CHAPTER XVIII

MISCELLANEOUS OCCUPATIONS

In the text on Economic Trends and in some other chapters the main occupations of the people of Bhagalpur district have been discussed. A discussion on the occupations other than the main occupations may be made here.

According to 1951 census out of the total population of 1,429,069, 1,158,703 persons or more than 81 per cent are engaged in agriculture and 270,366 or about 19 per cent in non-agricultural occupation*. Both agricultural and non-agricultural population have been subdivided into three sub-classes, viz. (i) self-supporting persons, (ii) non-earning dependants and (iii) earning dependants. They are as follows:—

AGRICULTURAL CLASSES

Self-supporting persons		Non-earnir	ng dependants	Earning dependants		
Males Female		Males	Females	Males	Females	
1	2	3	4	5	6	
239,787	74,393	299,350	467,305	43,853	34,015	

NON-AGRICULTURAL CLASSES

Self-supporting persons		Non-earning	dependants	Earning dependants		
Males	Females	Males	Females	Males	Females	
1	2	3	4	5	6	
51,835	9,080	85,791	108,351	8,065	7,244	

The above statistics will indicate the heavy pressure of non-earning dependants in both agricultural and non-agricultural sectors. This leads to a legitimate conclusion that there is a vast availability of properly unemployed persons in both agricultural and non-agricultural classes. Out of the total agricultural population

^{*}District Census Handbook, Bhagalpur, published in 1956, Table I. †Ibid. page, 10 to 11 and 14 to 15.

of 1,158,703 about 27 per cent were self-supporting persons, about 66 per cent non-earning dependants and about 7 per cent earning dependants. In non-agricultural sector the percentages of self-supporting persons, non-earning dependants and earning dependants were 22.2, 71.9 and 5.9 respectively.

A rapid sample survey was made at Sultanganj, a growing township with ample rural features. Sultanganj is also the thana and block headquarters of the same name and is 16 miles west of Bhagalpur. The population is both agricultural and non-agricultural.

The livelihood pattern of Sultanganj according to 1951 District Census Handbook is as follows:—

Total	Per	sons	Agricultural	Non-agricultural population	
	Males	Females	population		
4,212	2,244 1,968		1,067	3,145	
Cultivators of land wholly or mainly owned and their dependants.	Cultivators wholly or unowned depend	mainly and their	Cultivating labourers and their dependants.		
748	35		284	454	
Commerce.	Trans	port	Other service: miscellaneous		
1,433	• 17	4	1,084		

The above statement will show the preponderance of non-agricultural population in Sultanganj. There are three mills—one rice, oil and dal mill and the other oil mill. The first mill (rice, oil and dal mill) is a big mill which has the capacity of crushing 750 maunds paddy and 65 maunds mustard-seed in eight hours. The strength of labourers in this mill is 56 who are permanent employees. The other mills employ fewer persons.

There are 30 grain golas and 35 retail grain shops. There are about 20 retail cloth dealers. There are a few medicine shops. There is a large distillery which employs a large number of hands. It has to be remembered that the men at the actual concerns form only a small percentage of the people engaged in these trades. But there are middle-men, weighers, carters, porters, crushers, etc., who are all directly connected with them. The figures quoted above obviously do not include them.

Besides agriculture, industry, trade and commerce, there are persons engaged in other miscellaneous occupations. Some of them are as follows:—

- (1) Health and Medical Services.—About 100 persons are found to be engaged. They include doctors, compounders, dressers, nurses, dais, male and female servants, sweepers in the hospitals and dispensaries besides the practising vaids, quacks, etc.
- Education Services.—Sultanganj has one degree college with about 30 lecturers, one high school (17 teachers), one middle school (6 teachers), one girls' middle school (6 mistresses) and an upper primary school and a library. There are other men on the staff in various positions. The number will certainly exceed 150 persons.
- Public Administration.—Sultanganj is the headquarters of a block-cum-anchal and a police-station of the same name. In all there are 116 employees including the Block Development Officer-cum-Anchaladhikari. The police strength of the Sultanganj police-station is now 14—one Inspector of Police, one Sub-Inspector of Police, one Assistant Sub-Inspector and 11 Constables. The town outpost (T.O.P.) contains 13—one Havildar and 12 Constables and the anchal force 6. Thus there are 34 employees in the police service at Sultanganj but this is subject to fluctuation.

