CHAPTER IV.

PRODUCTION AND DISTRIBU-TION.

SECTION A.-AGRICULTURE AND LIVE-STOCK.

Chapter IV, A.

Agriculture
and Live stock.

General statistics of
agriculture.

Table No. XIV gives general figures for cultivation and irrigation, and for Government waste land; while the rainfall is shown in Tables Nos. III and IIIA and IIIB. Table No. XVII shows statistics of Government estates. Table No. XX gives the areas under the principal staples, and Table No. XXI the average yield of each. Statistics of live-stock will be found in Table No. XXII. Further statistics are given under their various headings in the subsequent paragraphs of this Chapter. Land tenures, tenants, and rent, and the employment of field labour, have already been noticed in Chapter, III Section D.

The seasons. Rainfall. The total annual fall of rain and the manner in which it is distributed throughout the year are shown in Tables Nos. III, IIIA, IIIB. The table below shows the season of seed time and harvest for the principal staples:—

	Name in English or Latin		Name in Vernacula		Season for sowing.	Season for reaping
_	Wheat		Gandum		Katik and Maghar (October, November, December).	Baisakh (April-May).
Rahi	Barley		Jau		Do.	Do.
E	Gram	••	Nakhud Chana		Asauj (September- October).	Chait (March-April)
(Mustard	••	Sarson		Do.	Phagan (February- March).
1	Paddy, Rice	••	Dhan	••	Asarh (June-July)	Katik (October- November).
	Great Millet	**	Juar		Sanwan (July-August)	Do.
Kharif.	Spiked do		Bajra		Asar (June-July).	Do.
3	Phaseolus aconitifolius	**	Moth		Do.	Do.
M	Do. mungo		Mung		Do.	Do.
	Do. radiatus	***	Mash		Do.	Do.
- 1	Indian Corn		Makkai		Do.	Do.
1	Sesamum		Til		Do.	Do.

Irrigation.

Table No. XIV gives details of irrigation. Further information will be found at pages 177 to 203 of Major Wace's Famine Report, compiled in 1878. At that time 5 per cent. of the cultivation was irrigated from canals, 0.11 per cent. from wells, 23 per cent. was flooded, and the remaining 72 per cent. was wholly dependent upon rain. The following figures show the number of wells then existing in the district, with certain statistics regarding them.

ber of	DEPTH OF WATER IN FEET.		COST IN	Rupees.		KS PER EL OR KET.	gear.	ACRES IRRIGATED PER WHEEL OR BUCKET.	
Number wells.	From	То	Masonry.	Without masonry.			Cost of	Spring.	Autumn
522 322	20 30	30)	2,000	200	2	100	18	4	6

Chapter IV, A. Agriculture and Live-stock. Irrigation.

The most usual depth of water below the surface is some 80 feet, but irrigation is not practised at this depth. All wells are worked by the rope and bucket. Of the 844 wells shown above, 428 are unbricked.

> Agricultural implements and appliances.

Table No. XXII shows the number of cattle, carts, and ploughs in each tahsil of the district as returned in 1878-79. The implements required to cultivate a small holding are a plough, a pair of bullocks, a por (or seed-sower), a kassi, a sohaga, or board for smoothing and levelling the furrows after grain has been sown; a kulhari or hatchet; a daranti for mowing long grass crops, &c.; a khurpa, for digging up grass; a kasola, for weeding; a jeli, or long wooden prong, for lifting and stacking the harvest; a gandasa, or large coarse knife, for cutting pula; some rope and a wooden yoke. The ordinary cost of these implements represents a capital of perhaps Rs. 100. One plough is calculated to cultivate 18 acres of unirrigated and 9 acres of canal or sotar land.

The following description of the use of manure and the system Manure and rotation of rotation of crops as practised in the district, was furnished for the Famine Report of 1879 (page 248):—

of crops.

"Percentage of cultivated area which is manured :-

example of the	Constantly manured.	Occasionally manured.	Not manured.	Total.	Percentage of previous column which bears two or more crops annually.
Irrigated land Unirrigated land	2:85	7.06	90.09	100	14-90 1-16
Total	0.16	0.88	99.46	100	0.89

"The average weight of manure given to the acre per annum on land constantly manured, is about 500 maunds. On land occasionally manured, the amount of manure per acre given is 200 maunds, and the interval at which it is given is six months. The usual course of cropping prevailing in this district is as follows :- The land is first ploughed, then harrowed, and after that seed is sown by the aid of the plough and tube. The unmanured lands in this district are the báráni; the greater portion of it yields but one crop, which is the kharif, and is allowed to remain fallow for six months, and is seldom or never ploughed during that time. There is but a slight difference between the treatment of irrigated and unirrigated lands. The irrigated lands have to be ploughed and harrowed four times and manured as well, before seed is put down, and the greater portion of it yields but one crop (rabi). In some places the irrigated land is not allowed to rest, as vegetables, cotton, tobacco, &c., are always being sown."

