

# INDUSTRIES DURING THE POST-KAKATIYA'S PERIOD

<sup>1</sup>M.Venkatachalapathy, <sup>2</sup>P.Ravi

<sup>1</sup>Research scholar, Dept of History, Sri Venkateswara University, Tirupati, AP, India

<sup>2</sup>Research scholar, Dept of History, Sri Venkateswara University, Tirupati, AP, India

\* Corresponding Author mail ID: eeshna2009@gmail.com

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**Abstract:** The Post-Kakatiya (1300AD–1600AD) period evidenced political chaos in Andhra region. The fall of Kakatiyas in 1324 A.D which resulted the movement of liberation started by the sub-ordinated chiefs of the Kakatiyas, the Musunuru Nayakas. They liberated the region from the Muslim conquerors and founded their kingdoms in Andhra country such as the Musunuru rule at Warangal, the Reddi kingdom at Kondaveedu, the Velamas of the Rachakonda and Devarakonda etc. Later on the rulers fought with each other for the extension their kingdoms and supremacy. they also had wars with the Rayas of Vijayanagar dynasty and the Sultans of Bahamani dynasty which were established simultaneously in Karnataka. Though they were busily engaged in wars, they never neglected administration especially the economic prosperity and the welfare of the people. They established for firm administration and well organized government which lead for the socio-economic development. So the paper focussed on the industries during this the post kakatiyas period and studied its development and progress.

**Keywords:** industries during, Post-Kakatiya's Period.

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## 1. INTRODUCTION

The period witnessed self-sufficient and industrial organization was widespread and was industrial flourished at several places in this period. The establishment of the industries, the development of internal and external trade. Which paved away for the rise of cities and towns. Warangal, Addanki, Rajamahendravaram [Rajamandry], Hampi, Belgaum, Goa, Mysore, Kalyani and *Ballary*, etc, rise as industrial towns. Added to this the professional or craft men have formed guilds to promote their industries. Besides the craft guilds or professional guilds, the trade and merchants guilds also played and significant role to promote the commodities transactions, production of articles are goods, the fiction of prizes and their distribution were the activities of the trade guilds. Thus the professional guilds, as well as the trade guilds, played an important role in promoting the industries and its trade activities. The following are some of the industries that experienced hetic economic activity. They were two types of industries

1. *Agro-based industries* 2. *commercial based industries*.

## 2. AGRO-BASED INDUSTRIES

Agriculture itself was big industry in this period .it provide employment some more people rise was principal crop cultivated in large scale because its was the staple food of the people. The farmers cultivated variety of rice beside they cultivated millets, *pulses* and cereals and add these they cultivated spices like cardamom, *nutmeg*, *mustard*, *betel nuts*, *betel lives* and *flower garden* in the country<sup>1</sup>.

**i. Sugar Industry:** The agro-based industries were established only in villages<sup>2</sup>. It was generally available two varieties, one of them was palm sugar or jaggery palm sugar was one of the most important agriculture manufactured. It was manufactured by pressing sugar cane in a hand –mill or boiling the juice<sup>3</sup>. Also, referees to one ikshu-yantra which means the crushing machine used to press the juice of sugar cane<sup>4</sup>. Palm sugar was produced from a date – palms. It must have

been very popular because of little expenditure either in the form of labour or capital was involved<sup>5</sup>. Jaggery and palm sugar yellow colour and coarse made from palm because of its sweetness it was great demand in the country. Some Kannada inscriptions also refer to crushing machines of sugar cane in the border of *Karnataka* region<sup>6</sup>. According to some inscriptions, jaggery and sugar were donated to gods for the purpose of offerings<sup>7</sup>. The government also imposed taxes in cash<sup>8</sup>. These references shall prove the existence of local industries of jaggery, palm sugar and sugar.

**ii. Palm-toddy Industry:** In addition to the palm–sugar industry, toddy extracted from the palm saps was also the wine of the country and was in large demand<sup>9</sup>. It flourished as an industry in this period and many articles that were produced from palm–trees were coir, mats, umbrellas, brushes, hand fans etc<sup>10</sup>. From the leaf of the trees they made many things in accordance with the size of the leaves. The leaves of palm trees were used for writings on paper<sup>11</sup>. The poor people thatched their houses with them<sup>12</sup> and the timber and beams were also used for the roofed houses and firewood as well. All these in plenty were exported to other parts of the country through cargo ships and boats<sup>13</sup>. Toddy drawers were subjected to a tax and the tax paid by them was known as *eediga gutta*<sup>14</sup>. Palmyra were exported in ships to other countries.

