

CHAPTER XII.

OTHER DEPARTMENTS.

AGRICULTURE DEPARTMENT.

There is a District Agricultural Officer with his headquarters at Motihari who is in charge of the Agriculture Department. The Director of Agriculture, Patna is the departmental head at the State level and the Deputy Director of Agriculture at Muzaffarpur at the Divisional level is the superior authority of the District Agricultural Officer. The District Agricultural Officer is assisted by two Subdivisional Agricultural Officers with their headquarters at Motihari and Bettiah. He has his own field staff. There are some subject-matter specialists and technical men, such as a Botanist, a Chemist, a Horticulturist and a Mechanic, one Marketing Inspector, one Fisheries Inspector, one District Engineering Supervisor, one Well-boring Supervisor, etc.

There is one Demonstration Farm at Peepra, where a Farm Manager, with three Agricultural Inspectors and one Junior Research Assistant work with some subordinate staff.

The two Subdivisional Officers at the Subdivisional headquarters have their own staff of Agricultural Inspectors, Fisheries Supervisor, Engineer, Overseer, Horticultural Inspector, etc.

Lower down in the Blocks or definite zones with a number of villages, there are Agricultural Extension Supervisors, with Farm Assistants, Ploughmen, etc., under the Block Development Officer.

The duty of the staff is to implement the agricultural policy of the Government. The work starts right at the fields. There are *Field Assistants*, who conduct experiments in the fields of the cultivators on various crops in accordance with the plan sent by the Field Experimental Specialists, Bihar, Patna. They take timely observations, maintain proper records and submit reports and returns, which help the specialist in his work according to a plan and on a scientific basis. There are *Agricultural Inspectors* for arranging supply of seeds, fertilisers, implements, etc. They are assisted by some *kamdars* who look after the maintaining of stores and in feeding and proper up-keep of the bullocks. There are also Junior Research Assistants who help in conducting experiments in accordance with the plan laid down by the Agronomist and study and report the timely observations. They are assisted by the Fieldmen in agronomical experiments and taking observations thereof. For expert advice, there are Subject-Matter Specialists, specialising in different subjects like Agronomy, Botany, Chemistry, Horticulture, etc., who all try to carry on the demonstration and propaganda work on a most dependable and correct line. The idea is to bring modern scientific knowledge about agriculture to our cultivators.

Efforts are also made towards popularising the improved implements. Technical men with mechanical skill attend the meetings of the blocks and advise the village level workers on the use of the improved implements, tractors, etc. They hold demonstrations and ascertain the cultivators' problems regarding the improved tools and find out their solution.

Besides popularising of scientific methods of cultivation, improved implements, etc., as has been mentioned above, the Department also comes to the aid of agriculturists in the problem of irrigation. Indian agriculture, as has been commonly held, is the gamble of the monsoon. Strenuous efforts of the people are set at naught if the rains fail in times of need. Medium and Minor irrigation works, surface percolation wells and diesel driven pumping sets are arranged with the minimum financial burden on the consumers. There are *Well-boring Supervisors*, who inspect and supervise the work of the borers engaged in boring operations of the tube-wells of different sizes as well as open boring without strainers. This aspect of the scheme is under the overall supervision of *District Engineering Supervisor*.

There are two important farms, e.g., at Peepra and Bettiah, managed and owned by the Government. There are *Farm Managers*, who carry on the work of the farm with the help of Sardars, ploughmen and some other subordinate staff. The proper sowing and upkeep of crops, maintenance of cattle, etc., are attempted in the Farm, and results of varieties of seeds and methods are recorded. The cultivators are encouraged to see the actual working in the field and profit thereby.

