

## **INTREPRENEURIAL BACKGROUND TO THE GROWTH OF AGRO BASED INDUSTRIES IN THE NORTHERN CIRCARS DURING THE INTER WAR PERIOD (1930-1960)**

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It has been generally pointed out that the commercialisation process under colonialism not only undermined the subsistence peasant economy but also led to the domination of trade-usurer capital over the peasantry compulsions of rent-revenue and debt payments prompted the peasantry to produce cash crops for the market. But this cannot be applied to all sections of the peasantry, in the case of poor peasants this may hold true, but in the case of upper peasantry this does not hold true, the growth of commercial agriculture, in the context of rising prices was advantageous to the upper section of the peasantry. <sup>1</sup>

The enhanced productivity of delta lands after Irrigation led to the growing demand for land and land prices rose. Agricultural production continued to increase. The continuous rise in grain prices during most of the period under review contributed to the growth of economy and a prosperity. general increase in The important outcome of these economic changes was the emergence of a relatively large class of prosperous peasant or owner-cultivator in the Northern Circars.

The newly rich peasant cultivators began to participate directly in the market both as sellers, buyers and as traders. With higher productivity the larger farmers were able to accumulate substantial surpluses from agriculture, and even in the early 20th century somewhere looking for new and more profitable ways to invest their savings. Purchase of additional land was the most common avenue for the investment of savings, but there was a limit beyond which land could not be cultivated profitably and most of the fertile land had been occupied by Barly 20th century. <sup>2</sup>

In the Guntur villages, surveyed by N.G.Ranga in the 1920s, it was felt by Range:

"there was no more land to be occupied so all that rich peasants can do was to buy the already occupied land at exorbitant prices, buying spree had caused land prices sharply to increase. Some Ryots speculated in land buying un-irrigated land and waiting for it to receive water. A safe gamble since the irrigation could be obtained by bribing officials." <sup>3</sup>

Money-lending was one way to which the farmers put their money. About the practices of money-landing in coastal Andhra Ranga writes that:

"Lend their money to needy ryots and poverty ridden Panchamas at very high rates of interest and hope to make much money. Indeed if they are not too avaricious and pay only an ordinary amount of care in choosing their customers, they can make much higher profits in this rural banking than in any other business. However, because of increasing indebtedness and evasion of debts in late 1920s money-lending was becoming less popular among rich ryots as a business." <sup>4</sup>

As a result, the newly rich delta-ryots began to look for other opportunities for investment. Sama entered grain trade buying paddy on commission and transporting it to the rice mills. About 12 ryota in each of the villages surveyed by Range, were making profits from dealing in paddy<sup>5</sup>

We also notice the emergence of the facilities like Commercial Banks, Imperial Bank of India, Co-operative Credit Societies. Since the big peasants held a substantial landed property, wealth and bullion they could offer security and obtain loan. In the deltaic area in particular the Imperial Bank of India had become a potent force as far as the supply of the credit was concerned. In spite of the limitations of the co-operative movement in Andhra, the Co-operative Society did provide necessary finances to the rich peasantry.<sup>6</sup>

The peasants collected agricultural produce from their debtor peasants and other peasants and stored it in their godowns. Their ability to possess instruments of production and transportation provided them an opportunity to compete with the professional merchants.

Rich cultivators also began to invest their sur-plus capital in agro-industries. There is ample evidence to suggest that land holders of the coastal Andhra owned cotton gins and presses, groundnut de corticating machine, tobacco barna4bit was their capital hat built many of new rice-mills that sprang up in this period.

Ranga describes in detail the attempts made by rich peasants in several Guntur villages to start business, in the following words:

"In every village there are few enterprising Kammas who have ten to twenty acres of land who are anxious to do some sort of business or other. Most of these business ventures were unsuccessful, because of lack of sufficient capital, prohibitive rates of interest, lack of business bent of mind, business capacity and the lack of commercial organisations to advice people."<sup>7</sup>

Thus one can clearly understand that by the early 20th century a new stratum of rich peasants had emerged in the Deltas that was rapidly developing into an entrepreneurial commercial farmer capitalist class.

Though the early efforts made by this peasant class to float to industries on account of the deficiencies mentioned above in Ranga's words, could not succeed. In the inter-war years on account of favourable opportunities and positive help of the Government in encouraging public to float industries, we notice this rich peasant class coming forward with enthusiasm in starting industries. A detail account of the industries that were floated in this region during the period under re-view is discussed in the next chapter.

State Aid and support is essential for the development of industry in any country to overcome the initial difficulties standing in the path of industrialisation. In the opening chapter of this study the views expressed by the early nationalists regarding the necessity of State intervention in this regard is presented. The role played by the Japanese Government after the Meiji Restoration in fostering modern industry was shown as an example. Exactly the same was followed in India by the State, when the development of industry in India became necessary during the inter-war period.