**iii. Oil Industry:** Oil was produced from raw agricultural products like coconut, gingerly, sesamum, castor seeds<sup>15</sup> and mustard<sup>16</sup>. During this period, the oil industry was developed a cottage industry and the people who involved in these industries were known as Ganugalavaru or Gandlavaru which means oil presses or oil mongers. The oil mill used by them was known as ganuga<sup>17</sup> in Telugu region and sekku<sup>18</sup> in Tamil was made of stone and wood and worked with two bulls<sup>19</sup>. In Tamil region, the oil pressers were known as vaniyars or cetties and were subjected to tax known as sekkukadami<sup>20</sup>. The oil pressers were known as gandlevaru<sup>21</sup> in Telugu region and taxes paid by them was called ganugari<sup>22</sup> and ganugastavaram<sup>23</sup>. This community had a guild known as telivevuru<sup>24</sup> and later this guild was mentioned as professional trade guild in the inscription<sup>25</sup>. According to an inscription of Rajaraj choda ganga records that this guild also had given certain facilities<sup>26</sup>. This oil industry was also developed during the time of the Kakatiyas and the Reddi kings and oil trades and oil mongers were exempted from certain taxes. Similarly, in Vijayanagar period also this oil monger guilds were strongly established and carried out their work for instance, an inscription of idumakanti gangireddi, a subordinate of king Bukkaraya donated an oil mill to the gods mallikarjuna, bhimesvara in gojulaveedu of Nellore district for the merit of his parents<sup>27</sup>. According to chadipiralla inscription dated 1542 A.D, the ganuga siddayam tax was paid by Gandla community in Achuta Raya period<sup>28</sup>. The guild of telivevuru donated ghee for the purpose of burning the perpetual lamps in the temples might have given sufficient stimulation for the development of oil industry<sup>29</sup>. According to Hamsavimsthi of Narayanamathudu, the oils of villages, kuri, verri, ippa and coconut were being extracted by the oil pressers of that period<sup>30</sup>. The same work also mentions about the necessary implements for the purpose of the oil pressing for the oil mongers.

**iv. Textile Industry:** Next to agriculture, textile industry occupied a supreme place among all industries that existed in the country. The textile industry grew up in many places such as Goa, Chaul, Mysore, Malabar, *Pulicat* in *Andhradesa*, Chitradurga in *Karnataka* etc<sup>31</sup>. These places were the important centres for cotton textile. Different types of cotton stuffs such as calicoes, muslins, buckrams, were manufactured in these centers<sup>32</sup>. But the demand for textiles goods was conditioned by the climate of the country. For example, On account of the dry and hot climate of the empire the common people used cotton clothes and very little wool clothes. For this cotton was cultivated as principal article and it was cultivated on large scale particularly in Andhra region<sup>33</sup>. Besides cotton stuff, there were other fabrics made of such materials as flax linen, velvet, satin and coconut fibers. *Pulicat* was famous for printed cotton called chintz and Coimbatore was important centres for manufactured dyed- garments. In this place raw silk was produced and dyed in different colours. The west coast was famous for carpets, made of velvets, satin and silk. Similarly, *Masulipatnam* on the Coromandel coast produced the cloth called chintz [chites]<sup>34</sup>. In addition to this, cotton and silk products manufactured at Darmavaram, Tadipatri, Gutti, Adoni in Andhra Ballary in Karnataka were exported to *Srirangapatnam* in the south, woolen blankets were dispatched from Chitradurga to other places and cotton from *Adoni to kolar*<sup>35</sup>.

According to an inscription of Sadasivaraya dated 1547 A.D records that cotton was cultivated at *Pulivendula* [Kadapa district] and it was manufactured on a large scale in Vijayanagar kingdom. The entire country encouraged the textile industry. Cotton thread was on sale in the modern Guntur area<sup>36</sup>. Lace was in great demand and worked in looms<sup>37</sup>. The Kurabas those shepherds by profession, took weaving as a part-time profession. They are woven woollen blankets and sold them to markets. The untouchability, particular malas also took to weaving in Andhra region<sup>38</sup>. Textile was also developed a cottage industry in Andhra and women also equally participated in weaving profession with men in

this period<sup>39</sup>. In Tamil country the community who involved in weaving profession were called *kaikkolas*. The weavers also migrated from Vijayanagar kingdom and found employment in the Tamil country.