The District Agricultural Officer has to control, guide and supervise the execution of all types of agricultural schemes functioning in the district and to co-ordinate their activities and act as agricultural advisor. Previously the District Agricultural Officer was entrusted with the work of supervision and control of the overall aspects of agriculture. But gradually the production of sugarcane and development of fisheries grew in such prominence that they caught special attention. Foreign exchange consideration and local consumption necessities combined to separate the sugar and fisheries sections from the previous general set-up. There is one Assistant Director of Agriculture since the year 1957-58, specially entrusted with the sugarcane development work and there are Fisheries Inspectors under the District Agricultural Officer to see the fisheries extension work. Research in sugarcane is going on in the Institution for Sugarcane Research at Pusa in Darbhanga District. The Assistant Director for Sugarcane is in close touch with the Specialists at Pusa. As regards the sugarcane development work, there are two Assistant Directors of Agriculture, stationed in the sugarcane belts at Motihari and Narkatiaganj, respectively. These Assistant Directors of Agriculture are assisted by the Agricultural Inspectors, who concentrate

their work in the reserved areas of the sugar factories of this district. In each of the sugar factory reserved areas, the Inspectors generally organise demonstrations by even sowing and producing better type sugarcane on the selected plots and then popularise the scientific and productive process of production. The selection of demonstration plots is made on a definite pattern and sought to be made popular. The Pusa Institute has, by intensive research, brought out special varieties of sugarcane with higher yield. They have also researched on pest-control and sugarcane diseases. The results of their researches are sought to be propagated.

The changes sought to be brought about in the agricultural structure, it appears, have been impeded to a great extent by meagre finance, scruples, and lack of interest of the agriculturists. Since the beginning of the First Five-Year Plan till July, 1958 in the Second Five-Year Plan, only 4,733 maunds of improved seeds have been distributed as against a target of 30,176; out of a target figure of 1,445 Bihar ploughs to be distributed, only 296 have been distributed and out of 587 manurial demonstrations to be made, only 92 have been made. So far only 696 maunds of *dhaincha* and 9,080 maunds of *sunai* have been distributed as green manuring seeds. Attempt is being made to popularise the Japanese method of cultivation. Certain improved implements, like puddler, Japanese weeder cultivators, etc., are being distributed.

The sugarcane development work has received close attention during the few years past. The production target of sugarcane at the end of Second Five-Year Plan (1960-61), has been fixed at 45 lakh tons, for the whole State, i.e., an increase of 50 per cent over the production of the base year (1955-56). Targets for cane development work for each Sugar Factory Area in Bihar have been fixed up, for each year of the schematic period for distribution of manure and fertilisers, establishment of seed nurseries, distribution of disease free cane seeds of improved varieties and organisation of demonstration, etc., which may result in achieving the target.

Like sugarcane, the Fisheries Section has also been receiving more attention now. This section is functioning since 1945 in this district. It was a part of Industries Department, till the 31st March, 1952 and from that date, it became a part of the Agriculture Department. Till the 31st March, 1956, there were one Fisheries Inspector and one Fisheries Assistant, posted at the headquarters at Motihari. But from the 1st April, 1956, the Fisheries Section has been completely integrated with the general administration and extension organisation of Agriculture Department. Now (1959) there are one Fisheries Inspector, two Fisheries Sanctuary Supervisors, four Fisheries Guards placed under the administrative control of District Agriculture Officer and two Fisheries Nursery Supervisors, one each

placed under the Subdivisional Agricultural Officers at Motihari and Bettiah.

The staff in the Fisheries Section have to develop the resources of the fisheries of the district through intensive collection and distribution of fish fry, development and exploitation of Khasmahal tanks, participation in exhibition and fairs for propaganda about the development of fisheries by manuring of tank and other means, development and exploitation of Government reservoirs, tanks and ponds and improvement of storage and transport of fish in markets.

Since 1956-57, one more fry distribution centre has been arranged making a total of two in the district, one each at the subdivisional headquarters at Motihari and Bettiah. Fish fries are distributed usually at a cheap price. Two demonstrations in the year 1956-57 and three demonstrators in the year 1957-58 regarding manuring of tanks have been conducted and also 12 demonstrations regarding paddy-cum-fish culture have been conducted in the year 1957-58. No proper arrangements have been made so far as the basic market survey is not completed. This district was once a great source for various types of fish including *mahseer*. The *mans* or channels of water are getting choked and silted and thus a great source of fish has been declining. The fishermen are mostly scattered all over the district and disunited and there is not much of co-operative system either to catch or sell fish. The Fisheries Section have a great problem before them.

