing the fact that traditionally a large number of people depend on it,greater attention needs to be paid to the development of livestock production in the Tribal Areas. Uptill now in most areas of the FATA, the growth rate in animal production has been only a fraction of the human population growth rate. It may be noted in this context that this sector has been kept depressed,by forcing price of livestock products, due to the poverty in the region and exporting a great number of livestock products to the settled areas of the NWFP. The necessary medicine for the control of livestock diseases are usually in short supply in the veterinary hospitals and dispensaries. To strengthen the extension services, it is essential to increase the number of trained veterinary staff, replenish their equipment and ensure the supply of necessary medicine. The existing facilities do not, however, suffice to meet the entire needs of livestock in the area. There is a great and urgent need for mobile veterinary dispensaries to provide these facilities to the scattered population and to cover maximum area in this hilly region.

POPPY CULTIVATION

Demand and Measures for Compensation

Pakistan is situated in the narcotics producing regions of South West Asia. The country has been a traditional producer of opium and cannabis since centuries. In Pakistan,opium production and extraction of cannabis resin have been practiced as a source of most profitable earning and value added revenue to the farmers and traders without taking into consideration its negative impacts on

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[1] Ibid., P.10.

the health and socio-economic aspects of the people. The appearance of the processing of opium into heroin powder in the Tribal Areas and NWFP and its use by thousands of young people in the country has culminated into a complex phenomenon, requiring a political will policy decision, mobilization and education of people and financial resources for eradication programmes to curb the menace. Prior to 1978, opium poppy was cultivated in NWFP under licence and procured by the Government for meeting the requirement of Pharmaceutical Firms and licensed vendors. In 1978-79, the Government imposed a total ban on poppy cultivation, except the Gadoon Amazai area on account of its special position and erstwhile merged status.[1] The table on the following page illustrates and shows the sown area and production of poppy in the NWFP and Tribal Areas.

Pakistan is a signatory to International Conventions on Narcotic Drugs (1961) and Psychotropic Substances (1971). During 1960s and 1970s, the United Nations Expert Group on drug abuse and control observed that drug, legal and illegal, medical and nonmedical is an integral part of our lives.[2] The drug use in the West was a ruling passion of the youth. So much drug was consumed by the youths of Hip America and Mod England that they were humorously described as breathing interveinously. The situation had not reached such proportion in our country while a whole drug culture had developed in the west till 1980.[3] The problem of drug abuse in our country is, by Western standards, still on a limited scale, even though it is growing rapidly. Before 1979-80, these drugs were to be smuggled to Europe Via Iran and Turkey by illicit trafficking. The routes closed down on account of Islamic Revolution in Iran in 1979. Since then Pakistan has become the only

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1 Prohibition (Enforcement of Hadd) order, 1979.

2 Pakistan Narcotics Control Board, The New Hazard: A Survey of Psychotropic Substances in NWFP, Islamabad, 1977, P.87.

3 Ibid., P.88.

TABLE-43

POPPY PRODUCTION IN NWFP AND FATA 1984-87

(Area in Acres and Production in Kgs.)

Area	1984-85		1985-86		1986-87	
NWFP	Area	Product	Area	Product	Area	Product
Amazai Area (Haripur).	-	-	1515	13580	1515	13580
Dir District.	2659	23931	4731	43825	4730	43500
Gadoon Area (Swabi).	902	8118	2672	22757	2672	22757
Mansehra (Black Mountain Area).	50	323	129	625	129	625
NWFP Total	3611	32372	9047	80787	9046	80462
Bajawar.	273	2457	3851	36730	3851	36730
Mohmand.	120	1120	1176	7856	1176	7856
Khyber.	-	-	892	4045	892	4045
Orakazai (Tirah).	636	4135	118	590	118	590
FATA Total	1029	7712	6037	49221	6037	49221

Sources:-

(i) Ministry of States and Frontier Regions, Islamabad.