No improvements are noticeable in the quality of the crops or the mode of agriculture. The only change that has taken place since the time of British occupation of the country is the introduction of cotton cultivation. This has of late years been on the increase

Agriculture and Live-stock. Manure and rotation of crops,

Principal staples,

Chapter IV, A. in the canal villages. The agricultural knowledge of the people is at a stand-still. Rotation of crops, though to a certain extent understood, as a rule, is not practised. It is never attempted except upon land which is capable of producing the superior and more valuable crops. Manure is used, but only in the cultivation of small plots near wells, or round the village site, set aside for vegetables and other garden produce.

Table No. XX shows the areas under the principal agricultural

Crop.	1880-81.	1881-82.	
Mashy Urad)		4,377	4.434
Mung		26,770	34,716
Masur		1	31,109
Turmeric		60	45
Coriander		1,114	1,064
Chillies		997	1,160
Other drugs	and	TE MILE	Test I
spices		529	527
Mustard		6,684	7,894
Til		6,978	7,401
Tara Mira		4	5
Hemp		275	380
Kasumbh		1,103	10
Other crops		81,364	5,554

staples. The remaining acres under crop in 1880-81 and 1881-82 were distributed in the manner shown in the margin. The staple products of the district are bájra (spiked millet); jawár (great millet); and gram (cicer arietinum). The latter is the only crop grown to any great extent for the spring harvest, and its cultivation is entirely dependent upon the seasons. Rice, wheat and barley are grown only upon land irrigated from the

canal or the Ghaggar, the first for the autumn, the two latter for the spring harvest. The other items of produce in the autumn harvest on unirrigated tracts are the common pulses moth (phaseolus aconitifolius), másh (phaseolus radiatus), and múng (phaseolus mungo). Of drugs and spices, tobacco and coriander are grown to some extent for the spring harvest, and chillies for that of the autumn. The tobacco grown is probably not more than enough for local consumption, but coriander appears to be cultivated here more largely than in any other district. The oil-seeds. sarson (mustard), and til (sesamum orientale) are grown somewhat largely for the autumn harvest. Cotton also in favourable seasons is grown extensively as an autumn crop in canal villages.

Table No. XXI shows the estimated average yield in pounds per acre of each of the principal staples as shown in the Administration Report of 1881-82. The average consumption of food per head has already been noticed at page 28. The total consump-

Agricul-Non-agri-Grain. Total. culturists. turists. 159,201 159,201 2,460,588 693,857 Wheat 2,221,735 455,054 238,803 238,803 Inferior grains Pulses Total .. 2,676,789 636,807 3,313,596

tion of food-grains by the population of the district as estimated in 1878 for the purposes of the Famine Report shown in maunds is in the margin.

figures are based upon an estimated population of 484,681 souls. On the other hand, the average consumption per head is believed to have been over-estimated. A rough estimate of the total production, exports, and imports of food-grains was also framed at the same time; and it was stated (page 151, Famine Report) that there was an annual average surplus of some nine lakhs of maunds available for export, consisting chiefly of bajra mung, moth, and gram, and sent to Bikaner, Jaipur, Jodhpur, and Dehli.

Average yield, Production and conaumption of foodgrains.

Table No. XXII shows the live-stock of the district as returned in the Administration Report at various periods. Hariana has always been famous for its cattle. A good specimen of the breed and Live-stoc stands six feet high, and is a splendid animal. These bulls are for the most part white, with massive head and forehead, and a chest and back that would delight the eyes of an English farmer. selected pair of these bullocks will now fetch as much as Rs. 400. They are bought by native gentlemen and merchants from all parts of Northern India. The Government cattle farm has done much to improve and perpetuate the breed. Bullocks, buffaloes and even camels are employed in agricultural operations. It is by no means uncommon to see camels drawing the plough. The price of an ordinary plough bullock is on an average about Rs. 50, and the lowest price Rs. 20. The price of a buffalo ranges from Rs. 10 to Rs. 30. Camels for burden fetch from Rs. 60 to Rs. 100. Sheep and goats are reared for wool, of which there is a large export, even more than for food, and their prices range from Rs. 3 to Re. 1 each. Milch-cows are worth from Rs. 15 to Rs. 50 and 60, and milch-buffaloes from Rs. 30 to Rs. 70 each. A recent estimate by the Deputy Commissioner states the stock of the district as follows: - Cows and bullocks 295,508; buffaloes 50,616; sheep 47,749; camels 17,001.