The State Government in the Industries Department have located an institutional centre of cluster type at Sultanganj in 1962 which would impart training in blacksmithy, carpentry, leather goods making and tailoring and cutting etc. Each section will have 12 trainees and the course of training is of one year's duration. When running properly there will be about 100 persons engaged in this.

Employees of the Union Government.—Sultanganj has a railway station of the Eastern Railway with about 30 employees. There are railway porters, etc., who are not exactly employees. There is a posts and telegraphs office which has 40 employees.

Domestic and Personal Services.—The domestic servants are mostly employed by the businessmen. The number of domestic

servants will certainly exceed 500 persons. It is reported that there is a scarcity of domestic servants here. About one thousand local coolies work at the Jamalpur Railway Workshop, for which several up and down coolie trains move to and from Sultanganj and Jamalpur daily. There are 15 hotels of low standard which employ about 50 servants.

There are a few shaving saloons. Besides, local barbers daily visit different *muhallas* in Sultanganj for employment. About 50 males and 5 females are engaged in this profession.

There is no laundry. The local washermen wash the clothes in the river Ganga. About 35 males and 25 females are engaged in this service. Besides washermen there are 20 tailors.

Sultanganj is typical and shows a surplus unemployed population. The vast field of unemployed labour has also been discussed in the Report of the Bihar Unemployment Committee, Volume I. This Committee was set up by the State Government of Bihar and had worked for years.

In the table which deals with an estimate of the redundant farm population in Bihar in 1951, the details of Bhagalpur are as follows:—

Cultivated land	Self-supporting cultivators (in thousand) of,—							
(net area includ- ing fallow in thousand acres).	Owned land.	Unowned land.	Cultivating labourers.	Total.				
1,043	154.3	57.8	97.9	310.0				
Size of a subsistence			adults at 2 per	Redundant adult				
holding. (acres)	in thouse		in thousand.	population in thousand.				

Thus the report estimated that the redundant farm population of the district is 149.0 thousand consisting of adults only.

Regarding urban unemployment problem the Committee had surveyed 500 families of Bhagalpur and found as many as 244 families affected by the problem of unemployment. The total number of persons affected was 4,167 (2,091 males and 2,076 females). The Committee found 1,139 males and 1,135 females between the age of 16 to 60. The persons wholly unemployed were 280 (203 males and 77 females), partially unemployed persons were 163 (143 males and 20 females) and totally affected persons 443 (346 males and 97 females).

The report of the Bihar Unemployment Committee mentions the estimated population and persons affected by unemployment on the 1st May, 1954 which shows that the estimated number of families in Bhagalpur were 14,663 out of which the estimated number of affected families were 7,156. The estimated population in families showed the total of 122,218 (61,329 males and 60,889 females).

The estimated population in families as shown between the age group 16—60 was 66,697 (33,407 males and 33,290 females). The estimated number of unemployed persons was 8,212 (5,954 males and 2,258 females), partially employed persons were 4,784 (4,194 males and 590 females). The number of illiterate persons, i.e., totally unemployed was 12,996 (10,148 males and 2,848 females).

Regarding the incidence of unemployment in urban areas the percentage of employable males to the male population was 54.47 and of female population 54.67. The percentage of adult group (males and females) to total population was 54.67. The percentage of affected persons to the total persons in the employable age-group in the family surveyed was 19.48 and the percentage of males wholly unemployed to employable males was 17.82 and of females 7.78; while the percentage of males partially employed to employable males was 12.55 and females 1.76.

This leads us to a discussion of the various types of miscellaneous occupations which are usually found in the urban areas. These miscellaneous occupations absorb only a fringe of population but their importance is considerable. The persons employed in miscellaneous occupations with their background of education, technical skill and leadership play a very important part in the economic and social structure of the people. Some of them are covered below.

Public Administration.—The District Census Handbook, Bhagal-pur, 1956, does not mention the figures employed in public administration separately. It has mentioned "Health, Education and Public Administration", under which 2,965 males and 470 females were employed. Their classifications were as follows*:—

^{*}District Census Handbook, Bhagalpur, published in 1956, pp. 58-60. (The figures are of 1951 Census.)