(ii) Department of Agricultural, Government of NWFP, Peshawar.

route for illicit trafficking of these drugs to Western Countries, resulting in the increased use of these drugs and other allied evils in the country. The Government is aware of the magnitude and ramifications of drug abuse including its production, processing, illicit trade and its impact on the society, which are now subjects of sharp focus in the Government Policy. In order to control the production of narcotics in the source areas,to interdict trafficking, to reduce the demand for drugs and to prevent drug abuse, a number of programmes are being implemented in the country. In this context,a number of projects have been initiated with the help of foreign assistance for the socio-economic development of the poppy producing areas in FATA and NWFP. These projects were intended to provide incentives such as job opportunities and agricultural inputs i.e. water, fertilizers,quality seeds etc and credits for intensive cultivation of substitute crops in order to replace poppy cultivation. The Government decided to provide the poppy growers alternative means of income accompanied by a phased implementation of the ban on the cultivation of opium poppy. The underlying principle adopted was that, development must precede enforcement of the ban. As a consequence, poppy cultivation has eliminated from Buner[1] in Swat district, Malakand Agency (PATA) and Adinzai Tehsil of Dir district. For the Gadoon Amazai, a project called Gadoon Amazai Area Development Project (GAADP), is under implementation since 1983, with U.S assistance,with funds to the tune of 20.5 million dollars and Government of Pakistan contribution of Rs. 17.4 million. Similarly for Dir district, Dir Area Development Project (DADP) has been formulated at a cost of 20 million U.S dollars and Government of Pakistan contribution of Rs. 27.7 million, to be implemented over a period of five years commencing from 1986.[2]

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1 Pakistan Narcotics Control Board, Socio-Economic Survey of Buner, A detailed report on Buner, Islamabad, 1975.

2 S.M.Usman, A Peep into FATA, Ministry of SAFRON, Islamabad, 1990, P.88.

In addition, nine Government Agencies are engaged for the enforcement of law against illicit trafficking of drugs. These agencies include Pakistan Customs, Coast Guards, Pakistan Rangers, Frontier Constabulary (F.C), Provincial Police Force, Provincial Excise and Taxation Department and Airport Security Force. Vigilance at the various immigration check points and seaports has been increased. At the Provincial headquarters, Joint Narcotics Control Task Forces have been established for the investigation of drug cases. As a result, significant seizure of heroin, opium, charas and other drugs have been made and the quality of investigation upgraded.

A number of laws have been extended to Provincially Administered Tribal Areas (PATA) of NWFP in order to discourage narcotics production. It may, however, be noted, that no such law could be extended to Federally Administered Tribal Areas (FATA). Moreover, the laws extended to PATAs also lack strict enforcement. The main reasons are administrative limitation of the Provincial Government, infeasible infrastructure and political influence of the big smugglers involved in narcotic activities. In FATA and NWFP the operation against narcotics has been carried out by the Provincial Government without the association of the Ministry of States and Frontier Regions Islamabad, which is mainly responsible for the enforcement of Govt laws in the Tribal Areas.

The control and ban on poppy cultivation expanded slightly in NWFP because of foreign funded projects, intended for the development of physical and social infrastructure of the poppy producing areas accompanied by a phased implementation of the ban on poppy cultivation. As a result, the production of opium reduced from 800 metric ton in 1979 to 40 metric ton in 1985. However, the production rose to 100 metric ton in 1986 and to 205 metric ton in 1988. The report of the International Narcotics Control reveals that the production of raw opium, the major drug for making heroin, has increased 25 percent from 130 metric ton in 1989 to 165 metric

ton in 1990.[1] The United States Drug Enforcement Administration (DEA) Intelligence indicates that heroin manufacturing laboratories, most of which are small and mobile in nature, are situated in the Tribal Areas within Pakistan's border. The government's attempts to persuade tribal leaders to prevent refining and smuggling of heroin across the Pakistan-Afghanistan border remained largely ineffective. Law enforcement efforts elsewhere in Pakistan remain insufficient, resulting in the arrest of a few important traffickers, and are often bailed out for lack of evidence etc.