**v. Commercial based Industries:** Though the Agriculture was the chief occupation and rural industry in the period there were regular and main industries both rural and urban which supplied the need of the people. The industrial organizations of the period were so widespread and the products were produced plenty as was whole self-sufficient. The people needed very little of foreign goods, the articles of transaction that were imported from foreign countries were largely horses and elephants used in the royal courts in the wars. The common people did not have much to get from foreign countries and the articles produced in the country made their common needs.

**vi. Coconut Industry:** The coconut tree was important for the many industries that depended on it coconuts were offered as *naivedya* to the gods and goddesses in the temples as well as in the houses. The oil pressed from coconut was also used for the purpose of food preparations, keeping lamps in the temples and houses and also hair. The other articles that were produced from it were coir, toddy, palm sugar, mats, brushes etc. The toddy extracted from the coconut was much in demand and it was also a kind of wine of the country<sup>40</sup>. Barbosa gives a clear description of the other uses of the coconut trees. He mentions that leaves of coconut trees were used for making mats and thatched the house except for temples or palaces of kings and nobles, all others were thatched with coconut leaves. They also made charcoal from the coconut shell close to the kernel and it was used by gold smith<sup>41</sup>. The timber pieces they got from the trees, were used for house construction as well as firewood.

**Dyeing Industry:** Pulicat [present Nellore district] was famous for dyeing cloths and these dyed cloths were exported to South-East-Asian countries and Malacca and Pegu. These were in great demand in South-East-Asian markets and the Europe<sup>42</sup>. Fabrics painted in colours called chintz and kalanakaris were designed in Pulicat and were exported to European markets. A variety of textiles were of dyed and painted varieties in excellent designs were also included in export to foreign countries.<sup>43</sup>

Dyeing was also agriculture based industry and was an allied industry to weaving, among the dyes the most notable was indigo which was available in the west coast, particularly in the area round chaul<sup>44</sup>. The raw material for dyeing was myrbalan; which was a kind of dried fruit used in the west for dyeing purpose. It was also the coromandel coast<sup>45</sup>. The guild of vastrabhedakas, i.e., the dyers too helped the dyeing industry to flourish<sup>46</sup>.

**vii. Mines and Metallurgy:** An important non-agricultural industry that was connected with land was mining. The most important article that mined from the earth was diamond. Besides, other metals such as gold, silver, copper, bronze and iron etc. Among metals gold, silver, copper were principally used in manufacturing various articles for the purpose of both household appliances and agricultural implements.

**viii. Gold Industry :** The gold deposits were available in the Deccan from Mysore (Karnataka) to the Aurangabad area. Karnataka was famous in medieval times for gold deposits particularly the area of gold mines in Karnataka called K.G.F or Kolar Gold Fields. Besides, Kolar gold fields, Kadur and around located in the chitradurga district were famous for gold mines in this period<sup>47</sup>. Gold was abundantly used for making idols, ornaments and other articles to be presented and for the decoration of the Gods, for embellishment in the courts of kings and chieftains and making coins and ornamentation by general public. A large number of inscriptions record the golden thrones, various gold ornaments, gold vehicles of different Gods such as "Garuda," and gold pavilions etc, gifted to various temples. The images of Gods were also made of gold and then gifted to the temples. But all these articles, made of gold, generally manufactured by the gold smiths were attached to the temples. As regards the use of gold in the courts of Rayas, the foreign travelers give us vivid descriptions in their accounts. According to Abdul Razak, the throne of king was fairly big and was made of gold with beautiful jewels<sup>48</sup>. According to Paes that the nobles in the court of Vijayanagar had on their necks collars, with jewels and gold set with emeralds, diamond, rubies and pearls. They put on girdles of gold and precious stones round their waists. They held in their hands vessels of gold each as a small cask of water. On important occasions, the kings weighed themselves against gold; which was then distributed to the people<sup>49</sup>.