FOREST DEPARTMENT.

In this district, there was no State-managed forest till the 5th November, 1951. The management of the Ramnagar Estate Forest came under the Forest Department, Bihar under the Bihar Private Forests Act (Act IX of 1948) on the 9th October, 1950 and later on with the application of the Land Reforms Act (Act IXXX of 1950) the Ramnagar Estate vested in the State of Bihar and consequently Indian Forest Act was applied to the forests by January, 1954. The forests of Bettiah Estate also came gradually under the Government management.

The forests in the State are under the Forest Department with the Chief Conservator of Forests at the head who has his headquarters at Ranchi. The jurisdiction is divided under two territorial circles, namely, Northern and Southern Circles, each of which is under the charge of a Conservator of Forests. Besides there is another circle called Development Circle, which looks after the afforestation side whereas research, utilisation of forest resources and working plans are directly under the Chief Conservator of Forests. The forests in Champaran district are under the jurisdiction of the Conservator of Forests, Northern Circle, with headquarters at Hazaribagh.

A Forest Division is the organisation for the proper management of forests for a specified zone. Every Forest Division is under the charge of a Divisional Forest Officer. The forests of North Bihar Division form a Division under the charge of a Divisional Forest Officer with his headquarters at Bettiah.

The forests of North Bihar Division are distributed under six ranges, namely, Madanpur, Gonouli, Bagaha, Western, Central, Eastern, with one Forest Range Officer for each range. Gonouli Range has got three Beat Officers of the rank of Foresters and under them are Forest Guards to look after their sub-beats. The ranges have been divided into 14 beats, each under the charge of a Beat Officer. Further these beats are again divided into 57 sub-beats each of which is under the charge of a Forest Guard. One beat covers nearabout four or five sub-beats which in their turn cover an area of approximately five square miles.

The duties of a Forest Officer include—

- (1) Proper management of the existing forest so that the condition of forest may improve and the maximum sustained annual yield may be procured.
- (2) To meet the demand of the Tharus and Dhangars who happen to be privileged holders of Bettiah Estate pay cess of six annas per bigha of their holding and in return they are supplied with timber and firewood for their domestic and agricultural requirements. Similarly for Tharus and Dhangars of Ramnagar Estate, there is a system of *charsa* permit on payment of prescribed fees for them and on these permits they are entitled to take firewood and timber for their domestic and agricultural requirements.
- (3) Bettiah Estate Forests were formerly worked under the Working Plan. But there was no regular planned management in Ramnagar Estate Forests. After the forests have come under the management of Government, a Working Plan has been drawn up for both the Bettiah and Ramnagar Estate Forests by the Working Plans Officer, Northern Circle.

The forests of Bettiah and Ramnagar Estates are now being worked under a scheme of the Working Plans Officer, Northern Circle. The yield is regulated by enumeration and on the basis of available trees of exploitable girth, making one tree out of three exploitable ones at a place.

The felling of miscellaneous and *semal* trees is regulated on the basis of a sustained yield from year to year keeping in view the object of building up the forest capital with improved growth and quality. The annual yield of *khair* trees has also been fixed.

The cane forest is being worked in a four-year cycle dividing the forest into four equiproductive parts each to be worked in a year so that the period elapses between two successive fellings in the same area is 4 years which is considered sufficient to develop a good growth of cane for its commercial use.

The chapter 'General' has a statement regarding the total revenue and the total expenditure of the Forest Department (Bettiah Division). The years from 1950-51 to 1956-57 have been accounted for there. Out of these seven years, last four years have shown a surplus and the first three deficit. But it appears as if the trend of increasing income has become a regular feature. In the year 1953-54, the total revenue is Rs. 93,861 and total expenditure Rs. 82,589; in the year 1954-55, these figures are Rs. 1,73,266 and Rs. 1,82,894 respectively and in 1955-56, Rs. 2,05,682 and Rs. 1,51,275 and in 1956-57, Rs. 4,96,957 and Rs. 1,74,961 respectively which all indicate a healthy trend.