An account of the help rendered by the Madras Government is discussed in this Chapter. We notice the State Government providing the loans to industries, supplied commercial and

industrial information to the public by conducting enquiries in enabling the industries to perform better. The Government came forward to aid the industries by providing them with concessional rates of transportation of raw material on Railways, and providing raw material at concessional rates. The Government also started few industries on experimental lines to serve as models to the natives to start industries on their own. Apart from this. The Government tried to develop technical and industrial knowledge among the natives by opening industrial and technical schools and also providing scholarships to students admitted into such schools. These aspects are taken up individually in the following pages.

### **Loans**

One of the foremost steps the Government took in its industrial policy during the inter-war period has been the extension of loans.

In the year 1931, Boddu Pydena and Sons of Vizianagaram who were dealing in oil-milling industry had applied for a loan of Rs.50,000 under the State aid to Industries Act. They asked for aid because electricity available at Vizianagaram mill was just sufficient to run ten rotary mills and decortication installed. The applicants desired to purchase an oil expeller for crushing groundnut, kurinji and vepa seeds. Their capital was not sufficient to carry on business throughout the year, with different stores of oil seeds since the whole crop will be consumed by the exporters in different seasons of the year.<sup>11</sup> They were in need of loan to store oil-seeds of different quality expected by them shortly into the market. The applicants expressed their view that if they were granted the loan they would get an additional income of fifty percent or double than what they were getting till then.

The Government granted them the loan but certain conditions were laid down according to which the Government ordered the loan to be utilised. The board mentioned that the firm should buy the machinery worth Rs. 15,000 construct godowns for Rs.5,000 and utilise Rs.20,000 as working capital.<sup>12</sup>

Similarly in the year 1931 Chinta Nandaiah and Chinta Chinna Nandaiah of Mori in Rajole Taluq of East Godavary district applied for a loan of Rs.10,000.<sup>13</sup> They were running a cashew nut roasting industry. They invested about Rs. 15,000 from their own resources till 1931. The rate of interest for the loans taken by them from private people was very high and they were not able to meet the demand to overcome these financial problems they asked for Government aid. The firm was facing problem with the middle men who were financing their trade. The applicants mentioned that due to lack of funds, they were not in a position to avoid the middle men. They expressed that if they were provided with the aid, they would avoid these middlemen. They were purchasing the supplies of nuts through dealers at Rajahmundry and Bombay. The firm was getting the nuts on credit on payment of Rs. 1-6 annas as interest, and one percent as commission. The applicants mentioned that if they were to be granted loan, a profit of fifteen percent was expected and that they would be providing employment for another 300 people.

The firm was not granted the loan on the grounds that the industry was not a new or nascent one and moreover the application cannot be brought under the State aid to Industries Act, as there were four Concerns of the same kind in Mori itself, and it was not a nascent industry in the region.

In the same year, the Krishna Jute Milling Company Limited of Eluru applied for a loan of Rs.3,00,000.<sup>14</sup> This particular company received the financial support till the year 1930 for about 20 years from the Imperial Bank of India. This Bank used to assist the mill by granting loans under the cash-credit to the extent of Rs.2,00,000 and produced loans for another Rs.300,000 on the personal security of the Secretaries and Treasurers. In the year 1930 they changed their policy and granted loans under the cash-credit only, hypothecating the Jute and Gunny stocks in process. In 1931 their Jute and Gunny stocks were sufficient to cover the amount due by them under cash-credit account only. The Imperial Bank of India did not give them further loan either on mortgage of their buildings and Plant or on personal security as previously granted. They applied for loan to purchase the jute at the time when the price of raw jute was very low. They had no money even to meet the manufacturing expenses. It was also reported that the mill was incurring severe losses from the year 1921 on account of world-wide depression. The Government rejected their application on the grounds that the mill was facing problems on account of world-wide depression and they would be able to do better after the temporary problems would recede.

In the year 1936 Ramakrishna Ranga Rao and C.V.S. Narasimha Raju the partners of the Sri Ramakrishna Sugar Mills, Kirlampudi of East Godavary District have applied for a loan of Rs.50,000.<sup>15</sup> They applied for loan because they were in debts amounting to Rs.40,000, which they incurred in connection with working of the factory and purchase of additional machinery. The loan was granted by the Government on account of which they purchased new machinery and was installed. This enabled them to rise the crushing capacity of the factory from 80 tonnes per day to 120 tonnes per day.

The same firm in the year 1938 had applied for loan for a second time to the extent of Rs.30,000, to pay the balance of Rs.30,000 which they incurred for the purchase of additional machinery.<sup>16</sup> The Board rejected the application and the loan was not sanctioned on the ground that the firm was already sanctioned the loan for Rs.50,000 and that one of the applicants partner of the Firm, was no less than the Zamindar of Kirlampudi and that his economic position was fairly high and that he does not need State financial support.

In the year 1938 there was another application from Gunadala Kodanda Rao of Vizianagaram for financial aid of Rs.1,000.<sup>17</sup> He asked for the aid to start an oil mill on a small scale. This application was also rejected on the ground that the oil-milling was not a new or nascent nor an industry to be introduced into the district of Vizianagaram, since there were already four mills working in the area including the State 100% aided oil mills of Boddu Rydena and Sons. The Board felt that even the Boddu Pydena and Sons mills were also not flourishing, and the Board expressed in their own words that "it is very doubtful, whether any new mill set up can hope to succeed in competition with the existing mills in Vizianagaram". And their application was rejected.