Some of the processed heroin transits Pakistan en-route to India, Iran, Europe and the United States, remains in Pakistan for the use of its addict population. According to official estimates, the heroin addict population was about 1.2 million in 1990 which is growing. In 1990, the Government's major success was maintenance of an effective poppy ban in the Bajawar and Mohmand Agencies of the FATA. Accordingly, about 268 hectares were destroyed during 1990, by all types of eradication.[2] The Government expanded the opium cultivation ban during the 1990-91 growing season to several areas in Bajawar and Mohmand Agencies. The Narcotics Control Division has been transformed into a full Ministry, which is indicative of the Government's will to stick to its commitment for eradicating the menace of narcotics from the country.

The Government signed the 1988 Convention against the illicit trafficking of narcotic drugs and Psychotropic Substance which came into force in 1990. Although the Government has shown more interest in less aggressive projects such as crop substitution schemes and opening schools, International Narcotics Management funded development projects in Bajawar and Mohmand Agencies will continue to focus on road-building projects, designed to open-up inaccessible

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1 Frontier Post, Peshawar, March 13, 1991.

2 Frontier Post, Peshawar, "Opium Production in Pakistan", Report of the International Narcotic Control, Published by Qaiser Butt, Peshawar, March 14, 1991.

areas to Government authorities, such as Salarizai area in Bajawar and Utman Khel in Mohmand Agency. International Narcotics Management is considering a similarly focused project in the Khyber-Agency, the major poppy growing and heroin producing agency, where no development projects have been under-taken . USAID is helping with small projects under its Tribal Areas Development Project and is prepared to rebuild a major road through the Tribal Areas, including Khyber Agency. The Government is working on legislation which will enable the elite anti-narcotics units to investigate narcotics trafficking Organizations with the intent to arrest and prosecute major trafficking managers. According to a recent report of the International Narcotic Management, during 1992-93, opium poppy was cultivated over an area of 8170 hectares in Pakistan, which led to the increase in heroin production by 175 metric ton.[1] According to U.S. estimates, 20 percent of the heroin processed in Pakistan, is smuggled to USA. The Government of Pakistan has destroyed only twelve heroin processing laboratories during 1992 in the Tribal Areas, while none of the drug traffickers were arrested, or prosecuted. Despite the Government efforts, more than one hundred factories are still functioning in the Tribal Areas.[2]

According to Government's estimates, the yield of opium was 19.9 kgs. per hectare for 1990. Estimates of refined heroin were 22.2 kgs for 1989-90.[3] Estimates of refined heroin are based upon an assumption that one kg of heroin is produced from each ten kgs of opium. For the estimates, it is assumed that most opium harvested in both Pakistan and Afghanistan, is converted into heroin in Pakistan. Heroin consumption numbers are very uncertain. The Pakistan Narcotics Control Board estimates that there are more than 2 million heroin addicts in Pakistan and that there are more than 2 million of all types of drug addicts in Pakistan. To control

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1 Nawa-i-Waqat, (Urdu) Rawalpindi, June 26, 1993.

2 Ibid.

3 Frontier Post, Peshawar, March 14, 1991.

the increasing incidence of drug abuse and reduce the demand, the Government has established more than thirty Drug Treatment/ Rehabilitation Centres all over the country. These centres are engaged in the fight against addiction and have a reported cure rate of about 20 percent with an unknown number of relapses.Private Medical practitioners have been trained to treat drug addicts in their clinics. Social workers from Non-Governmental Organizations (NGOS) have also been trained in preparing society for community intervention against drug abuse. It is considered a matter of high priority to educate the nation, regarding the adverse effects of drug abuse on individuals, family and society. An awareness programme has been launched through the use of national television network, radio and newspapers. Conferences, seminars, symposia, public meetings and group discussions have been organized in educational institutions all over the country, to inform and alert the general public of the necessity for community awareness and action. Non Governmental Organizations (NGOS), private medical professionals, social workers, religious scholars and community leaders are also actively participating in the drug abuse preventive measures through family intervention and community action programmes. There is an urgent need of legislation for the application of judicial law in narcotic cases by specific legal authority. There is also a need for political will, sound policy frame, mobilization of financial resources and education of the people, to curb the menace of drug abuse in the country.