A series of roads and bridges have been made by the Forest Department which has made access possible into difficult but productive tracts of the forests. Thereby more exploitation of the forest resources has been made possible. The following forest roads existed which were taken over by the Forest Department, when the forest came under its management :—

	Miles.
(1) Ganauli-Jharharwa	3
(2) Ganauli-Jatashanker	9
(3) Hathimalkhanta-Kalapani	4
(4) Bhainsalotan-Kharkharia	1
(5) Bherihari-Pathlahwa	8 $\frac{3}{4}$
(6) Kobraha-Thari	3
(7) Darmahari-Lachmipur	1
(8) Pipra-Chunbhatta	3
(9) Rampur-Bhainsalotan	24

Out of the above, the Ramnagar-Bhainsalotan road has been handed over to the Public Works Department, in the year 1958, for construction of a *pucca* road between Bagaha and Bhainsalotan in connection with the Gandak Project. No forest roads existed in the Ramnagar forests.

After the Forest Department took over the management of both the Ramnagar and Bettiah Estate forests, the following roads have been constructed so far with a view to open the inaccessible forests for proper management and exploitation :—

	Miles.
(1) Gobardhana-Thori	10
(2) Gobardhana-Gardi	5
(3) Raghia-Bankutwa	2
(4) Gardi-Kalapani	6
(5) Baluthappa-Gardi	6

Two Forest Rest Houses, one at Naurangia and one at Gobardhana, in addition to the two previously made, and some residential and office quarters have been constructed by the Department.

ANIMAL HUSBANDRY DEPARTMENT.

Previously, under the name of Veterinary Department this Department had worked with limited scope and action. The work of the entire district was supervised by a non-gazetted Veterinary Inspector with his headquarters at Motihari. There were only three Veterinary Hospitals in the district, one each at Bettiah, Motihari and Bagaha. The Hospital at Bettiah was run by the Bettiah Estate and the rest two by the District Board. Besides there were five dispensaries, one each at Chakia, Areraj, Dhaka, in the Sadar subdivision and Bettiah, Narkatiaganj in the Bettiah subdivision. With these centres, the Veterinary Department worked only on the curative side. Prevention of the outbreak of diseases by vaccination, etc., endeavours to improve the general condition of cattle health by fodder arrangements through development and demonstrations of fodder production, etc., were not at all taken up during those years. But now with the enlarged scope, the field covers both curative and preventive measures. The Animal Husbandry Department now is concerned with livestock and its activities are mainly the development of livestock industries, including breeding, nutrition, research, disease control, dairy, production of fodder and marketing of animal produce.

The scheme for the establishment of the 'supervisory posts of the Animal Husbandry Department in the district of Champaran was introduced during 1957. Under this scheme, two administrative posts, viz., District Animal Husbandry Officer with his headquarters at Motihari and Subdivisional Animal Husbandry Officer with his headquarters at Bettiah were sanctioned and the officers joined their respective posts during May, 1957.

The officers are required to visit each Animal Husbandry Institution in their respective jurisdictions. The Subdivisional Animal Husbandry Officer at Bettiah works under the supervision of the District Animal Husbandry Officer.

The District Animal Husbandry Officer at his headquarters at Motihari is assisted by one Veterinary Assistant Surgeon, Incharge Rinderpest Scheme, one Livestock Inspector, one Fodder Overseer and some office assistants.

Expansion of Veterinary Services.

Under this scheme several Class I Veterinary Dispensaries have been started under the management of the State Government, with a view to give treatment to diseased animals and to attend the outbreaks of cattle disease. During the First Plan Period, the Class I

Dispensaries were started at the places where they were needed most. But from the Second Plan Period, the State Government has adopted the arrangement to start Class I Veterinary Dispensaries at the Block Headquarters. So far, the Department has started 12 Class I Veterinary Dispensaries besides six Veterinary Dispensaries which are managed by the District Board. In all the Dispensaries the technical staff, viz., Veterinary Assistant Surgeons are provided by the State Government. The dispensaries started by the State Government during the First Plan Period are at Bettiah (Hospital), Sugauli, Ramnagar, Gaunaha, and during the Second Plan Period are at Madhuban, Pakridayal, Turkaulia, Sidhao, Dhanaha, Patarhi, Kessariya, Mainatanr and Mehshi, and those started by the District Board are at Chakia, Raxaul, Dhaka, Areraj, Narkatiaganj and Bettiah. These dispensaries treated cases of general diseases, carried out castrations and inoculations and worked in epidemic outbreaks during 1957-58.