### **Purchase of Shares**

By the way of purchasing of Shares of the newly floated industries by the Government the industries will be benefitted by the getting the initial capital.

Government had this item under the State Aid Act.

In the year 1936, the Guntur Tobacco Growers and Dealers Association Limited, Guntur, which formed into a Joint Stock Company, with a share capital of 6,60,000 to benefit the Ryot, offering all facilities to the Ryot for preparing the leaf into a suitable condition acceptable in London and other market, had applied for aid by the Government, in the form of subscription of 5000 shares worth Rs.50,000 by the Government. The Association was in need of investment for installing a redrying plant costing Rs.40,000.

In the year 1939, the Andhra Scientific Company Limited, at Masulipatanam, applied for state-aid, in the form of subscription of shares by the Government or in the alternative loan worth Rs.50,000 for the development of Scientific Instrument.<sup>20</sup>

In the year 1939, there was another application from the India Canning Industries Limited, Bezwada, for the subscription of shares by the Government worth . 10,000.<sup>21</sup> applications. The Government rejected all these

Under the State Aid to Industries Act we see as many as 20 applications were received from the region under study, out of which seven applications were accepted and a total loan worth Rs.2,00,000 was granted to them from the year 1924 to 1939.<sup>22</sup>

#### Supply of Raw Material At Concessional Rates

State also provided aid in the form of supplying raw material from the natural resources at concessional rates. Under this provision we have the following applying for aid.

In the year 1925, the promoters of a match factory at Rajahmundry have asked for a free grant of supplies of wood suitable for match industry, which were available in the Godavary division. The board had granted this protection by free grant of supplies of wood.<sup>23,24</sup>

In the year 1930, the Andhra Paper Mills Limited, Rajahmundry, applied for the lease of bamboo coupes in Russelkonda Reserve Forest.<sup>25</sup> through a letter dated 2.4.1930. Earlier the factory was granted the lease of the bamboo coupes from the Rekapalle reserve, but it is reported that the mill was not working regularly to their full capacity and as such they were not in need of 10,000 tons of bamboos, which the Rekapalle forest can afford. In the year 1930, they reported that they required only 2000 tons of bamboo per annum, under such circumstances, they requested the Board to reserve for the mill the most easily accessible coupes which would give them about 2000 tons of bamboo per annum for which they say they were prepared to pay a pro-rata royalty of Rs.1.00 per ton of dried bamboo extracted by them. The Board replied to the mill that the bamboo coupes of upper Godavari, which the mill had referred were to be auctioned on the 14th April, in which regard the notice was already issued and thus it would not be possible for them to grant them of it. The Board wrote that the Company must obtain their requirements from the contractors.

Again in the same year, by another letter dated 25-5-1930. the Rajahmundry Paper Mills Company, requested for the bamboos from the Government from Tirumalayipalem of the lower Godavari, which would yield the necessary bamboos for them. They requested the Board to lease out those reserves for one or two rotations that is for 3 or 6 years, for which the Company stated that it would pay an average income of the last 10 years and also requested for a rebate of 25% on that average income.<sup>26</sup> that The Board wrote back to the company

"Until the Andhra Paper Mills Company attains a position to enter into long lease, the best plan be for them to bid at auction for any coup they require, either upper or lower Godavary, or to do as they are doing now, to obtain their requirements, which appear to be small from the ordinary coupe contractors.<sup>27</sup>

#### Demonstration Units

The Government had laid down in their policy towards, industrial development of the Province, a provision for conducting experiments of few industries, having for their ultimate object, the starting of industries either by private owners, or by Government of new industries of new branches of or improved processes in existing industries. From the year 1922 onwards the Government commenced conducting experiments.

In the year 1922, question of utilisation of lime and tamarind as sources of citric and tartaric acids respectively has been under investigation.

Limes from Krishna district were examined and found to contain 3% citric acid which could be expressed and citrate of calcium fair quality prepared from the juice. <sup>28</sup> The tamarind investigation gave interesting results for although it had been proved that tartaric acid could be obtained in reasonable quantity from cleaned pulp. The experiment had in view the possibility of working up the whole fruit, as it comes to the market, not only for the tartaric acid production but also for the utilisation of the sugar contents.

In the year 1923, a Firm in the Krishna district established a small factory of matches on experimental lines, without first ensuring that the requisite supplies of timber were available in the neighborhood. <sup>29</sup> After carrying on experimental manufacturing for the year they had to close down operations and then appealed to the department for assistance.

On the recommendation of the Indian Sugar Committee. in the year 1923. the Madras Government referred to the Director of Industries for investigation and report 1) the question as to the further utilisation of the juice of the date-palm trees in the Presidency.<sup>30</sup>

The Government made an announcement as to the facilities which they were prepared to offer for the prosecution of Schemes for the development of Sugar industry and invited suggestions from the public in regard to the promotion of the object in view, namely the extension of cane cultivation and the establishment of additional sugar factories. Towards the close of the year 1923, Government sanctioned the deputation of an officer of the agricultural department for a period of six months to conduct a detailed examination and investigation of the possibilities of sugar cane factories in the Agency as well as in portions of Godavari and Tanjore districts.