MINERAL SECTOR

There is considerable evidence for the existing mineral deposits in the Tribal Areas. One of the major function of FATA Development Corporation (FATA-DC) established in 1970, is the exploitation of mineral resources of the region.[1] A team of FATA-DC visited the Tribal Areas in 1971-72 and reported that there is

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[1] FATA Development Corporation, Peshawar, Annual Report 1971-72, P.1.

substantial mineral wealth which need to be surveyed and exploited.[1] Pakistan Industrial Development Corporation (PIDC) was assigned the task of appraisal of copper, chromite, quartz crystals in north and South Waziristan Agencies in March 1972, against an advance payment of Rs. 50,000/- by the Government.[2] The FATA-DC also took a scheme of exploitation and development of emerald deposits in Mohmand Agency. The geologists identified the location of transparent and high value emerald at Tora Tega (black mountain) and Nawe-Dand in Mohmand Agency and considered these most easy and promising for exploitation.[3]

In 1972-73, a scheme for the detailed investigation and exploitation of mineral resources in the Tribal Areas was sanctioned by the Government at a cost of Rs. 1.49 million. During the year, an allocation of Rs. 1.14 million was made with the foreign exchange component of Rs. 8.36 lacs, for the purchase of drilling rigs and equipment, to undertake a detailed investigation of the minerals in FATA.[4] However, the FATA-DC has not been able in making a headway in the implementation of its programme as efficiently as desired. Inspite of its tribal character, the employees of the Corporation have not been able to move about in the Tribal Areas as freely as required by the nature of their duty. The survey parties have not been able to carry out their surveys because of the embargo placed on them by the Political Authorities. In this connection, it may also be pertinent to point out that the Government has not been able to define its policy regarding the participation of the tribesmen and their status of ownership in the mineral wealth.[5] Inspite of Government directives, the exploitation

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1 Ibid., PP.34-38.

2 FATA Development Corporation, Peshawar, Annual Report 1972-73, P.33.

3 Ibid., P.32.

4 FATA-DC Peshawar, Annual Report 1972-73, P.33.

5 Ibid., P.34.

of emeralds, chromite and marble in Mohmand Agency could not be carried out because of unconducive atmosphere and failure of the Political Administration to arrive at an understanding with the tribes.

During the Annual Development Programme 1974-75,Rs.1.764 million were allocated for mineral development in FATA while the expenditure was Rs. 1.787 million somewhat more than the allocation.[1]

During the year, the silica sand in Mohmand Agency was subjected to benefication studies in Pakistan Council for Scientific and Industrial Research and the material was found suitable for glass manufacturing. The Khwaja Glass Industry Hasan Abdal also approved the utilization of the material for glass manufacturing. These studies led to the scheme of establishing Glass Making Industry in Mohmand Agency.[2] Besides, huge deposits of white marble and chromite were discovered at Ambar in Utman Khel area of Mohmand Agency. Some deposits of chromium-garnet, Jade (ornamental stone), and soapstone were also identified in Mohmand Agency.

During 1975-76, the geological section was created in FATA-DC, to study the mineral potential of the Tribal Areas and to plan and organize, the development of these resources, in such a way, that the tribesmen can derive the benefits out of the hidden wealth.

Regarding exploration of chromite and other minerals in Mohmand Agency , it is interesting to point out that by early 1981, more than 137 requests (written) had been made to the concerned administration for getting its clearance to explore any part of the Agency but to no avail.[3]

During the period between 1974-75 to 1989-90, an allocation of

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1 FATA-DC Planning Cell Report No. PG63/73, dated 15.1.1991, P.1.