Provincialisation of Veterinary Hospital.

The Veterinary Hospital at the district headquarters, Motihari, under the District Board was taken over by the Department under the management of the State Government from 20th July, 1957. One Senior Veterinary Assistant Surgeon in Junior Class II of Veterinary Service has been posted to this hospital.

The average daily attendance of the Provincialised Veterinary Hospitals, Motihari is reported to be on the increase. The treatment to animals is made here at a charge which varies according to the classification of its owners.

All-India Key Village Scheme.

This scheme provides the following item of work to be done :—

Opening of All-India Key Village Centre.—All-India Key Village Scheme was sponsored by the Government of India and has been in operation in the State since 1952. The scheme aims at improving the general efficiency of the cattle by adopting scientific methods of breeding, feeding, disease control and marketing. Selected bull calves are reared at the key villages for distribution after maturity for the purposes of upgrading. Under this scheme one key village centre was started at Shikarpur on the 16th December, 1954. The work of the centre was managed by one Artificial Insemination Inspector, with 6 Stockmen and there were 4 key village units during the First Plan Period. During the Second Plan Period the centre was extended and 2 more key village units were added to the key village centre. The number of Stockmen was also increased from 6 to 8. Thus there are 6 key village units at

present running under the main key village centre. The centre has since been shifted to Bettiah from Shikarpur.

There are 31 villages in the key village centre. There are 3,820 cows and 1,271 buffaloes fit for breeding purpose in these key villages (1958). Six hundred and twenty-two cows have been inseminated artificially and 197 by natural service. One hundred and fifty-seven calves have been born from the insemination done artificially and 23 by natural service.

Poultry Development Scheme.

There are four Poultry Extension Centres and one Poultry Hatching Centre in the district. These Centres produce eggs out of which some are sold for hatching, some used in incubator at the Farm and some are sold for the table.

Production and Trial of Fodder in Bihar.

One hundred demonstrations in each National Extension Service Block are required to be done for which Rs. 160 has been provided in each Block. One thousand four hundred and seventy-two demonstrations have so far (1958) been made.

Animal Husbandry Extension Work.

For the execution of the schemes of the Animal Husbandry Department one qualified Extension Supervisor has been posted in each block under the administrative control of the Block Development Officer.

Scheme for Eradication of Rinderpest.

The Rinderpest disease takes away a heavy toll of cattle and the State has therefore introduced a scheme to eradicate the disease. One Veterinary Assistant Surgeon, 3 Livestock Supervisors and 22 Stockmen are working under this scheme. On an intensive scale vaccinations against Rinderpest have been made.

INDUSTRIES DEPARTMENT.

The Head of the Department is the Director, who is assisted by two Additional Directors at Patna. The Department has been divided into two branches, one Technical Education and the other General Administration and Extension programmes. There are also technical experts earmarked for each division who are known as Assistant Directors.

In the district of Champaran, there is one District Industries Officer, with one Subdivisional Inspector each for both the subdivisions. The Inspectors look after the schemes of Industries being financed by the Department. The Department is primarily meant

to develop small scale and cottage industries of the district, and thus somehow ease the unemployment tension. The District Industries Officer with his Inspectors studies the scope of a particular zone and local people and arranges for machineries for small industries. They provide for technical education through which the people trained therein may acquire livelihood by manufacturing things of general use. It is for the Industries Department to study the people, requirements and possibilities and select particular types of small cottage industries for the area. There are two sorts of industrial centres in the district: (a) one under the direct control of the Block Development Officers and (b) under the direct administration of the District Industries Officer. The Inspector of Industries, stationed at Bettiah, does the supervision work of the Industrial Centres at Bettiah including those under the Block Development Officers.