In the year 1925, the Department had considered the development of a Coir industry on the East coast, on experimental lines, with a view to improve the quality of the fibre, instruction for the retting of coconut husk, for extraction of clean fibre, and for the spinning and weaving of coir yarn, had been drawn up, and copies distributed by the district officers of the department to those interested in the industry<sup>31</sup>. It was hoped by this means to induce private enterprise to take up the experiments, and the Assistant Industrial Engineer, Bezuada, Was instructed to offer all possible assistance to such persons. The attempts made by the department to persuade the people in the Godavari district to adopt the improved methods of retting coconut did not prove successful, because, the people who were undertaking the coconut coir industry were very poor,

and they could not carry out the experiments involving long periods. As soon as the financial conditions permit, it was proposed to initiate the experiments. In the year 1926, the department sanctioned the proposal for the conduct of experiments in coir retting at Ambajipet in the Godavary district and a sum of 2.500 was provided for the purpose in the budget for the year 1926-27 <sup>32</sup> it is hoped that, as a result of this experiment, it would be possible to establish the practicability of producing good quality yarn on a commercial basis on the east coast. out and the results were not fruitful. It worked

Attempts were made from time to time to encourage the people on the east coast to adopt improved methods of retting coconut husks. It was considered that if west coast methods were adopted, coir fibre and yarn could be produced in the east coast almost equal in quality to that produced on the west coast. There were large areas under coconut in the parts of Ganjam, Vishakapatnam, Godavari, but, it was reported that the coir produced in these areas is of an inferior quality and much of the coconut husk is used as fuel.

In the year 1936, the Government sanctioned proposals for the demonstration of improved methods of coir retting and coir production at Baruva in the Ganjam district which was carried out in the year 1936-7.<sup>33</sup>

In the year 1937, the work of coir-retting demonstrations were undertaken by the Konassema Cooperative Loan and Sales Society at Amalapuram. This society carried the coir retting demonstration at Kondurupadu village in Amalapuram Taluk. For this the Government had lent a coir making machinery free of rent for a year. The Director of Industries had lent the services of a demonstrator <sup>34</sup> About 30 apprentices from East Godavary district, West Godavary and Vishakapatnam districts had been demonstrated.

In the year 1938, the above Society had under-taken similar demonstration at Amalapuram, for which the Government sanctioned an amount of Rs.1500.<sup>35</sup> During the demonstration they had soaked 500 fresh green husks and extracted about 50 lbs. of fibre. They had also obtained 800 lbs of fibre from dried husks. They had prepared 26 lbs., of yarn from soaked fibre and 38 lbs. of yarn from unsoaked fibre. They had prepared 43 brush-mats and several were still Unfinished. 54 sq.ft. of coir mat had been woven. <sup>36</sup>

In Amalapuram and Razole, that contain almost the whole of coconut plantations in the East Godavari district have realised the importance of the industry and few parties had shown interest in starting the industry. L. Seshagiri Rao of Peddapatanam in Razole Taluka of East Godavari district had soaked 40,000 green husks, he proposed to spin the fibre into yarn and manufacture of mats and mattings. He was assured of a fair consumption by a local dealer in this goods at Rajahmundry.

The Rural industries Syndicate Limite, Amalapuram proposed to start the Coir industry on a large scale and had selected a spot near Komaragiripatanam, 14 miles from Amalapuram, the coconut husks were available in village with in a radius of 5 miles from the site. <sup>37</sup>

The Assistant Director of Industries visited two villages namely Bodasakurru and Allavaram, which contain great number of coconut trees, the people there, were explained of the Economics of the coir industry. Their Association namely the Settibalija Association had taken up the question in right earnest and they decided to soak 5000 coconut husks in the first December 1938. On 16th December 1938, they had started the work by soaking about 1000 husks and by

22nd December they had soaked another 3000 husks, they proposed to make ropes, for use of boats than in Mats and Matting. <sup>38</sup> six of the apprentices at the demonstration came from Amalapuram. Another apprentice - Satyanarayana had soaked about 300 husks in the village of Kesavakurru of Kakinada Taluk, <sup>39</sup>

Another positive and fruitful continuous effort of the Government is seen in regards to the development of sugar-cane industry. In the year 1930, the Government conducted a sugar cane crushing demonstration to educate the ryots the usefulness and economy resulting from the use of power crushing plant and demonstrate its advantages over the crude, methods of manufacturing jaggery to which the cane growers were till then accustomed. To undertake this demonstration, the Board sanctioned Rs.1,000<sup>40</sup> and it had under-taken the demonstration between 15th December 1939 to 15th March 1931 and about 1500 tons of sugar cane was crushed. The demonstration was conducted at a village Munagapaka, in Anakapalli taluk of Vishakapatnam district. The results obtained on the whole justified the demonstration for the ryots who gradually appreciated the advantages of power crushing, as a result of which a large number of cane growers sent a petition praying for an extension of the demonstration and the Government approved it.