**ix. Jewellery Industry:** During the time of Vijayanagar the jewellery was largely employed in making ornaments for the Gods, articles of luxury and show for the kings and the nobles in courts and sometimes for the use of common people for ornamentation purposes. Articles such as pearl garlands, pearl canopies<sup>50</sup>. Pearl bracelets and ornaments of diamonds and precious beads were in great demand in the temples. According to Portuguese traveler Domingo Paes that the nobles

of Vijayanagar put on high caps bedecked with flowers made of large pearls. The collars of gold on the neck were richly set with emeralds, diamonds, rubies and pearls and there were strings of pearls for shoulder belts. The bracelets and armlets were of precious stones. The anklets were of pearls. Some sorts of ornaments made of jewels were used even by the common people<sup>51</sup>.

**x. Diamond Industry:** The Vijayanagar period was famous for its rich diamonds and other precious stones because of its rich mineral sources particularly in Andhra region. In addition to industries of metallurgy, the diamond mining industry was flourishing greatly, because of the rich mineral sources of the Vijayanagar kingdom. The existence of diamond mines in this region was testified to by a number of travelers such as Nicolo di Conti, Barbosa and Nuniz<sup>52</sup>. The principal mines were on the bank of the Penna river and mainly located in the Kurnool and the Annapur district, especially Vajrakarur, a place in Annapur district. Generally these are known as "The mines of Golconda" and the phrase has passed into a proverb<sup>53</sup>. According to Nuniz that Adappanayaka, the ruler of the country of Ghats, had to handover to the emperor of Vijayanagar. Barbosa says the king possessed a great treasure and boasted much of this diamond<sup>54</sup>. After the fall of Vijayanagar its diamond trade captured by Goa which was a greatest mart for small diamonds. Barbosa distinguishes between the diamonds of the Old Mine and those of the New Mine. The former were found in the Deccan in the kingdom of Golconda, the latter were mined in the Vijayanagar kingdom, were of poor quality. Barbosa also says that in India false diamonds were manufactured which looked like real, but they lost their natural colour. Nikitin the Russian traveler also speaks of different kinds of diamonds and their selling rates<sup>55</sup>. Besides, diamonds of many other precious stones such as rubies, topazes, white sapphires, pearls and emeralds were produced in this period<sup>56</sup>.

#### **xi. Iron & copper Industries:**

Iron mines were found in Mysore especially the surrounding area of Kolar and Chitradurga district<sup>57</sup>. The processing and manufacture were done in jungles in large quantities<sup>58</sup>. From the iron ores iron bloom, wrought iron and steel were produced. Steel was made by a kind of cementation process<sup>59</sup>. Besides, iron was produced by smelting black sand and earth in channels from hills<sup>60</sup>. Iron was used for military purposes, for manufacturing swords, bows, arrows, bucklers, daggers, and battle axes<sup>61</sup>. Besides, large shields were used by the soldiers which avoided the necessity for any armour to protect their bodies<sup>62</sup>. The iron produced was enough for all the demand for it both internal and external. There were many ships with iron that left the Indian shores<sup>63</sup>. The iron was also used for agriculture implements, such as plough, spade, sickle etc<sup>64</sup>. And household articles such as lamps, bedsteads and utensils<sup>65</sup>.

The copper was mainly found at Quilon and it was chiefly used for decorative purposes in the courts, for making household utensils, and for manufacturing articles required in the temples<sup>66</sup>. Copper was used on a large scale for minting coins<sup>67</sup>. Copper yielded other alloys also when mixed with different other metals. The handles of sword/dagger hilts, according to Barbosa were made with ivory<sup>68</sup>. Besides, these metals, the other mines such as sulphur etc, which were found in large quantities in this period for the purposes of the industries.

**xii. Leather Industry:** Regarding the manufacture of leather goods, the foreign travellers who visited Vijayanagar empire gave some information. According to their accounts, they saw some people wearing shoes. Nicolo de Conti says that the people wore sandals with purple and golden ties<sup>69</sup>. Barbosa also noted the use of rough shoes by the people<sup>70</sup>. But rich people wore decorated shoes almost all would go about the country bare-footed<sup>71</sup>. Besides, leather bags, ropes, tubs and buckets were also made by the leather makers of this period. Large tubs and buckets were used to draw water from the wells by the farmers for irrigation purpose<sup>72</sup>. The leather makers were paid by the farmers which are called Meras<sup>73</sup>.