The following centres are directly under the administration of the District Industries Officer :—

- (i) *Bettiah Model Tannery*.—Tanning in a large scale will be taken up, but the work has not started. There is availability of raw materials and a certain amount of skill in curing hides and in hide business.
- (ii) *Tanning and Tutorial Class, Bettiah*.—Working since September, 1958. This has been established here after being shifted from Biharsarif. Generally training is given to Harijans and Backward Class Mohammadans.
- (iii) *Cane Bambooware Centre, Bettiah*.—Started from the month of August, 1958. Training in cane and bamboo product is given here.
- (iv) *Glass Bangle Centre, Jiwadhara*.—Started from August, 1958. Bangles-manufacture is taught. The sand that is required is locally available.
- (v) *Dyeing and Printing Industries, Chakia*.—Working since the year 1954.
- (vi) *Weaving Demonstration, Chakia*.—Training in weaving is given here.

Tanning Tuitional class at Bettiah, although started in the month of September, 1958, yet began actually training the desirous persons since January, 1959. Altogether 12 students have been receiving training here, out of which eight are *Chamans* and four are Mohammadans. The period of training lasts for six months, but it is being thought to extend this period by six months more. There are so many processes of tanning, and each of the processes takes at least nearabout a month in being finished. First of all the leathers.

which remain in the skin form, are taken to liming with lime liquid, etc. Then deliming is done with Boric Acid or wheat brio and finally tanning.

There are two processes of tanning : (a) Vegetable tanning and (b) Chemical tanning. The first tanning is taken up in the liquid formed by mixing certain plant's special part, whereas the second one in the liquid of some chemicals. But the second system is dangerous in the rustic village system where it is meant to be popularised, and therefore, generally the first one is taught and preached.

After being trained, one man with a capital of one or two hundreds of rupees, can earn a profit of Rs. 2 or Rs. 3 per day. The raw materials and equipments are not very costly.

As regards the Cane and Bambooware Tutorial class, this institution was started since August, 1958, but preliminary preparations and arrangement of raw materials and trainees, took some months, and it started actual training since January, 1959. The period of training here is for six months, the sessions being from January to June and July to December.

Training is given here to manufacture round, waste paper basket, fruit basket, table flower basket, cycle basket, tiffin carrier, table, easy chair, photo frame, etc.

Up till now (1959), no permanent arrangement for sale of goods manufactured here has been made. No show rooms or shops have been established as such. The sale is arranged by the Senior Instructor, in the local markets or in *Bikash Melas* wherever held.

Persons trained here can earn from Rs. 2 to Rs. 10 per day on an average, with a similar capital of Rs. 50 to Rs. 500. The articles manufactured here attract a reasonable price leaving a good margin.

CO-OPERATIVE DEPARTMENT.

With the Registrar at the head on the State level, the Co-operative Department in the district of Champaran is in the administrative charge of the Assistant Registrar, Co-operative Societies, Motihari Circle and Assistant Registrar, Co-operative Societies, Bettiah Circle, with their jurisdictions of Motihari and Bettiah subdivisions, respectively. Over these Assistant Registrars, there is the Deputy Registrar, with headquarters at Muzaffarpur.

The Assistant Registrar, Co-operative Societies, Motihari Circle, is assisted by 1 General Manager, Motihari Central Co-operative Bank, 2 Inspectors, posted at Dhaka and Motihari, 3 Organisers at Motihari, Sugauli and Chakia, 19 Local Auditors, 2 Managers Bikash Mandals, Marketing and Supplies in the grade of Inspectors and some office staff. For Canegrowers' Co-operative Societies he is given 3 Organisers and 12 Supervisors who organise Canegrowers' Co-operative Societies and inspect and supervise their operation as

provided under the Bihar and Orissa Co-operative Societies Act, 1935. Besides all this he has in his charge the Land Mortgage Bank also, with one Branch Manager and one Land Valuation Officer. Their work is to settle debts through the mortgage of lands.