The success of the above demonstration consider-ably impressed the ryots of neighboring districts and from a village, Rayavaram of East Godavari district, the ryots sent petition for a similar demonstration to be conducted free of hire and transport charges. The same was undertaken by the Government to be carried out during the sugar cane season 1933-34.<sup>41</sup> On account of these demonstrations, the Ryots of the Monaragala village and the surrounding villages were impressed with the improved methods of sugar-cane crushing and had showed interest to set up not only sugar-cane crushing mills, but also sugar centrifugal on a cottage industry basis.

Ettikopska Sugar Centrifugals were installed and the Government on its own had installed at the Government agricultural station at Ankapalla.<sup>42</sup> From the year 1932. there was a great enthusiasm shown by the natives of Northern Circars to start sugar mills and applying modern methods for crushing. The Department had about six sets of power-driven sugar cane crushing mills which were hired to the public and from 1932 onwards, a great demand is seen for the hire of this machinery. In the year about six mills are hired, the details of the persons hired to and the work done is given below.<sup>43</sup>

One mill sat was given to Thota Ramaswami of Veeravaram in East Godavari, with which about 350 pans of juice and 3,500 lbs of sugar was extracted. Another was hired to Thota Subba Rao of Kirlampudi, he had extracted 10,250 lbs of jaggery, and 690 pans of sugar. Another demonstration was undertaken by the Government at Vedurupaka, in the Ramachandrapuram taluka of East Godavari District, the Government sanctioned an amount of R. 250. About 90.123 lbs of cane was crushed and 51.278 lbs of Juice was extracted of which 44.596 lbs of jaggery and 3850 lbs of sugar and 4760 lbs of mollasses was obtained. <sup>44</sup>

In the year 1935, one mill was hired to Akcakale village which crushed 150 tons of cane, and another was hired to Sajjupalli Sriramalingam, of Regidi village in Palkonda taluka of Vishakhapatnam district about 41 tons of cane was crushed. ✓ Another was hired to Elatipalem of Repalle in Guntur District, where 440 tons of cane was crushed: Kakani Venkataratnam of 1

Akumuru village in Gannavaram taluka of Krishna district also hired one set. He had crushed 300 tons of cane, yet another set was hired to Chineraparupudi cooperative society of Gudivada taluka in Krishna district which crushed 350 tons of cane. Another was hired to Paddemuddula Cooperative Society in the same taluk which crushed 400 tons of cane. Another was hired to Chellapalli co-operative Society which crushed 1400 tons of cane. In the Guntur district one set was hired to the Zamindar of Ullipalavam where 575 tons of cane was crushed; and another Zamindar of Raichur in the same district had hired a set and had crushed 400 tons of cane with it.<sup>45</sup>

In the year 1936, some of the crushing sets were retained for hire by the people who had used it in the year 1935, in which, an increasing amount of cane was crushed at Regidi; 600 tons of cane in Chineraparupudi Cooperative Society and 1210 tons in Paddamaddula Cooperative Society and 1590 tons of cane at Chellapalli Cooperative Society and the other villages to which the crushing sets hired were Ela-mallu of Gudivada; Gopalagudem of Tiruvur; Gurupada of Gannavaram, Jakkaulanakkalem all in Krishna District.<sup>46</sup>

In the year 1937, about 2557 tons of cane was crushed with the help of these sets and in the year 1938; about 1816 tons of cane was crushed from which 14175 mounds of jaggery and 157 mounds white sugar was obtained.<sup>47</sup>

In the year 1939 about 3990 tons of cane was crushed from which 34654 mounds of jaggery and 8 mounds of sugar was obtained.<sup>48</sup>

Another area in which, the Government had put in its efforts was in the development of Ellore Carpet Industry.

The Godavari district was from time immemorial famous for its Ellore Carpet and in Palampore and printed cotton and large amounts of which were exported by the European merchants in the 17th, 18th and 19th centuries. These Industries were in a decaying condition by 1920s.<sup>49</sup> The Government conducted an enquiry in this regard to find out the condition of this Industry. It was understood as a result of the enquiry conducted in the year 1928, that there was practically no demand overseas for Ellore Carpets of superior quality owing to their high price. Prior to the great war, a fair price was obtained for carpets of good quality. During the war, the Industry was practically at a stand still. After the war, it was found that materials and labour had increased in cost, but the consumer was not prepared to meet the changed conditions and pay for a good carpet (made from live wool and dyed with fast colours) a sufficiently high price to give the manufacturer a reasonable margin of profit.<sup>50</sup>

Several times the Department joined with Cooperstive Department to help this industry, but found it would be extremely difficult to obtain regular supplies of good wool at a price sufficiently favourable to meet the wishes of the manufacturer. The Director of Industries had undertaken several methods to improve the condition of the industry.

The Government had sanctioned the installation of a woolen spinning plant in textile institute for the purpose of training students and capitalists.

A plant, with improved techniques of appliances was bought to Madras, in the textile institute, a mechanic was asked to prepare designs for a cheaper type of woolen carding and spinning machinery suitable for cottage workers.