Serial no.		Employers		Employees		Independent workers		Total	
	Marketon	M	F		F	M	F	М	F
	1	2	3	4	5	6	7	8	9
1.	Health and Medical Services.	87	47	564	194	826	112	1,477	353
2.	Educational Services and Research.	••	••	548	112	18	5	566	117
8.	Police (other than village watchmen).	••	••	208	٠	• •	••	208	• •
4.	Village officers and servants (including village	• •	••	137		- •	. •	137	••
5.	watchmen). Employees of Municipa- lities and Local Boards.	••	••	140	••	••		140	••
6.	Employees of State Government.			305	••	••	• •	305	••
7.	Employees of Union Government.	••	• •	132	••	••	••	132	••

These figures of 1951 Census are clearly under-estimated. Moreover, it must be borne in mind that public administration, after independence in 1947 and especially due to execution of enormous development projects since the launching of the First Five-Year Welfare State Plan in 1951, underwent a great expansion. In a the public administration covers a very wide field of public activities. As such the number of persons employed in public administration has considerably increased. Since the District Census Handbook of 1961 has not yet been published, it would be hazardous to come to any definite conclusion. An effort has been made to give the figures of the employees of the few departments. In chapters on Law, Order and Justice and General Administration the strength of police and village watchman and the gazetted officers engaged in public administration had already been covered. The strength of non-gazetted staff under the Bhagalpur Collectorate only in 1962 (June) is reported to be 1,278. The break-up figures were as follows:--

Clerical staff 437, Karamcharies 231, Welfare Inspectors 15, Supply Inspectors 19, Circle Inspectors 36, Village Level Workers 133, Amins 30, Muharrirs 2, Draftsman-cum-Surveyor 2 and Gram Sevaks 373. The other sections, viz., Registration, Excise and Survey Office, etc., have not been included here.

[†]The figures have been collected from the Bhagalpur Collectorate Office.

In local bodies also there has been an enormous increase in the staff. The number of the employees of the municipalities and local boards in 1951 as stated in the table was only 140. The strength of the employees of the District Board, Bhagalpur in 1962 is reported to be 288 in non-teaching and 1,503 in teaching sectors. The number of the employees of Bhagalpur Municipality is reported to be 1,286*.

The District Census Handbook, Bhagalpur in the table had mentioned 208 members of the police force excluding village watchmen in 1951. The total strength of the police (Inspector to Constable) in 1956 was 944.† The present strength of police and village chaukidars has been given in chapter on Law, Order and Justice.

In development sections, viz., Agriculture, Animal Husbandry, Public Works Department, Irrigation, Public Health Engineering, Industry and Labour, Education, Medical and Public Health, etc., the increase is equally striking. The above table of 1951 does not include the employees of the Union Government working in railways and postal communications. There were 442 males and 18 females and 489 males and 27 females in railways and postal services respectively in the district in 1951. The postal and railway communications have expanded a lot and consequently the number of employees in both the services has considerably increased. railway and postal services there are offices of the Central Excise and Income-tax under the Union Government. It appears that also the number of the employees has to a great extent increased. The present figures of persons employed by them and o her Central Government services could not be obtained.

Learned professions

Learned professions include lawyers and their clerks, authors, journalists, sculptors, architects, photographers, musicians, dancers, doctors, teachers and priests, etc.

An increasing number of persons has been following the profession of law. The starting of a Law College recently at Bhagalpur will also contribute to an increase in the number of lawyers. The profession includes lawyers and mukhtars, their clerks, petition writers and touts, etc. The influence of the progressive members of this class on the society is very considerable and has been discussed elsewhere.

The Bhagalpur Municipality has recently imposed Professional tax on the persons living within the limits of the municipality and work for gain. According to the assessment of the municipality in 1962 the number of assessees under Professional tax come to 3,099 out of which 213 are practising lawyers and doctors, 369 employees of the State and Union Government and of private

^{*}These figures have been collected from the offices of Bhagalpur District Boar and Municipality.

†Bihar Statistical Handbook 1956, p. 177.

concerns, and 2,517 are businessmen. There are reasons to believe that many taxable persons have escaped the imposition. But the overwhelming majority of businessmen in Bhagalpur is a clear proof of Bhagalpur being a large business centre. The incidence of trade and commerce is bound to go on increasing and the number under business will multiply rapidly.