**xiii. Pottery Industry:** This industry seems to have been largely based on rural need but a widespread one as it continued even today. The art of the pottery started as a handicraft using the clay as it occurs in river beds or tank beds<sup>74</sup>. The earthenware were used by the people as cooking utensils used on different occasions particularly poor people. The potter was an important servant of the villages and return for his services received some remuneration either in allotments of lands from the corporate stock or in fees, consisting of fixed properties of a crop of every farmer in the village<sup>75</sup>. The imposition of tax on potters wheel 'chakrastavara' and the profession of potters existed as an industry in the Vijayanagar period<sup>76</sup>.

**xiv. Salt Industry:** Salt was produced widely and it continued to be a state monopoly. An inscription from Alur taluk in Bellary<sup>77</sup> district, dated 1521 A.D registers certain orders issued by two officers of a Nayaka regarding the manufacture of

salt in an area. Another inscription from the same taluk of the same district refers to the grant of two bags of salt from each pan by certain salt manufacturers to a charity fountain<sup>78</sup>. An inscription of the reign of Krishnadevaraya mentions the tax on one bag of salt was  $\frac{1}{2}$  rate<sup>79</sup>. Another inscription found at Tripurantakan (Prakasam district) also records the manufacture of salt at this period<sup>80</sup>. Barbosa says that salt – making was a business of a particular caste. The salt business was carried out by ‘Vettuvans’ in Malabar coast and Upparas (salt workers) in Bellary and Molakalmuri (Karnataka state)<sup>81</sup>. Another of inscriptions record the taxes levied on salt pans, especially in Malabar, Guntur, South Arcot, Chingalpattu, Tanjavur, Travancore, Mysore and Shimoga<sup>82</sup>. But at the same time the rate of the tax and name were not mentioned clearly.

**xv. Fisheries:** The city of Vijayanagar got fish in different varieties from rivers in large quantities. In the West coast, some people lived on fishery<sup>83</sup>, as an occupation to earn their livelihood. In addition, they sold raw and dry fish oil which was extracted from them. It was used as manure to plants and medicine to cure some diseases<sup>84</sup>. It also gave occupation to a section of the population. During this period fishermen were not taxed on fresh fish but on paid on dried fish. Therefore some fishermen were very rich and well- off in this period. The government got revenue by leasing tanks and fishing rights to the individuals. For example, an inscription found at Pandraveedu<sup>85</sup> in Chittoor district dated, 1409 A.D records that the amount derived from selling the fishes was used to repair of the tanks. Another inscription dated 1445 A.D registers that a tank was leased to fishery<sup>86</sup>. One more inscription found in Meseshmangalam in Godavari district dated 1636 A.D mention that an amount derived from selling the fishes was spent for the repair of the tanks<sup>87</sup>

The government also imposed a tax on fishermen profession. Fishing and its distribution or sale may be taken as an industry at a village level. Fishermen community was known as Besta in this period especially in Andhra. They had to pay tax on the government and the local bodies. In some contexts, the tax on fishermen has exempted. An inscription from Kesavapuram dated 1547 A.D (Anantapur district ) records that at the request of the sons of puli Appanaboya (belong to Besta caste) of Kesavapura Dalavayi Yallappanayaka: abolished ‘bitti’, ‘birade’ and other taxes levied on the fishermen<sup>88</sup>.

Thus the above mentioned Industries flourished during the time of the Rayas of Vijayanagar. Besides many other industries flourished like cattle industry, ship – building industry, tailoring industry, flower industry and vegetable industries and so on.

To sum up, the period between 14<sup>th</sup> and 15<sup>th</sup> centuries witness a number of industries. Most of the industries are large - scale industries and also urban in nature especially the metallurgy and diamond mining. This rural industry such as pottery leather – work, sugar, oil, cotton and silk, indigo, weaving was also highly developed in this period. The smith craft and industries in gold, silver, bronze, iron, copper and many alloys were highly developed. Besides cotton, weaving, dyeing, cloth printing, embroidering etc, were subsidiary industries in this period. Though the period witnessed some of the rural and urban industries that developed but the period was not evidenced the rural industries like sprites, liquids and also scents from flowers paper and shipbuilding or boat ferries. Thus the industries and its production of the period was entire then based on handicraft which yielded many economic profits to the businessmen and the state.

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