As regards the modern methods of dyeing and woolen yarn classes were conducted at textile institute. Attempts were made to persuade the carpet workers of Ellora to send some of their boys for training at the Institute on scholarships, so that after the completion of their course, they may be of assistance to the Industry.

A peripatetic dyeing party comprising a Superintendent and two demonstrators were deputed to Ellore, for the purpose of affording practical demonstration in modern methods of dyeing at the doors of the weavers.

Dead wood obtained from tanneries is largely employed and owing to the presence of chunnam it is not possible to obtain uniform shades whilst dyeing.

The Director had instructed the leather research Centre chemist to take up this problem with a view to free the wool of chunnam by some chemical process.

As regards the preparation and distribution of suitable designs, the Ellore Industrial School was asked to undertake the work of preparing a number of novel designs suitable for the manufacture of two or three grades of carpets and to transfer the design on graph paper and thus to send it to textile institute to enable instruction to be imparted to the students and carpet weavers in the production of carpets from these designs.

As regards the commercial side of the industry, an increase in the supply of wool and an improvement in the quality and improvement in the breed of sheep was a must. This was taken up with the Director of Agriculture and the Department took lot of initiative in setting up co-operative organisation in Ellore with <sup>51</sup> the help of Registrar of Cooperative Societies.

The Ellora pile carpet weavers society was registered on 30th June 1937, with the membership of 54 master weavers who contributed a share capital of 6.550 and another six non-weaver members who contributed a share capital of 8.50 <sup>52</sup> The cost of running this society was met partly from the Government of India grant and partly from funds made available to the provincial government. The Government of India provided the working capital and defraying the rent, pay of the designer and pay of the Special Co-operative Inspector. It also met their travelling allowances and the pay of the clerk and peon. The Provincial Government met the cost of the dye house equipment. tiny of the dye house and the pay of the dyer and the day watchman besides some miscellaneous expenditure. The equipment required for the dyehouse was supplied from the Government Textile Institute. An amount of R.2,000 for working capital was disbursed on 19th December 1937. Upto 31st March 1938, the Society had purchased 5,957 lbs of loose wool, for Rs.1,440; 5,657 lbs of woolen yarn for Rs.1,811; 870 lbs of cotton for Rs.286; 1275 lbs of jute yarn for;158; 2378 lbs of dyes and chemicals at a cost of Rs.697 and fuel to the value of Rs.41. The Society manufactured 356 42. Annual Report of the Department of Industries for the year ending with 31st March 1938.

carpets valued at R.3,000 and cerpets for value of R.2,300 were disposed. <sup>53</sup> The demand was seen both locally; and at London and the Government had taken steps to develop market for Ellore Carpets in Australia.

### Technical Help

The work of investigation of few engineering projects of erection of new power installation, the maintenance of pumping and industrial machinery already at work, the conduct of boring operations, the supply of erection and maintenance of pumps suitable for irrigation was also taken up by the engineering branch of the industries department.

The main objective of the pumping and boring operations conducted by the department was to render assistance to the Ryots and small industrialists. In cases of where a local inspection is necessary a fee of Rs.10 is levied, in return for which advice was given in regard to the selection of a suitable site for a mill, factory or installation and as to most suitable type of machinery for the purpose. General information and advice on Engineering question was given free provided no local inspection was involved for the use of drills and pumping sets very low rates of fee is accepted.

Government also decided that the advance hire charges, but not transport charges should be refused in case of unsuccessful boring by hand drills.

**Tablo IVA gives the details of work undertaken by the Engineering branch from the year 1928 to 1939.**

**TABLE IV-1**

Year	No.of Erections	Boring successfully completed	No.of Feet drilled	areas brought under irrigation in acres	Pumping sets supplied
1929	19 10 Industrial 8 Pumping 1 Combined	206	17,634	201	23
1931	6 5 pumping 1 industrial	45	15,937	20	6
1932	14 4 Industrial 10 Pumping	161	14,232	10	14
1933	23 5 Industrial 17 Pumping 1 Combined	201	22,355	10	N.A
1934	11 7 Pumping 4 Industrial	238	24,360	4	N.A
1935	20 17 Pumping 3 Industrial	318	27,375	501	N.A
1936	21 17 Pumping 4 Industrial	280	27,581	73	N.A

1937	13 11 Pumping 2 Industrial	361	31,959	425	N.A
1938	18 all pump	305	32,835	63.5	N.A
1939	42 32 pumping 5 agriculture 2 industrial	183	25,001	45.5	N.A

Source: From Annual Reports of Department of Industries, Madras Government, for the years 1928 to 1939. \*Not available

### Industrial Schools and Scholarships

The Department had undertaken starting of Industrial, technical schools and providing scholarships with a view to impart industrial and technical education to the natives, who would run the industries.

The Department had established the Indian Institute of Science, Bangalore Victoria Jubilee Technical Institute, Bombay; Madras Trades School apart from these it had started several Industrial Schools in all the districts of the Presidency. The schools that are started in the Northern Circars and the aid given to them; the subjects taught are discussed below.