Domestic and personal services.—The domestic and personal services have been included also in the District Census Handbook, Bhagalpur under the division Services not elsewhere specified in which 13,630 males and 2,496 females were found to be engaged. * The break-up figures in 1951 census were as follows:—

	Employers		Employees		Independent workers		Total	
	М	F	М	F	M	F	M	F
1	2	3	4	5	6	7	8	9
I. Services otherwise unclassified.	••	••	3,608	713	231	75	3,839	788
II. Domestic services			1,855	435	1,673	404	3,528	839
III. Barbers and beauty shops.	82	••	380	••	1,884	163	2,346	163
IV. Laundries and laundries services.	75	••	211	11	2,066	313	2,352	324
V. Hotels, restaurants, eating houses.	81	••	146		53	••	280	••

Domestic services include cook, kitchen help, domestic servant, water carrier, etc. The census of 1951 enumerated 3,528 males and 839 females engaged in domestic services in the district. This appears to be an under-estimate.

Barbers as stated before are found all over the district. Their number is also an under-estimate.

Like barbers, washermen are also found all over the district and they are paid in kind in the rural areas. The number of washermen appears to be much more than what is mentioned.

The hotels and restaurants throughout the district are of ordinary or poor standard. But their number is on the increase. Cheap eating houses are becoming common and serve hundreds of people everyday. In 1951 census only 280 males were enumerated

^{*}District Census Handbook, published in 1957, pp. 61-64.

in hotels, restaurants and eating houses. By now the number has gone up very considerably. The scarcity of cooks and servants and the floating population that comes to Bhagalpur city and other subdivisional towns everyday has led to the increase of hoteliers.

A large number of hotels and restaurants have been started by the displaced Punjabis and some sweetmeat shops by the displaced Bengalees. The number of tea-stalls, pan-biri shops has very considerably increased.

Tailoring is the occupation of a large number of people throughout the district. Unfortunately the number of tailors has not been mentioned in the census of 1951. Their number is fairly large in Bhagalpur, Colgong, Sultanganj, Banka, Naugachia and the other townships. They are also found in the rural areas as well. No tailor is found without work. The profession is exclusively confined to males. Tailors are mostly Muhammadans. It will be hazardous to guess the number of tailors but it will surely be near about 1,000 persons.

The above discussions will show that occupations other than the main occupations which are rather loosely described as miscellaneous occupations do not keep engaged more than a very small percentage of the people. The discussion of the Unemployment Committee also strengthens the conclusion that the incidence of unemployment is very large and the district can very well allow emigration of a large population for at least seasonal labour outside. It is rather peculiar that the unemployed labouring classes would rather stay back in Bhagalpur district with one meal a day than go out to the tea districts in Assam which can absorb a good number of them on permanent or temporary jobs. The neighbouring district of Purnea has a large seasonal immigration of labourers for the cutting of jute but these immigrants come from the districts of North Bihar and very few from Bhagalpur district. The unemployed labouring classes of Bhagalpur do not normally cut across the district frontiers and go to Purnea for such seasonal occupations.

A certain percentage of the available unemployed population could also be usefully employed in operations in connection with marketing if the market is properly organised. The census figures do not indicate clearly the number of people that are engaged in handling marketable produce as apart from the people who actually produce marketable goods. Probably the people engaged in the operations in connection with market operations are vaguely clubbed under business operations or under some other nomenclature. It has to be remembered that the rules under the Bihar Agricultural Produce Market Act, 1960 have not been promulgated by the Government and hence conditions in the market are still allowed to be moving on traditional lines. It may bear repetition that Bhagalpur district is quite self-sufficient in paddy, just sufficient in wheat and is a surplus district in gram and maize. The district is slightly in deficit in pulses, oil-seeds, etc., as their

consumption in maunds per year is 6,00,000 while the production in maunds 4,90,060. There are 21 markets, 41 hats, and 12 fairs in Sadar Subdivision while Banka subdivision has 8 markets, 58 hats, and 7 fairs. Marketable surplus for rice is 33—37 per cent, for maize 40—45 per cent, for wheat 45—50 per cent and gram 40—42 per cent. The marketing seasons for rice, maize, wheat and gram are October—April, August—March, April—September respectively. The important markets of the district as mentioned before are Bhagalpur, Sultanganj, Colgong, Pirpainty, Naugachia, Jagdishpur and Barahat. Facilities for storage are available at Bhagalpur, Colgong, Pirpainty, Naugachia and Sultanganj. The State Warehousing Corporation has been running a State Warehouse at Bhagalpur from January, 1961 for proper storage of agricultural produce and for affording credit facilities. The present storage capacity of the warehouse is about 6,000 bags.