2 FATA-DC, Annual Report 1974-75, P.22.

3 FATA-DC Peshawar, Annual Report 1980-81, P.41.

TABLE-44

YEAR-WISE ALLOCATION OF FUNDS FOR THE DEVELOPMENT OF MINERAL SECTOR IN MOHMAND AGENCY AND FATA 1974-90

(Rs. in Million)

S.No	Financial Year	Allocation for Mohmand Agency	Allocation for FATA	Actual Expenditure
1	1974-75		1.764	1.787
2	1975-76		2.800	1.523
3	1976-77		2.317	1.414
4	1977-78		2.053	2.053
5	1978-79		5.290	2.989
6	1979-80		2.520	2.212
7	1980-81		1.039	1.030
8	1981-82		1.540	1.540
9	1982-83		2.050	2.291
10	1983-84		7.700	5.229
11	1984-85		4.309	4.208
12	1985-86	0.100	5.362	4.308
13	1986-87	-	11.996	11.473
14	1987-88	0.530	7.914	7.888
15	1988-89	0.308	12.784	5.826
16	1989-90	-	11.370	8.015
-	Grand Total	0.938	82.808	63.786

Source:-

FATA Development Corporation, NWFP, Peshawar.

Rs. 82.808 million was made for the development of mineral deposits in the Tribal Areas, while the total expenditure during this period were Rs. 67.786 million.[1]

During this period, the FATA-Development Corporation so far surveyed an area of 19408 sq. kms. out of a total of 27220 kms area of the Tribal Territory, while only 7812 kms area is to be surveyed in future. During geological investigations, some valuable minerals have been identified but a few of them could be exploited. The FATA-DC has not been able to implement its programmes for various reasons. The survey and geological investigation teams could not move in the interior of the Tribal Areas because of the restriction placed on them by the Political Authorities. Most of the approved schemes for which funds were allocated, could not be started or had to be suspended due to lack of any understanding between the tribesmen and Political Agents. The FATA-DC has no power to sanction any project without referring it to the Federal Government which led to the delays in execution of many projects. The system of awarding contracts to the tribal contractors by the Political Agents on political grounds rather than on the capability and resourcefulness, caused delays in the completion of projects and did not allow competition amongst contractors. At present the development work in the Tribal Areas in mostly confined to areas located along the river beds or along the roads. There are many prospective areas where development work can be undertaken, but these have been declared closed by the concerned Political Agents. For instance, chromite in Laman Utman Khel area of Mohmand Agency and lime stone in Darra Adam Khel cannot be exploited due to embargo by the Political Agents. Though, FATA is rich in mineral wealth but no significant progress of work in the field of exploitation of mineral deposits is evident. The development funds for this purposes, are mostly spent on procurement of costly machinery, not for use but for stock piling. A large portion of

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[1] FATA-DC Year-wise Annual Development Programme Allocation 1974-90.

TABLE-45

PHYSICAL ACHIEVEMENTS IN MINERAL SECTOR FATA 1971-87

Agency/F.R	Total Area in Sq. Kms	Area Surveyed in Sq. Kms	Area to be Surveyed in Sq. Kms	Minerals Identified in MatricTon
Bajawar	1290	1250	40	Marble = 8550.0 * Emerald,Copper, Manganese, Chromite
Mohmand	2296	1998	298	Marble, Dolomite, SilicaSand, 345.0 11.0 537.0 * Chromite, Emerald, Jade
Khyber	2576	1935	641	Marble, 846.0 * Barite
F.R Peshawar & F.R. Kohat	707	445	262	Industrial Grade Limestone 3322.0
Orakazai	1538	1450	088	Iron Ore 3.0 * Coal
Kurram	3380	1156	2224	Soap Stone, 1.6 * Copper, Lead, Manganese, Iron Ore
North Waziristan	4707	2268	2439	Copper, Manganese 122.0 0.50 * Chromite, Magnesite
South Waziristan	6620	5355	1265	Bentonite 1.5 * Copper, Lead
F.R. Bannu	877	851	026	* Bentonite
F.R. D.I. Khan	3229	2700	529	Gypsum,Marble, 20.0 50.0 Industrial Grade Limestone 750.0 *Shale and Clays in Huge Quantity
Total	27220	19408	7812	

* Minerals being quantified.

Source:-

FATA-Development Corporation, NWFP, Peshawar.

funds is utilized for the purchase of costly vehicles for FATA-DC head-office Peshawar, foreign tours, engagement of highly paid consultants, renovation of offices and advance payments etc.

