

CHAPTER- IIII N D U S T R YIntroduction

Āndhradeśa, including Telangāṇa, has a tradition of industrial activity from very early times. Textiles and diamonds of Āndhra were famous even outside India. Iron and Copper mining and melting and manufacture of metallic tools and utensils formed different aspects of industrial activity in Telugu country. Iron, copper and zinc were found in Guntur district. In Agnigunḍāla in Vinukonḍa Taluq, near Kārempūdy in Palnāḍ and in several villages to the west of Sattenapalli traces of melting and working of metals are found.<sup>1</sup> In Telangāṇa, at places like Koṇḍāpūr, furnaces belonging to the Śātavāhana period have been discovered.<sup>2</sup> Rich iron ore was available at Kūnasamudram near Nirmal.<sup>3</sup> It appears that the iron found here was exported to foreign markets and was used in the manufacture of Damascus swords. Iron mines and steel works are noticed close to Indūr (now Nizamabad) and Indulavāyi.<sup>4</sup> Gold and silver appear to have been imported from abroad. It is possible that the Kākatīyas, revived the old traditions of industrial enterprise in the core region of their authority, i.e., Telangāṇa where trade and industry in metals received tremendous stimulus. The Maṭṭenakaram and Pañcalohālanakaram were found busy with trade in metals in Telangāṇa. Marcopolo who visited the Āndhradeśa in the 13th century paid a rich

tribute to the industrious habits of the people. He praised in particular Āndhra textiles and compared them to the tissue of spider's web.<sup>5</sup> He further gave an interesting description of the diamond industry as well.<sup>6</sup>

Industries may broadly be divided into two categories viz., (1) agro-industries and (2) non-agricultural industries. The agro-industries such as the cotton textiles, jute works, oil pressing make use of agricultural products as raw materials. The raw material for non-agricultural industries is of non-agricultural origin such as metals, precious stones etc., As the workers worked with their hands, though using some tools and mechanical devices, the products are generally known as handicrafts, and the workers are known as artisans. The artisans specialising in an industry had their own tools. The Table X gives the tools and implements used by different artisans. For example, the textile workers used the spinning wheel and the handloom. Spinning, weaving and dyeing generally go hand in hand. Therefore, the weaver has to deal with chemicals for producing colours and dyes and with some implements for printing them on the cloth.

#### AGRO-INDUSTRIES

##### Cotton Textiles

The most important agro-industry of the period under review, is textile manufacture. Epigraphical evidence reveals intensive cotton growing in the districts of Mahaboobnagar,

Karīmnaḡar, Nalgonda, Waraḡal, Medak and Adilābād. Cotton was a commodity sold and purchased at almost every trading centre as demonstrated by Table IX. Waraḡal city appears to be the biggest centre of textile manufacture and trade. The Girmājīpet inscription<sup>7</sup> refers to the guild called Dharmasāliyajānulu who built a temple for Sāleśvaraḡeva. Rich textile merchants like Nijaraḡāla Malliseṡṡi and Venniseṡṡi figure in this record. The record bears ample testimony to the prosperity of textile industry.

Every village produced cloth in small or big measure. The Basavapurāḡam states that spinning of cotton thread was a household work. Rich and poor, without distinction were engaged in spinning. Handlooms were used for weaving the cloth. Dyeing and printing were done on the cloth.<sup>8</sup> Information is not available about the materials that were used in the making of dyes. Perhaps some plant products like the turmeric and minerals like Inḡilīkam were used to produce colours. Maḡḡiṡṡha,<sup>9</sup> a substance used in producing red dyes was an article of trade in the market of Waraḡal.

### Silk Industry

The richer sections of the society used silk cloth and silk sarees especially on festive occasions. Different varieties of silk finds mention in literature such as Devāḡḡa, brocaded silk, jedara silk varieties known as Jedāra Mathaḡ Jedāradadhimaṡara (Pomḡranate coloured silk), Jedārabhatigatu

(patterned silk) Vichitra (variegated silk)<sup>10</sup>. Another variety was Sellapaṭṭu which denotes a superior variety of muslin.