It is felt that during the marketing seasons for the marketable surplus in rice, maize, wheat and gram there could be more people engaged if better warehouse facilities are offered and marketing intelligence are disseminated. There is no reason why warehouses cannot be set up in the private sector.

At present there is no regulation of commodities for fixing up of market area and hardly much concrete work has been made for market development. There is no study of market prices, price trends and their publicity. Marketing conditions and practices are too traditional and conventional and there is no doubt that they are in the hands of coteries who would not admit freely other people within their groups. There is a clear avenue for absorption of more men in this line.

A partial solution of the unemployment problem of Bhagalpur district lies in starting some large industries. According to the Banking Enquiry Committee of Bihar and Orissa in 1930, the principal business in Bhagalpur was in piece-goods, grain and seeds. After the lapse of 30 years the principal business still remains the same. The same committee report had pointed out that 50 years back the value of the silk business in Bhagalpur town was about four to five lakhs only. In 1930 when the Enquiry Committee Report was published the total value of silk business in Bhagalpur town had come up to Rs. 20 to Rs. 25 lakhs. In the last 30 years there must have been a great increase in sale output. Figures for correct assessment of the current outputs are, however, not available.

The closure of the Joint Steamer Company had led to a decline in water-borne trade. The Ganga-Brahmaputra Water Board Transport sponsored by India Government has been trying to tackle the problem. The main commodities of inward traffic are grain and seeds, coconut oil, sugarcandy, miscellaneous goods, machinery, pulses, filter cloth, iron, linseed, turmeric, consumer

goods, onions, and castor oil. The outward traffic consists of grain and seeds, gur, castor seeds, linseed, iron, kalai, mustard oil, consumer goods, sugar, oils, and wooden goods. The Ganga-Brahmaputra Water Board Transport had also opened a station at Bhagalpur but owing to the undercutting of business by the small boatmen they have not been able to make much headway. Their station at Colgong is better patronised. The operations of the Ganga-Brahmaputra Water Board Transport will surely revive riverine trade and give occupation to a good number of men.

The industrial potential of the district has been discussed elsewhere. A district with this type of exports and imports which has been partially revived by the Ganga-Brahmaputra Water Board Transport and where the commercial importance has gone up tremendously due to the development of railways and roadways is surely capable of developing some large industries like textile mills, silk factories, cold storages, sugar mills, ice factories, etc. Bhagalpur has got quite a number of very substantial businessmen. There will not be dearth of finance. There is ample space available near the town for starting some large industries.

There are also avenues for medium and small industries. Bhagalpurhas excellent possibilities for an assembling unit, and Engineering concern with facilities for fabrication and making of nuts, bolts and rivets, a re-rolling mill, etc. A large well-equipped automobile repairing shop could easily run here as Bhagalpur is the centre through which a large number of automobiles pass.

During the slack agricultural season a portion of the agricultural population could be employed in canning fruit. Bhagalpur is rich in mango and other garden fruits. There was a bumper mango crop in 1962. Even in Bhagalpur, the district headquarters, which has a good link of roads the famous local variety of zardalu mango was sold for three to four rupees per hundred. local variety of maldah and bombai mangoes was sold four to six rupees per hundred. This low price at the peak period of supply of mangoes in 1962 could not benefit the owners of mango orchards. The middlemen alone profited by investing money and taking risks and sent mangoes by trucks to Jamshedpur, Delhi, Calcutta and even to distant places in Maharashtra. Had there been a fruit canning industry much of this mange crop could have been held back for the future and even for export to foreign countries. In Sabour Agriculture Institute there is a small unit under the Industries Department making fruit preserves and syrups. A scheme for canning fruits has not yet been experimented upon and there is no reason why it cannot succeed. In certain places of the country there are community fruit preservation centres where housewives take their surplus garden produce like goose-berry, guavas, etc. and get them canned and learn the process of canning which is easy to follow.