The principal fair of the district, in fact the only one at which it is officially estimated that more than 10,000 persons usually assemble, is the cattle fair held at the town of Hisar twice a year in March and October. The fair on each occasion lasts for 20 days, and the usual attendance is estimated at 25,000, of which number about 10,000 are estimated to be strangers from a distance. Food is obtainable from the local merchants, but no arrangements are made for housing the visitors. Large numbers of cattle are brought in for sale from Rájpútána, especially from the Bágar country. Purchasers attend from all parts of the province, and from the direction of Saháranpur and Merat in the North-West Provinces, and a brisk business is always done Year by year the fairs are increasing in importance and popularity. The municipality derive a considerable revenue from the dues collected, only one-tenth of which is credited to Government.

The Hisar farm dates from the year A.D. 1813, when it was Hisar Cattle Farm instituted by Major Livingstone. The objects of the farm are, first, to breed bullocks of superior size and quality for ordnance purposes; and, secondly, to provide and to distribute generally for breeding purposes, high-class bulls. The locality is in every respect well chosen. The grazing lands, comprising an area of 6,763 square miles, or 43,287 acres, afford excellent pasturage for the cattle of good and nutritious grasses all the year round, except in seasons of drought; and numerous tanks scattered over the country give a full supply of drinking water. The district is noted for a breed of cattle called Hariánáh. Cross-breeding between cows of this sort and other kinds of good bulls is much practised. They produce powerful cattle for heavy draught. The pure breeds of cattle maintained in the farm are : Gújrát, Ungole, Nagore and Mysore. These breeds are good in themselves. It is with

Chapter IV, Agriculture Cattle.

Hisar Cattle Fair

Chapter IV, A.

Agriculture
and Live-stock.

Hisár Cattle Farm.

bulls of the first three kinds that the Harianah cows are usually crossed. There is a constantly increasing demand for Hisár bulls for breeding purposes - an indication that their excellence is appreciated. They are certainly superior to the produce of any other farm. The farm lands lie east, west and north of the town of Hisar. The boundary is marked by masonry pillars. There are three farms, called the Home, the Salli and the Chaoni farms. The Home farm lies east of the town, about 200 yards from the Mori gate. The Salli farm is 51 miles to north-west, and the Chaoni farm about 2 miles to the south-west of the town. The farm lands are classed as culturable waste. The soil si rausli. There is no irrigation except of a small area, about 300 bigahs, from the Western Jamna Canal. On this are raised fodder crops. The natural productions are various kinds of grasses, of which in ordinary years there is a most luxuriant crop. The best kinds, yielding both grain and fodder, are the following:-Anjan sámak and palinjee gándhi, súrvála palva and lámp.

Besides the above, the birs or rakhs (grazing lands) abound with jál, kair, jant and ber trees (wild plum), the first predominating; all of these bear fruit. The fruit of the jál tree is called pl, and is much eaten by the poor people. The fruit of the kair tree is called faint, and is used by the people generally for pickling; when young and green, it is like capers; when ripe it is called pinjú, and, being of a sweetish flavour, is eaten by the poorer classes. The fruit of the jant is called sángar, resembling a bean; when tender and green it is used as a vegetable. The ber tree (zizyphus jujuba) or wild plum has a fruit like the cherry. The fruit also is

Herd bulls Other bulls Cows Plough bullocks Ordnance bullocks Bull calves Heifer calves	61	Brought forward	7,656
	229	Young bulllocks	78
	3,078	Rams	285
	235	Sheep	687
	366	Lambs	295
	1,715	Mares	4
	1,972	Camels	12
Carried over	7,656	Total	8,967

called ber. The dried leaves, called pála, are excellent fodder. The present strength of cattle on the farm is given in the margin. The number of calves born during the year beginning 1st January 1883 to date is—

Bull calves Heifer ,, 568 599

A certain number of bull calves are reserved for breeding purposes, some to recruit the farm stock and others for distribution to districts and village proprietors. The rest are castrated and are kept separately from the other cattle. When they are four years old a careful selection is made, and those that are fit for the purposes of artillery draught are made over to the Commissiariat Department at Firozpur. The heifer calves are reserved at the farm for breeding purposes. As many as are rendered unfit for breeding purposes, whether by age or by natural faults, are cast and sold by public auction.

The statistics regarding sheep and goats are shown in Table No. XXII already referred to. A recent estimate by the Deputy Commissioner gives the number of sheep in the district as 47,794 Sheep-breeding from Government rams is at present confined to

Sheep and goats.

the cattle farm. The table given of the farm stock shows that there are in the farm 235 rams, 687 sheep, and 295 lambs. The rams are of English stock (Southdown and Leicestershire), and are distributed generally to improve the breed of sheep.