Each of the Supervisors is placed in charge of 30 to 40 societies. It is their duty to maintain the records correctly and to assist in the smooth working of the societies in their charge. The Inspectors of Co-operative Societies supervise the working of the Supervisors at least once a year, with regard to each of the societies in charge of the Supervisor and suggest improvements thereupon. The Local Auditors, Co-operative Societies, audit the account for the co-operative year. The Assistant Registrar, Co-operative Societies, co-ordinates the organisation and smooth functioning of the Co-operative Societies and registers the primary Co-operative Societies and industrial Co-operative societies. So far as the Co-operative farming and other societies are concerned, the Deputy Registrar, Co-operative Societies, Tirhut Division, Muzaffarpur, registers them.

Very recently (1958), the Canegrowers' Co-operative Societies have been linked up with the General Co-operative Societies, with only one Assistant Registrar over both the Sections, as against two previously. The Organisers and Supervisors in the Canegrowers' Co-operative Societies Section work so as to fetch reasonable price for sugarcane and also distribute improved cane seeds and fertilisers.

At the close of the year 1957-58 (31st March, 1958), there were 10 Co-operative Development and Cane Marketing Unions with 1,463 primary Canegrowers' Co-operative Societies affiliated to these Unions. Seventy thousand seven hundred and thirty-three canegrowers stood as members on roll, in these primary societies. Their total working capital including the balance of Rs. 13,06,571, being loans and deposits held, amounted to Rs. 27,13,323. Their total investments in the shares of the State Co-operative Bank, Patna, Central Co-operative Banks of the district, National Savings Certificate, Financial Corporation, etc., at the close of the year amounted to Rs. 3,40,302.

One lac twenty thousand nine hundred and eighty-six maunds of cane seeds of improved varieties, including 29,313 maunds of castor cakes and 12,037 maunds of fertilisers comprising of Ammonium Sulphate and Superphosphate were advanced to growers in assistance to improve sugarcane cultivation on modern improved methods. For proper lay-outs of fields, 1,728 sets of Bihar ploughs, 19 tractors with 21 implements were kept in use by the members of these Canegrowers' Co-operative Societies.

The total cane supply to different sugar factories in the district through these Canegrowers' Co-operative Societies amounted to 81,41,082 maunds (up to 31st March, 1958), the price of which

amounted to Rs. 1,15,54,577. On the above supply of cane the societies earned a commission of Rs. 3,81,613.

With a similar pattern of work and almost equal number of workers, the Bettiah Circle Co-operative Societies carry on the work with the Assistant Registrar as the overall head. To assist the Assistant Registrar, there are one Bank Manager, National Co-operative Bank, two Inspectors, posted at Bettiah, 8 Co-operative Extension Supervisors under the Block Development Officers and Project Extension Officers, one each in all the eight Blocks; two Managers, Byapar Mandal Sahyog Samiti at Ramnagar and Bagaha; five Managers of Large-sized Multi-purpose Co-operative Societies at Mainatanr, Ramnagar, Gaunaha, Bagaha and Nankar Panchayat, the last being outside the Block; seven Supervisors and some office staff. For carrying on the work of Canegrowers' Co-operative Societies Section, there are eight Organisers and 23 Supervisors. These Organisers and Supervisors generally work in sugar factory areas, that is, in Bettiah, Chanpatia, Lauria, Majhauria, Narkatiaganj, Ramnagar, Bagaha, Dhanaha, etc.

The figures below will indicate the position and improvement of the general co-operative societies of Bettiah Circle during the last three years :—

	1957-58.	1956-57.	1955-56.
	Nos.	Nos.	Nos.
Credit societies	280	261	222
Membership ..	11,004	8,348	6,996
	Rs.	Rs.	Rs.
Share	1,95,177	1,79,353	72,049
Reserve and other Funds	41,422	41,187	21,198
Deposits	45,561	44,387	12,820
Borrowings	5,16,599	2,94,632	2,08,525
Loans to Members ..	3,50,582	1,81,641	1,65,843
Repayments	1,60,606	1,54,130	1,55,607
Outstanding	5,14,032	3,20,961	2,93,450

The number of credit societies, membership, deposits and borrowings is all going up, which is a healthy feature of the system, but the outstanding figure seems to lead all the rest, indicating something vitally wrong. It appears, as if the very essence of co-operative movement of being accommodating to other members' interests is lacking. Conniving at the payment of the borrowing is laid bare which mars the velocity of circulation of capital in it and the advantage is not being reaped by as many persons as it ought to be.