INDUSTRIAL DEVELOPMENT

For the social and economic development of the Tribal Areas, the FATA-Development Corporation was made responsible to establish industries either by itself or through any institution or organization set up by it.[1]

FATA-Development Corporation under its programme of initiating industrial development in the Tribal Areas, established eleven different industries in various Agencies to foster socio-economic development in the region. Due to several critical reasons, all these projects ran into heavy financial losses. Losing the objective of socio-economic development, the management at FATA-DC evaluated all these projects on purely financial grounds, declared these to be sick projects and closed them down one after the other. One of these sick units, namely, the Vegetable Ghee Factory, at Bara Khyber Agency was taken over by the Ghee Corporation of Pakistan.

Efforts were made to ensure the spread of industrial investment amongst different Agencies. Besides providing employment, the objective of these industrial units was to provide training and generating business activities, hitherto unknown in the region.

The common cause of failure for all the projects has been a very high degree of centralization at the head office (FATA-DC), which crippled the decision making ability of the projects management and prevented them from taking quick actions, in situations where prompt actions were needed. This factor alone compounded the effect of all other causes of failure of these industrial units.

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[1] FATA-DC, Annual Report 1971-72, P.1.

MOHMAND GLASS FACTORY

During geological survey for marble in Mohmand Agency in 1972--73, huge deposits of silica sand were found around Ghallanai, the samples of which were sent to Pakistan Council for Scientific and Industrial Research (PCSIR) for chemical analysis.[1] In 1973-74, the total reserves of silica sand deposits at Ghallanai were quantified to be 535 million ton and its samples were sent to Khwaja Glass Industry Hassan Abdal for actual utilization in glass manufacturing.[2] After benefication studies in the PCSIR Laboratories Lahore in 1974-75, the material was found suitable for glass manufacturing. These studies ultimately led to the approval of the scheme for Glass Making Industry at Ghallanai Mohmand Agency.[3] The factory was finally commissioned in September, 1977.[4]

Established in 1977 at a cost of Rs. 6.147 million[5] with a capacity to produce 3,000 ton of hollow glassware per annum, the Mohmand Glass Factory was conceived to provide socio-economic benefits to the people[6]. The capacity was based on three shifts operation per day. The factory operated for only 21 months from September, 1977 to July 1979 when it was closed down because it could not maintain the quality of its products and was running into financial losses.[7] The project was located at Ghallanai,as the area was rich in quartz and silica sand which is the basic raw material for glass manufacturing. The project was entirely financed by FATA--DC through Government grants with no technical or financial

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1 FATA-DC Peshawar, Annual Report 1972-73, P. 33

2 FATA-DC Peshawar, Annual Report 1973-74, P.34.

3 FATA-DC Peshawar, Annual Report 1974-75, P.22.

4 FATA-DC Peshawar, Annual Report 1976-77, PP.2-3.

5 FATA-Development Statistics 1988-89, P. 264.

6 Ibid, P. 263.

7 For details of losses, see FATA-DC Peshawar, Annual Report 1978-79, PP.115-21.

TABLE-46

A.D.P ALLOCATION FOR INDUSTRIAL SECTOR IN FATA 1972-90

Year	Allocation	Expenditure
1972-73	7.437	0.186
1973-74	9.731	6.898
1974-75	16.561	25.097
1975-76	23.354	19.645
1976-77	21.950	27.989
1977-78	21.622	20.785
1978-79	11.874	10.605
1979-80	14.447	18.348
1980-81	9.333	3.842
1981-82	1.040	(-) 0.600
1982-83	3.275	1.032
1983-84	7.860	2.711
1984-85	4.497	4.218
1985-86	0.843	0.644
1986-87	0.820	0.085
1987-88	1.084	0.124
1988-89	4.525	0.782
1989-90	1.817	-
Total	162.070	142.391

Sources:-

(i) FATA-DC,Todate Investment in FATA (TIF) 1989.

(ii) FATA-DC Planning Cell,Yerar-wise Allocation FATA (1970-90).

(iii) FATA Annual Development Progammes, 1971-90.