Horse-breeding on the branded mare system was introduced in the Hisar district in the winter of 1882-83, when 373 mares Six stallions were sent to the district, of which were branded. three were thoroughbred English, two Arabs, and one a Nortolk trotter. Operations have been fairly successful; but bad seasons and scarcity of grass and fodder have impeded the development of the system. A salútri and zilahdár are entertained on the district establishment. Mule-breeding is not carried on in the district. There are no horse fairs.

Chapter VI. B.

Occupations, Industries, and Commerce,

Sheep and goats.

Horses and mules.

SECTION B .- OCCUPATIONS, INDUSTRIES AND COMMERCE.

Table No. XXIII shows the principal occupations followed by males of over 15 years of age as returned at the Census of 1881. But the figures are perhaps the least satisfactory of all the Census statistics, for reasons explained fully in the Census Report; and they must be taken subject to limitations which are given in some detail in Part II, Chapter VIII, of the same Report. The figures in Table No. XXIII refer only to the population of 15

Population. Towns. Villages. Agricultural Non-agricultural 18,118 309,171 118,894 58,005 Total 76,118 428,065

years of age and over. The figures in the margin show the distribution of the whole population into agricultural and nonagricultural, calculated on the assumption that the number of women and children dependent upon each male of over 15 years

of age is the same whatever his occupation. These figures, however, include as agricultural only such part of the population as are agriculturists pure and simple; and exclude not only the considerable number who combine agriculture with other occupations, but also the much larger number who depend in great measure for their livelihood upon the yield of agricultural operations. More detailed figures for the occupations of both males and females will be found at pages 79 to 87 of Table No. XIIA and in Table No. XIIB of the Census Report of 1881. The figures for female occupation, however, are exceedingly incomplete.

Table No. XXIV gives statistics of the manufactures of the Principal industries district as they stood in 1881-82. The district of Hisar has no manufactures of importance. The manufacture of saltpetre has been already alluded to. It is made by banias, who pay small fees as seignorage to the owners of the village where it is made. It is not refined in the district, but sent in the rough to Farrukhábád in the North-West Provinces. The traders of Farrukhábád

Occupations of the people.

and manufactures.

Chapter IV, B. Occupations, Industries. and Commerce. and manufactures.

refine it and send it on to Calcutta. A refinery has lately been established at Dehli, but the manufacture and the trade have fallen off remarkably of late years. Coarse country cloth is made more or less in every village, both for local use and for export, but the Principal industries chief seat of this industry is at Fatehabad. In this town, too, and in a few others, a caste, called Dabgars, are famous for the manufacture of leather scales, and kúppas, or leathern vessels for oil. These have a wide local reputation, and their handiwork is exported to considerable distances. Mr. Lockwood Kipling, Principal of the Lahore School of Art, has kindly furnished the following note on some of the special industries of the district:-

> "Mr. Ogilvie has given an account of the brass and bell-metal (kánsi) trade of Bhiwáni in this district, from which it appears that about 200 artizans are employed, and that their earnings vary from Rs. 7-8 to Rs. 8 per mensem. The ware is exported to all parts of the Punjab and to Rájputána. Ornamental work does not appear to be made, but the kánsi cups and platters sent to the Punjab Exhibition were fairly well finished. Brass is imported from Calcutta, but mainly for re-export to Bikaner; and old broken brass (phút) is chiefly used for local purposes. Some brass is manufactured from imported copper and zinc in the proportion of 24 seers of copper to 16 seers of zinc in the maund of 40 seers. The cost of the metal thus manufactured is calculated at Rs. 26 per maund. Kansi is made with copper and pewter. The cost is Rs. 39-8 per maund. Besides its brass trade, Bhiwani has a name for carved chaukats or doors. Elaborately carved models mounted with brass were sent to the Exhibitions at Lahore and Calcutta, and one is now in the Lahore Museum,. In this district the leathern hukka, metal-bound, common in many parts of the Punjab, is quaintly adorned with strips and stude of copper, brass, and sometimes silver, roughly engraven. The execution is rough, but no fault can be found with the design. Good hukkas thus adorned cost from Rs. 5 to Rs. 12, and last a long time.