PUBLIC WORKS DEPARTMENT.

With expanded scope of action and resources, the Public Works Department has been entrusted with the public utility works like that of construction of roads and buildings and some irrigation arrangements through canals and bunds.

There is one Chief Engineer as the head of the Department at the State level. In the district, there is one Executive Engineer to look after the progress of works in the district. The Motihari (Roads and Buildings) division is in charge of an Executive Engineer. The division started functioning since 14th November, 1949 as a temporary division and has been made permanent with effect from 1st July, 1955. Headquarters of the division was shifted from Muzaffarpur to Motihari in July, 1955. Its jurisdiction was changed due to the formation of Bettiah division located at Bettiah with effect from 19th June, 1956. The whole district for administrative convenience has been divided into four subdivisions, namely, Motihari subdivision, Dhaka subdivision, Raxaul subdivision and Project subdivision. The first named subdivision is a permanent one while the latter three are temporary. Each subdivision is controlled by one Subdivisional Officer who holds a gazetted rank.

To assist the Executive Engineer in the Divisional Office there are Estimators, Draftsman and Tracers besides ministerial staff.

In the Subdivisional Office at Motihari there are Overseers, Amins and Clerks. The same type of staff has been provided in all the other subdivisions.

The Executive Engineer is the controlling and disbursing officer of the division. He controls and supervises construction of roads and buildings, inspects the works in progress and controls the payments. The Subdivisional Officers likewise are the heads of the supervising staff of their respective subdivisions. The Overseer gets the works executed according to the sanctioned plan and estimate.

On the pattern of work above noted, the Public Works Department till 1958 has taken up construction and improvement of a number of roads and buildings some of which are noted below :—

Roads.	Miles.
Construction of Sugauli-Bettiah road ..	18
Construction of Ramnagar-Someswar road ..	19
Construction of culverts and bridges in 1/6 to 12/3 miles of Sugauli-Raxaul road.	..
Improvement upon nearly 20 roads covering a mileage of about 400 miles.	

Besides these roads some buildings for hospitals, schools, co-operative godowns, officers' quarters, etc., have been constructed or are being constructed by the Department.

For irrigation purposes the Chief Engineer, Irrigation is the head of this Department at the State level. Under the Chief Engineer there are Superintending Engineers incharge of circles, posted at different places in the State.

There are Executive Engineers under the Superintending Engineer, who are posted at district headquarters incharge of maintenance and construction work.

Under the Executive Engineer, Champaran Division who is under the administrative control of the Superintending Engineer, Muzaffarpur there are three Assistant Engineers, posted one each at different Irrigation Subdivisions. There are Overseers under the Assistant Engineers who are placed nearest to the work sites and incharge of a section.

The Executive Engineer is to execute the work and to incur the expenditure, although the Chief Engineer as the technical head of the department on State level finalises the schemes and controls the expenditure. The Assistant Engineer, incharge of the subdivisions is mainly to inspect the work and check the measurement of work done under Overseers. The Overseers are generally posted at the work sites and they get the work executed by the contractors and labourers. They maintain all the canals and embankments by the help of Government coolies and guide irrigation work. These Government coolies are employed by the Department to work as group leaders in carrying out this work.

The construction of Burhi Gandak Embankment in the year 1957, widening of Tribeni Canals (transferred to Raxaul Division), and filling up gaps of Champaran Embankments during the years 1954-1956, have been some of the main activities of the department.

The extensive Tribeni canal system which radiates from Bhainsalotan in this district has been covered elsewhere. The maintenance of this canal system and the implementation of the objective, i.e., supply of water for irrigation purposes attaches special importance to the Irrigation Department.