Another economic potentiality of the district is fisheries in which a percentage of surplus population of the district could be employed. Fish cultivation can be much developed if properly guided. The Ganga Survey Unit of the Central Inland Fisheries Research Institute has, for some years past, been observing the species composition of the gangetic fish landed at Bhagalpur. Their data show the seasonal and annual fluctuations in fish abundance according to variety of fish for all commercial species of fish marketed here. There is a proposal to further intensify the research activities of the department of Bhagalpur with a view to acquire, to a fuller extent, an understanding of the population dynamics of economic varieties of fish. In the new programme of work natural breeding grounds of fish have to be located and charted and fish survival in the early stages of the development of fish upto their recruitment into commercial fishery, have to be biometrically studied. Such modern tools of fishery research as are proposed to be applied to the field are likely to have a great significance of the gangetic harvest much in the same way as a meteorologist forecast the weather with which is ultimately connected the agricultural production of the land.

A very large quantity of small fish which is particularly suited for being dried and salted is sold daily at a much lower price. Drying and salting fish is an occupation in portions of Singhbhum and Purnea districts only. In Darbhanga district also small species of lobster (*jinglia* or *chingri*) is salted and consumed. There is a good market for dried and salted fish in West Bengal with which Bhagalpur is connected both by rail and roads.

Bhagalpur can very well give occupation to a large number of men by the starting of a large milk colony and dairy farm on the lines of Aarey Milk Colony of Bombay or Haringhata Colony of Calcutta. The northern portion of Bhagalpur is noted for ghee and butter and a large quantity of milk, curd and chhena come to Bhagalpur by Mandar-Bhagalpur trains. Pirpainty and Mirzachowki send out large quantity of chhena to West Bengal, particularly to Bolpur and Burdwan. There is ample scope for developing the industry of milk products under scientific processes.

Sheep and cow-breeding could also be well encouraged. As will be apparent from the census of 1931 Bhagalpur district has a large number of Ahirs or Goalas but unfortunately the number of Ahirs who follow their traditional occupation is getting smaller and smaller. It appears that the number of cows in Bhagalpur has also decreased in the census of 1956 which enumerated 179,935 cows as against 203,490 in 1951*. She-buffaloes were 48,178 in 1951 which rose to 60,398 in 1956. Thus the

^{*}Bihar Statistical Handbook, 1956.

³² Rev.-45,

increase of 12,220 in she-buffaloes to some extent compensated the decrease in cows. Moreover the average she-buffaloes give more milk than the average cow.

Like cows and buffaloes rearing of sheep and goats is also an occupation subsidiary to agriculture. Its importance lies in the fact that sheep and goats are mainly reared by the agricultural labourers who have not got enough land to plough. We have seen that the number of landless labourers in the district is fairly large. A fair percentage of them can be economically engaged in rearing sheeps and goats. The price of meat in Bhagalpur varies from Rs. 3 to Rs. 3-8-0 per seer; while at Patna meat is available at Rs. 2-4-0 to Rs. 2-8-0 per seer (1962).

Eggs and chicken in Bhagalpur are slightly more expensive than Patna. There is much more scope in keeping poultry in the average household in Bhagalpur than in Patna. There is a State poultry farm in Bhagalpur now and there are subsidiary poultry stations at different places. These poultries are meant for distributing eggs for hatching purposes and most of the eggs distributed for these purposes are consumed at the table. Poultry industry in this district has potentiality of development. It is rather unfortunate that low income and small income-group people are not turning to the keeping of goats, sheeps and birds within the house plot to supplement their diet or income.

In the Third Five-Year Plan the State Government has decided to encourage the keeping of more pigs. There is an idea of pig utilisation by the preparation of pork, ham and bacon. The number of pigs in 1951 was 14,513 which came down to 10,885 in 1956. Pigs are only reared by Dusadhs, Doms and Halkhors. The number of pig rearers approximately come to between 1,000 to 1,500 in the district. Pigs are reared and kept in a very crude and unwholesome unhygienic manner. Under proper guidance with the necessary tools and plants there is no reason why good pork, ham and bacon cannot be made locally. At present the Dusadhs do prepare some kind of pork, ham but follow the traditional method which is not clean.

The Bhagalpur Co-operative Milk Union helped by the State and the Central Government has started functioning from 1956. In 1961-62 2,10,654 litres of milk and 35,218 litres of milk products were sold. There are three milk supply booths in the town. Recently a pasteurisation plant has been installed.