Pālkuriki Somanātha in his Basavapurāṇam mentions a large variety of silk cloth.<sup>11</sup> The variety was in colour, design and technique of printing. Silk cloth and sarees embroidered with golden thread were highly prized.<sup>12</sup>

It is not known whether silk thread was produced in Telangāṇa during the period under study. The Motupalli Charter of Gaṇapatideva (A.D. 1244)<sup>13</sup> mentions the import of silk cloth and silk thread from far east, especially from China. The Warangal Fort inscription (A.D. 1228)<sup>14</sup> mentions the trade carried on in paṭṭunūlu (silk thread), Dāsūripaṭṭu (perhaps silk from Dāsūr, may be Tussoire silk) and pachchapaṭṭu (yellow or green silk). It appears that trade in silk was carried on by Ubhayanānādeśi merchants. This suggests that raw silk was imported into Warangal, where local weavers and artisans produced beautiful cloth out of it with attractive patterns, colours and embroidery. Inscriptions from Āvanca<sup>15</sup> (Mahaboonagar district, A.D. 1104) and Ālavānipalli<sup>16</sup> (A.D. 1110) mention a community called paṭṭasālīlu. It may be suggested that this Paṭṭasālī community was engaged in the silk industry.

About the textiles in Āndhra in general, Marco Polo wrote that in the kingdom of Motufil "are made the best and most delicate buckrams (fine cotton stuffs or fine muslin)

and those of the highest price, in sooth they look like tissue of spider's web! There is no king nor queen in the world but might be glad to wear them. The people have the largest sheep also in the world ----"<sup>17</sup>

### Wool Industry

Warangal and its surrounding villages were known for wool industry. As noted above, sheep were reared in large numbers almost in every district of Telangāna and wool was collected from them. The Warangal Fort inscription<sup>18</sup> (A.D. 1228) mentions the trade by Ubhayanānādeśī merchants in vūlumalagalu (bundles of wool) and Gorepaḍāla malaḡalu (perhaps another variety of wool). The latter was probably used for producing blankets and carpets. The Kriḍābhirāmam<sup>19</sup> refers to the carpets woven from sheep wool. Warangal was famous for its carpets in the medieval period. Even today the carpets of Warangal are famous all over the country and abroad.

### Oil-pressing

Oil-pressing industry comes next importance to that of textiles. Oil was essential not only as an article of domestic consumption but also for lighting in houses and in temples. Besides ghee, gingelly oil was used in temples. Many inscriptions refer to donation of oil mills to temples.<sup>20</sup> The workers that specialised in this industry were known as the Telikis. They are an old artisan community mentioned in inscriptions of the Satavahana times as the Śrenī of Telapisakas.<sup>21</sup> In-

scriptions refer to them as Telikivevuru or Teliki-1000.<sup>22</sup> The oil-press was generally made of large stone discs which was worked by animals.<sup>23</sup> It may be said that each village had at least one oil mill. Oil seeds were grown in large areas in Telangāna region. Gingelly was the main source of oil. Castor occupied the next place. Trade in oil and oil seeds was common at every centre.<sup>24</sup> The whole-sale trade in oil was also conducted by the Teliki community.

#### Jaggery and Sugar

The production of sugar and jaggery was another agro-industry during this period. In most parts of Telangāna, sugarcane was cultivated in wet land with favourable climatic conditions. The Krīdābhirāmam mentions sugar as an article of food served to customers in hotels. Details about the production of sugar and jaggery are not available and it is likely that only conventional methods were adopted in the industry. Jaggery was produced in kilns erected on cane fields. Pānugallu<sup>25</sup> (Nalgonda district) Perūr<sup>26</sup> (Nalgonda district) Waraṅgal<sup>27</sup> appear to have been the centres of production of jaggery and sugar.

#### Jute Industry

The Waraṅgal fort inscription<sup>28</sup> refers to trade in Gonesanculu (jute bāgs) and Gone-paṭṭālu (jute cloth). Jute bags were used to store and transport paddy, rice, jowar and other commodities. Peraka was a kind of jute bag which finds

mention in many inscriptions. The bags were used for transport of grain and was a unit for taxation. Several records<sup>29</sup> mention Perkavāru, a community engaged in the manufacture of the jute bags and in transport of goods. Jute was also used for the manufacture "nulaka" (coarse thread) which was used for cots.<sup>30</sup>

### NON-AGRICULTURAL INDUSTRIES

#### Metals

The most important non-agricultural industrial activity was that using metals and alloys. The artisan community that was proficient in this industry was known as Pañcānamuvāru. The artisans viz., Kamsāli (goldsmith) Kanchari (alloy worker) Kammari (black smith) Kāśe (stone carver) and Vadrangi (carpenter) constitute the Pañcānamuvāru.