> "The embroidered woollen ohrnás or chadars of the district are worthy of mention, for, though nothing could be more homely than the material, or more simple than the design, they are thoroughly good and characteristic in effect. Two breadths of narrow woollen cloth are joined with a curious open work, sewn and covered with archaic ornaments in wool and cotton thread of different colours, needle-wrought in a sampler stitch. The cloth is a fine red, though somewhat harsh and coarse in texture; and though all the designs are in straight lines, human figures and creatures are sometimes oddly indicated. The price of these chadars was originally about Rs. 4, but since a sort of demand has arisen among amateurs interested in Indian fabrics, the rate has been doubled. It is scarcely likely that the woollen phulkari will grow, like the silk and cotton one, from a domestic manufacture for local use, into a regular production for export trade. Similar chadars are made and worn in the Sirsa district. The better known cotton phulkari embroidered with silk is of exceptional excellence in this district. From Hisár and Hánsi chadars and ghagras, of dark indigo or madder-dyed rough country cloth with orange coloured silk in bold patterns, diversified by the insertion of small circular mirrors, have been sent to various exhibitions. The mirrors come from Karnál, where globes of thin glass, about four or five inches in diameter, are blown and silvered on the inside. These are broken up, and the fragments are used for shishadar phulkaris, and formerly in the shishadar plaster work, to be seen in

buildings of the last century. In the Amritsar district are merchants who have pushed the *phulkárî* to such good purpose that it has become a profitable industry. It is possible that the extension of the railway may do something for the hitherto purely local and domestic industries of this district."

Occupations, Industries, and Commerce.

Course and nature of trade.

The chief centres of trade are Bhiwani, Hansi, and Hisar. The town of Fatehabad in the north-west part of the district also acts to some extent as a trade centre for the country in its neighbourhood; but the greater portion of the agricultural produce of the northern part of the district would probably find its way direct to Hisár or Hánsi without going through Fatehábád. Practically, we may consider that all the trade of the district, except a very small part, comes to one or other of these centres of distribution. With regard to Hánsi and Hisár, it may be said generally that goods traffic is all on a line between east and west. The produce of the surrounding country comes from all directions towards the central marts; but the trade with the countries outside the district, and also the through traffic, passes along the main road between Dehli and the western Punjab. The greater part of this trade will now doubtless be diverted from the Sirsa and Dehli road, and will go and come by rail via Rewari and Bhiwani. As to the portion between Hánsi and the west, the whole traffic will, without doubt, be transferred to the railway, which at this part follows the same direction as the existing road. The trade routes to and from Bhiwani are more complicated. The statements printed on the next pages show the trade of Bhiwani. Imports from the east are either from Dehli or from the Rohtak district. The former will doubtless come wholly by rail. Also the produce of the western agricultural districts may be expected to come by rail via Hisar and Hansi. A very large export trade, especially in grain and salt, will pass from Bhiwani to Dehli and the east generally by the railway. The trade with Bikaner and the States of Rajputana and the south-west will continue to follow the present existing routes; but it is expected that it will be largely developed by the facility of transport between Bhiwani and the east and north-west which is afforded by the new line.

The statements printed on the next pages show the quantity of average yearly imports to be 1,767,900 maunds, and of exports 1,033,000 maunds. It is calculated that out of this total quantity, 789,700 maunds of imports and 520,800 maunds of exports will be carried by the new line. The traders at Bhiwáni are sanguine as to the extension of trade owing to the opening of the Railway. The increase of imports under the heads of sugar and saccharine products, grain, cloth, and met ils, is calculated at about 4½ lakhs of maunds, or more than half as much again as the existing imports; while the increase in exports is estimated under the same heads at nearly six lakhs of maunds. Although these anticipations may be too sanguine, there can be no doubt that the through trade of this town will be greatly enlarged.

Sugar and other saccharine products are among the chief staples of trade. Sugar to the quantity of 100,000 maunds comes

Trade of Bhiwani.

Statement showing imports to Bhiwani for one year.