In 1926; St. Joseph Industrial School was started by the members of the St. Gabriel Fraternity, the Government had provided funds for a building. For the year 1939; the subjects taught in the School were mechanical engineering and wood works. There were about 77 students in the School.<sup>53</sup>

In the year 1919, at Vishakhapatnam, St. Alloysius Industrial School was started. It started with 20 students, imparting knowledge in the trade fitters, and mechanical drawing. In the year 1927, this school had applied for grant-in-aid to take up instructions in mathematics and mechanical engineering. The Government sanctioned Rs. 1200 for the payments and another Rs.1000 as maintenance grant By the year 1939, there were 21 students in the school undergoing training in Turning, Smithy, Electricity, Motor and Painting.<sup>54</sup>

By the year 1926, the other Schools which were in existence were C.B.M.Industrial School, at Kakinada in which there were about 15 students by then, it imparted training in carpentry, cabinet making, and wood works.<sup>55</sup>

There was a Girls Industrial School at Ongole of Guntur district By the year 1926, there were about 18 students in the School. The lace making instruction was provided in the School.<sup>56</sup>

In the year 1928, another girls school by name St. Joseph Industrial Girls schools was established At Guntur imparting instructions in dress making and general needle work a two year course, this School was run by mission funds assisted by a small Government grant.<sup>57</sup>

By the year 1928we also see in the Godavari district, C.B.M.Industrial School with 33 students imparting instructions in Motor car driving and repairs.<sup>58</sup>

In Guntur at a village, Lam, there was rural school, namely U.L.C.M. Lam Rural School with 29 students providing instruction in agriculture and allied trades.<sup>59</sup>

In the year 1930, the West Godavari District Board proposed to start an Industrial School and they requested the Government to bear the net cost from the Provincial Punds. The estimated expenditure was Rs.47,200. They proposed to take up the subjects of Carpentry, Smitty, Handicrafts, weaving, leather works, Sewing, Canning and Mechanical Engineering. The Government had provided the necessary funds for the School.<sup>60</sup>

In the year 1931, another Industrial School was started at Cowtharam, in the Krishna District by name SriKrishna Parisramalayam in which subjects like Fitters and Carpentry were taken up. In the year 1936, the School was granted Rs.5000 as building grant and also permitted to take the grant upto Rs. 12,500.<sup>61</sup> In the year 1933, another Industrial School was started at Mesulipatanam, where metal working was taught.<sup>62</sup>

Mesulipatanam, where metal working was taught.<sup>63</sup>

In the year 1937, an industrial School managed by the Industrial Association, Rajahmundry, was recognised by the department and grant-in-aid was provided. In this School subjects like general mechanics and woodwork was taken up. The courses extended for a period of four 53 years.

There was yet another school in existence in the region at Masulipatnam, by the name Andhra Jatya Vidya Parishad, this school had come into existence as early as 1910, to impart education on National lines.<sup>64</sup> It had come into existence in response to the call given by the Indian National Congress. From the year 1913-14 to 1921 this School had been getting grants from the Government. These grants were stopped by the Government on the ground that some of the teachers of the School had taken part in the political movement against the British.

In this School various branches of mechanical engineering, mechanical apprentice, workshop apprentice in Fitting, Turning, Smithy, Carpentry, Carpetweaving, Cloth-making, Oriental Art, Painting, and also general education were taught. The instructions in mechanical engineering section is given by two engineers who under-went training in the Government Victoria Jubilee Institute in Bombay and another in the Tata Iron and Steel Work.

In the year 1928 the management of the School had applied for recognition of the Industrial section of the School and also grant them teaching and building grants, and scholarships to students. They applied for an aid of Rs. 15,000 of which, Rs.2,500 for building and equipment per annum for three years, and maintenance grant of Rs. 1,000 to Rs.3,000 per annum if the results are satisfactory. The Government granted the school the necessary funds.<sup>65</sup>

The development of Sugar Industry having created a demand for Sugar Technology, it was decided that the facilities should be provided by the Andhra University for the grant of the B.Sc. (Hons.) degree with technology as main subject. Chemical Technology including the technology of Cane-Sugar was taken up to serve to the needs of sugar industries for taking up more responsible posts in the sugar factories. The Government installed

six scholarships of the value of Rs.40 per month, for a period of three years at the Andhra University College, Waltair. In the year 1936 the Scholarships were raised from 6 to 9.<sup>56</sup>

In the Table IV-2 details pertaining to the strength, the subjects taught in the Schools as on 1936 is given.

**TABLE I-2**

District	Name of the School	Strength	Subjects taught
Vishakhapatnam	St. Alloysius Industrial School	24	Turning, Smithy Electricity, Motor, Painting.
Godavary	Rajahmundry Industrial School	121	10-Mech. Engg. 19-Wood Works 92-Paper making Book Binding
Krishna	Kavutaram Srikrishna Parishramalayam	27	All wood works
	Masulipatanam Andhra Jateeya Vidya Parishat	80	44-Mech. Engg. 16-Artisan courses
	Gundala St. Joseph Industrial School	117	All wood works
Guntur	U.L.C.M. Lam Rural School, Lam	31	All Agricultural
	American Mission School, Guntur	80	42-Cabinet Making 38-wood works

Source: From Appendix of the Annual Report of the Department of Industries for the year ending with 31st March 1938, Madras.