		R Flow				IMP	ORTS.				NE TE
Articles.		FROM EAST.		FROM WEST.		FROM SOUTH.		FROM NORTH.		TOTAL.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			Rs.		Rs.		Rs.	1 1 1 1	Rs.		Rs.
Sugar	***	100,000	10,00,000	***		***			***	100,000	10,00,000
Gür and shakkar		275,000	8,25,000					***		275,000	8,25,000
Rice	***	75,000	2,25,000						***	75,000	2,25,000
Grains of all kinds	***	100,000	2,00,000	300,000	4,50,000	50,000	75,000		***	450,000	7,25,000
Groceries, drugs and colours	***	25,000	3,40,000	5,000	10,000	***	***		***	30,000	3,50,000
Cloth, Europe		14,000	17,00,000	***	***	110				14,000	17,00,000
Do. country		2,000	80,000			1,000	40,000		***	3,000	1,20,000
Metal	***	30,000	4,00,000				***		***	30,000	4,00,000
Tobacco		200	1,000		***	1,300	6,500		***	1,500	7,500
Salt	***	400	2,000		***	150,000	5,25,000	***		150,400	52,700
Sarsaf		1,000	2,000	21,000	42,000		***	***		22,000	44,000
Flax, ban, munjh, &c.		2,000	12,000	100	***	23,000	46,000			25,000	5,800
Bamboos, karis, &c.	***	25,000	12,500	15,000	15,000					40,000	27,500
Stone		1,000	500	***		40,000	20,000	***		41,000	20,500
Cotton, cleaned and uncleaned		8,500	1,02,000					16,500	1,32,000	25,000	2,34,000
Wool	122	3,000	60,000	15,000	3,00,000	10,000	20,000			2,800	5,60,000
Ghi				4,000	80,000	4,000	80,000			8,000	1,60,000
Salpetre	111	20,000	40,000	20,000	40,000				***	40,000	80,000
Cotton seed, oil, cakes and guar		2,000	3,000	8,000	12,000	15,000	12,500	9 8		25,000	37,500
Leather		2,000	50,000	2,500	62,500	4,500	1,12,500			9,000	2,25,000
Threads, country and Europe		2,000	80,000	1,000	20,000					3,000	1,00,000
Fruits, country		30,000	60,000	10,000	20,000			***		40,000	
Do., Kábul		3,000	30,000			S				3,000	80,000 30,000
Multáni clay				30,000	30,000					30,000	30,000
Miscellaneous		37		150,000	50,000	150,000	50,000	111		300,000	1,00,000
Total		721,100	52,25,000	501,500	11,31,500	448,800	11,77,500	16,500	1,32,000	1,767,900	76,66,000

Statement showing exports from Bhiwani for one year.

				ada.	335.	EXPO	RTS.			The state of	
ARTICLES.		FROM EAST.		FROM WEST.		FROM SOUTH.		FROM NORTH.		TOTAL.	
ARTICLES.	Ţ	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			Rs.		Rs.		Rs.		Rs.	1	Rs.
				50,000	5.00,000	30,000	3,00,000			80,000	8,00,000
Sugar	***	***	F F 5	225,000	6.75,000	10,000	30,000		***	235,000	70,50
Gür and shakkar	***		= 9	64,000	1,92,000					64,000	1,92,00
Rice	144	200,000	4,50,000	50,000	75,000					350,000	5,25,00
Grains of all kinds	***	300,000	10,000	13,000	78,000	2,000	12,000			20,000	1,00,00
Groceries, drugs and colours	***	5,000		2,000	2,40,000	7,000	8,40,000			9,000	10,80,00
Cloth, Europe		***	***	6,000	24,000	1,000				600	24,00
Do., country	***	***	+311	8,000	1,20,000	20,000	80,000			28,000	2,00,00
Metal	***	***	•••			20,000					
Tobacco	200	700,000	0 70 000	***	***			20,000	70,000	120,000	4,20,00
Salt		100,000	3,50,000			3-9-1	in				
Sarsaf	***	2.000	***	4,000	8,000					4,000	8,00
Flax, ban, munjh, &c.	***	***	***	12,000	6,000	10,000	5,000			22,000	11,00
Bamboos, karis, &c.	***	***	***	2,000	1,000	100,000			***	2,000	1,00
Stone	***		***		60,000	10,000	80,000			15,000	1,40,00
Cotton, cleaned and uncleaned	+++	****	0 00 000	5,000	The same of the same of		00,000			15,000	2,00,00
Wool		15,000	2,00,000								
Ghi			7 00 000	***						25,000	1,00,0
Saltpetre	***	25,000	1,00,000	***	***					***	***
Cotton seed, oil cakes, and guar			7 50 000	***		***				6,000	1,50,00
Leather		6,000	1,50,000	***		***	***		****	5,000	1,00,00
Threads, country and Europe		5,000	1,00,000	***		***					1
Fruits, country					00,000	E				2,000	20,00
Do., Kabul				2,000	20,000	6 3.13 8				25,000	25,00
Multáni clay		25,000	25,000	***							
Miscellaneous		B B		9		8 40 4	***			,	
Total	ā.,	481.000	13,85,000	443,000	22,15,000	89,000	13,47,000	20,000	70,000	1,033,000	50,17,00

Chapter IV, B.

Occupations, Industries, and Commerce.

Trade of Bhiwani.

entirely from the direction of Dehli, and will be carried by rail. It is expected that the quantity imported will be largely increased. It is chiefly exported towards Bikáner; but a small quantity will be carried by rail towards Hisár and Sirsa. Unrefined sugar and molasses (shakkar and gúr) are imported partly from Dehli and partly from the Rohtak and Karnál districts. The Dehli portion only, estimated at about 90,000 maunds out of 275,000 maunds total import, will be transported by rail; but it is expected that the quantity imported by this route will be very largely increased. At present the export of this article is exclusively in the direction of Bikáner and the south-west; but it is thought that a trade may be developed in the direction of Hisár and the north-west also, now that the country is opened up by the railway.