56. Annual Report of Department of Industries, Madras Government, for the year ending with 31st March 1935.

Out of 20 who applied for loan 7 were granted loan. For the 16 years between 1923-39 a total of Rs.2,00,000 was granted as aid directly by the Government. The Eluru Carpet Industry was helped in several ways in recovering it from its decline. Apart from granting loan to the industry it was also provided with necessary technical and administrative staff to whom salaries were paid by the Government. This industry fared well only on account of Governments' help. With the loans provided by the Government to industries such as Boddu Pydena & Sons Oil-Mills, Kirlampudi Sugar Factory, benefitted a lot in overcoming their difficulties and also adding to their machinery. In the case of paper and match industries located at Rajahmundry we see the Government providing the raw materials at concessional rates.

The Government's role played in regards to the development of coir-retting and sugar-industry was of a high order. On account of the demonstrations conducted showing to the natives the methods of coir-retting on improved methods we see the apprentices who took training at the demonstrational industries such as L.Seshagiri Rao, Satyanarayana floating coir-retting activity in several villages namely Kumaragiripatanam, Budasakuru, Allavaram. On account of sugar-demonstrations in the villages of Munagapakka, Ryavaram of Vishakhapatnam and Godavari of the methods of power-crushing the ryots were educated of the usefulness and the economy resulting from the use of power-crushing over that of the country methods of manufacturing Jaggery. It is only on account of this we see in several villages of the Northern Circars the

peasants hiring power-centrifugals and producing sugar. It is to be noted that in the year 1933-34, the year of grant of production to the sugar industry we see the Kirlampudi, Etikopakka, Vyuru, Bobbilli, Tummapalla Sugar Industries being floated. The industrial and technical training provided in the Schools to which Government granted aid we see several people undergoing training in several industrial subjects. The act of providing facilities in the Andhra University for starting a B.Sc. (Hons.) degree in sugar technology, and also providing scholarships to students taking up this course can be pointed out to say that the government had responded in the way it is needed at different times.

In the next chapter the industries that were floated during this period and their performances are dealt in detail.

1. Carol Boyack Upadhyay, "The Farmer-Capitalists of Coastal Andhra Pradesh", E.P.W., vol. 2, No.27, July 1988, p.1377.
3. A. Satyanarayana, op.cit., p. 14.
4. Carol Boyack Upadhyay, op.cit., p.1378.
5. Ibid., P. 1379
7. Ibid., p. 1380
8. A. Satyanarayana, op.cit., p.17.
9. Ibid..
10. Carol Boyack Upadhyay, op.cit., P.1381
11. Government Order (hereafter G.D.) No. 1729, Development Department, Madras Government, dated 7th August 1931, p.8.
12. Ibid.
13. G.O.No. 1219, dated 15th August 1931, pp. 4-5.
14. G.O. No.1273, Development Department, Madras Government, dated 25th August 1931, p.1.
15. G.O. No. 1906, Development Department, Madras Government, dated 3rd August 1938
16. Ibid.
17. G.O. No. 1885, Development Department, Madras Government, dated 2nd August 1938.
18. Ibid.
19. Ibid.
20. Annual Report of Department of Industries, Madras Government for the year ending with 31st March 1939 Madras, 1940, p.43.
21. Ibid., p.45.
22. This calculation was made with the data available in the Annual Reports of Department of Industries of the Madras Government from the year ending with 31st March 1924 to 31st March 1939.
23. G.O. No.1163, Development Department, Madras Government, dated 10th August 1925.
24. Ibid.
25. G.O. No. 1044, Development Department, Government Madras, dated 16th July 1931.
26. Ibid.
27. Ibid.
28. Annual Reports of the Department of Industries, Government of Madras for the year ending with 31st March 1922, p.18.

29. Ibid., 1923, p.15.

30. Ibid., p.16.

31. Ibid. P.22.

32. Annual Report of Department of Industries for the year ending with 31st March 1925, p.20.

33. Annual Report of Department of Industries for the year ending with 31 March 1936, p.17.

34. G.O. No. 3065, Development Department, Madras Government, dated 10th December 1938.

35. Ibid.

36. Ibid.

37. Ibid.

38. Ibid.

39. Ibid 40. G.O. No.1079, Development Department, Madras Govt., dated 26th May 1930.

41. G.O. No.1078, Development Department, Madras Government, dated 6th September 1933.32.

Ibid.

43. Annual Report of Department of Industries, Madras Government for year ending, with 31st March 1934.

53. Ibid.

54. Ibid.

55. Ibid.

56. Ibid.

57. Ibid.

58. Ibid.

59. Ibid.

60.G.O.No.95, Development Department, Madras Government, dated 16th January 1930.

61. Annual Report of Department of Industries, Madras Government for the year ending with 31st March 1931.

62. G.O.No.307, Development Department, Madras Government, dated 27th February 1936.

63. Annual Report of Department of Industries, Madras Government for the year ending with 31st March 1937.

64. G.O.No.805, Development Department, Madras Government, dated 2nd May 1928.

65. Ibid.