The through trade in grain is very considerable. It is estimated that one lukh of maunds is imported from the east, of which 25,000 maunds (of wheat) come from Dehli, and will be carried by rail. The rest comes from Rohtak. Three lakhs of maunds of grain and oil-seed are imported from the direction of Hisár and Sirsa, all of which will now be conveyed by rail, and the same amount will be exported to the eastward, also by rail. It is expected that the opening of the railway will stimulate this traffic.

The total import of rice from the Dehli direction (all of which will come by rail) is 75,000 maunds. The greater part of this,

64,000 maunds, is exported to Bikaner.

Drugs.—The import of drugs and spices and kindred articles from the Dehli side is 25,000 maunds drugs; and that from the Sirsa side 5,000 maunds (colours). The drugs not consumed in the town are exported to the south-west (Bikáner), and the colours to the east. The import trade will now come by rail; and a considerable extension of the export trade in the direction of Ferozepore is anticipated.

European cloth.—14,000 maunds of European cloth are imported from the Dehli side, and after allowing for local consumption, the balance is exported towards Bikáner and also Hisár and Sirsa. A very large increase in this trade is anticipated, and European piece-goods will probably be largely imported direct from Bombay.

Country cloth.—2,000 maunds of country cloth is imported from the Dehli side, and 1,000 maunds from the countries to the south. In addition, about 4,000 maunds are made in the town

The export is entirely to the north-west.

Metals.—The imports amount to 30,000 maunds, all from the Dehli side; about 20,000 maunds are now exported towards Western Rájpútána, and 8,000 maunds to the direction of Sirsa. A large development of this trade is anticipated.

Tobacco.—The import for local consumption is 1,500 maunds, of which 200 maunds come from Dehli.

Salt.—Bhiwáni was once the great local salt emporium, but since the opening of the Dehli and Rájpútána line the Sambhar salt is carried direct to Dehli and also southwards from stations nearer to the locality of production. About 150,000 maunds of Didwána salt, however, are still imported, and 100,000 maunds are exported to the east. About 400 maunds of Lahauri salt is imported from

Dehli. It is possible that an export trade in Didwana salt in the direction of Ferozepore may be developed by the railway.

Sarsaf, &c.—Sarsaf (or mustard oil), flax, bamboos, and stone

do not call for special remark.

Cotton.—The import and export of cotton will probably not be affected by the railway, unless an export trade of cleaned cotton should be established with districts down the line. Cotton is imported from the surrounding agricultural districts, and is exported towards Bikáner.

Wool .- The import of wool is chiefly from the west and south. It is calculated that 15,000 maunds are exported eastwards.

Ghi, cotton-seeds, &c. - The trade in these articles will not be influenced by the railway, the supply for local consumption being derived from the surrounding country.

Saltpetre.—About 25,000 maunds are exported in the Dehli

direction.

Country and European threads, country and Kabul fruits, Multani Clay.—These articles do not call for special remarks.

Leather. 9,000 maunds of leather are imported chiefly from the surrounding country. About 2,500 maunds from the west may be expected to come by Hisár by rail, and 6,000 maunds to be exported by rail towards the east.

Coined money. -- Money (called by the traders rokar) will probably be freely sent by rail between Dehli and Bhiwani,

and finds a place in the list of exports and imports.

The total quantity of imports of Hánsi is calculated at 185,000 maunds, and the expert at 260,700 maunds. There is a through trade in sugar, molasses, rice, metals, tobacco, and flax, &c., between Dehli and the west. There is a large export trade in grain (gram and mung) towards Dehli; and a through trade in leather between the west and Dehli. Indigo, cotton and wool, the produce of the neighbouring country, are exported eastwards. All this heavy traffic may be expected to be diverted from the direct road to the railway route vid Rewari.

The total imports of Hisar town are estimated at 117,500 Trade of Hisar town, maunds, and the exports at 46,800 maunds. Being the headquarters of the district, the retail trade is large; and this accounts for the disparity between exports and imports. There is an export trade towards Dehli in grain, saltpetre, cotton, and leather, which will be carried by rail. Similarly the whole of the imported goods from the Dehli side will now be carried by rail. There is a small export trade in wool and cotton towards

the west. It goes by river from Fázilka to Karáchi.

The railway does not touch Fatehábád itself. Fatehábád, Trade of Fatehábád. however, will probably continue to be the trade centre of that part of the district, and will be connected by a straight road with the nearest station. All the local trade which goes entirely east and west may be expected to be carried by rail. There is an export trade in grain (gram and oil-seed) and in hides and leather; cloth, sugar, and rice are imported from the east. The through trade from Sirsa has been mostly accounted for in the estimates for Hánsi and Bhiwáni, which are the chief marts for this trade.

Chapter IV, B.

Occupations, Industries, and Commerce.

Trade of Bhiwani.

Trade of Hánsi.

Chapter IV, C.

Prices Weights and Measures, and Communications.

Prices, wages, rentrates, interest.

SECTION C.—PRICES, WEIGHTS AND MEASURES, AND COMMUNICATIONS.

Table No. XXVI gives the retail bázár prices of commodities for the last twenty years. The wages of labour are shown in Table No. XXVII, and rent-rates in Table No. XXI; but both sets

Period.	Sale.	Mort- gage.
1868-69 to 1878-74 1874-75 to 1877-78 1878-79 to 1881-82	4-5 5-8 5-4	3-15 3-5 3-7

of figures are probably of doubtful value. The figures of Table No. XXXII give the average values of land in rupees per acre, as shown in the margin, for sale and mortgage; but the quality of land varies so enormously, and the value returned is so

often fictitous, that but little reliance can be placed upon the figures.

Local weights and measures.

Coin and	gold weight	s.	Grain weight	s-continue	d.
8 rattis		másha.	4 panserás		dhaun.
12 mashás]	tola.	2 dhauns	1	maund.
5 tolás		l chitack.	Cloth n	neasure.	
	weights.		4 ungals	1	girah.
5 tolás]	chitack.	16 girahs		yard.
4 chhitacks]	pausera.		measure.	
2 pauserás	1	adhsera.	20 kachwánsis		biswansi
2 adhserás]	seer.	20 biswánsís		biswah.
5 seers	ber 1	pansera.	20 biswahs	1	bigah.
The foures i	n the mar	min show	the communicati	ons of the	district

Communications.

The figures in the margin show the communications of the district

Communications.	Miles.
Railways	75
Metalled roads	42
Unraetalled roads.	509

as returned in quinquennial Table No. I of the Administration Report for 1878-79; while Table No. XLVI shows the distances from place to place as authoritatively fixed for the purpose of calculating travelling allowance. Table No. XIX shows the area

taken up by Government for roads and railways in this district.

Railways.

The State Railway from Rewári to Firozpur runs through the, district for 75 miles, with stations at Bhiwáni, Bowáni Khera Hánsi, Satraud, Hisár, Jakhaud, Adampur, and Bhattu.

Roads.

The following table shows the principal roads of the district, together with the halting places on them, and the conveniences for travellers to be found at each:—

Route.	Halting place.	Distance in miles.	Remarks.
Dehli to Sirsa.	Mundahal Sorkhi Hansi Hisar Agroha Badopal Fatehabad	10 16 13 8 9	Unmetalled. Encamping-ground and sarai. Partly metalled. Police bungalow. Metalled. Dak bungalow, police bungalow, sarai and encamping-ground. Metalled. Dak bungalow, sarai and encamping-ground. Partly metalled. Police bungalow, sarai and encamping-ground. Encamping-ground. Unmetalled. Dak bungalow, sarai and encamping-ground.
Hansi to Bhiwani.	Hansi Bowani Bhiwani	12 12	(As above). Unmetalled. Encamping-ground. Unmetalled. Police bungalow, sarai and encamping-ground.
Bhiwani to Dehli.	Bhiwani .	die	(As above) metalled. Next halting place is Kharak in the Rohtak district.

There are also unmetalled roads from Hisár to Bhiwáni, 34 miles; Hisár to Tuhána (vid Barwála), 43 miles; Tuhána to Ratiya, Prices, Weights 21 miles; Ratiya to Fatchábád, 16 miles; Hánsi to Barwála, 22 miles, on which there are no fixed halting places. A good and Communicaunmetalled road runs along the right bank of the Western Jamna canal. The dák bungalows are completely furnished and provided with servants. The police bungalows have furniture, crockery and cooking utensils, but no servants.

There are Imperial post offices, at Hisár, Hánsi, Bhiwáni, Tusham, Kairu, Bahal, Ratiya, Fatehabad, Tuhana, Barwala and Balsamand; Money Order Offices and Savings Banks also exist at these places.

A line of telegraph runs along the whole length of railway, with a telegraph office at each station.

many of the shown in the margin.

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tributed to shirefurernment there, have, and it lands The Month Ethers and Manufacture the management of the Cons

Table 1 though I bear and Harris and Name and a sink which Tilly Blicker - While Brown To ben Lake Chapter IV. B. and Measures,

Roads.

Post Offices.

Telegraph.

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