The first three sects of the Pañcānamuvāru worked in metal where as the fourth worked in stone and the fifth in wood. These artisans too are very ancient but the collective name Pañcānamuvāru appears to have become current in medieval times. Metal industry was generally controlled by this professional guild. The undated Maṭṭewāḍa inscription<sup>31</sup> refers to a nakaram called Pañcalohāla behārulu that traded in five metals. The Warangal fort inscription (A.D. 1228)<sup>32</sup> refers to trade in tin and lead by a guild called tagaramuvāru and in copper by a guild, mūsaravāru. These guilds must have been associates of the community of Pañcānamuvāru.

### Iron and Steel

Geologists are of the opinion that iron smelting was widespread in the Deccan and making of iron rods and implements was almost a cottage industry in this part of the country.<sup>33</sup>

In Telangāna, iron and coal mining was an important industry from early times. There are rich deposits of iron and coal in the Nizāmābād, Nalgonda, Mahaboobnagar and Khammam districts.<sup>34</sup>

The Jalālpuram inscription (A.D. 1202)<sup>35</sup> in Nalgonda district mentions a field Ganimettakunṭa, which may be an iron mine. Traces of lead and iron working are found in Nalgonda and Mahaboobnagar districts. The present Jaggayyapet area, which was part of Natavāḍi is well known for iron mining. Ancient copper mines are found at Agniguṇḍāla near Vinukoṇḍa. The area near Sattenapalli in Guntur district yielded old iron mines. These must have been the sources for import of these metals into the Telangāna. Similarly, lead bearing deposits were also found near Kārempūḍi and Koilkunṭla in Palnāḍ, Gājulapally near Nandyāl in Kurnool district, Varikunṭa and Jangamarājupalli in the Cuddapah region which were in the Kākatīya territory.<sup>36</sup>

Blast furnaces where iron and steel were produced till the middle of 19th century were found at Kūnasamudram in Nirmal Taluk, Adilābād district. Iron mines and steel works functioning till the Mughal period were found near modern Nizamābād. Iron and steel were largely used in the

manufacture of weapons. Nannecoda mentions large number of war weapons in his Kumārasambhavam and most of them were manufactured locally. Nirmal and Indalvayi specialised in the manufacture of swords, lances, daggers and other offensive weapons.<sup>37</sup>

### Brass and Bronze

The Kaṅcaris, among the Pañcānamvāru, were experts in casting alloys like brass and bronze and making a large variety of articles in them. This industry was mostly concentrated in the urban and temple centres. Household articles like vessels, tumblers, plates were generally made of these alloys. The Pammi inscription (A.D. 1235)<sup>38</sup> records the gifts made by Devanapreggada to God Prasannavallabha. The gifts included Piḍigaṅṭa (bell with handle) Jayaṅṭa (hanging bell) lamp-posts made of bronze and plates. Several inscriptions of the period mention the gift of metal lamp-stands.<sup>39</sup> An undated inscription from Būrugugaḍḍa<sup>40</sup> mentions Jegaṅṭalavāru and Goḍuḡulavāru among temple servants who rang the bells and held the umbrellas. These bells and ceremonial umbrellas used on occasions in temples were also made of alloys.

### Jewellery

The Moṭupalli inscription of Gaṅapatideva (A.D. 1244)<sup>41</sup> mentions the import of gold, pearls and also metals like copper, zinc, mercury and lead. A later inscription also at the place (A.D. 1358) mentions the import of gold at the

port.<sup>42</sup> The import of gold into the country is also corroborated by the literary references especially Haravilāsa kāvya of Śrīnātha.<sup>43</sup> It states that Avaci Tippaya setṭi imported gold from the far east. Silver was also imported. Marcopolo wrote that silver was imported into south India from Jedda.<sup>44</sup>

Literary works during this period mention a variety of jewels and ornaments. Pālkuriki Somanātha's Panditārādhyā Charitra<sup>45</sup> mentions gold umbrellas. Headgear (Helmet) made of iron was used by soldiers.<sup>46</sup> Somanātha refers to bulls adorned with anklets, bells and horns made of gold. Gold ornaments mentioned by him included crowns, bracelets, earrings and finger rings.<sup>47</sup> Children wear ornaments like puligollu and molanūlu.<sup>48</sup> Ketana in his Daśakumāra Caritra mentions a large number of ornaments.<sup>49</sup>

Maṭṭewāḍa, a suburb of Warangal, according to the local tradition was famous for the manufacture of anklets and maṭṭelu (silver rings worn by ladies on their toes) used by married ladies. This led to the suburban village acquiring the name Maṭṭewāḍa. Usually, silver and lead are traditionally used for the manufacture of maṭṭelu. Silver lamp-stands, silver flowers, armlets, ear-rings, belts etc., are also mentioned in literature. Maṭṭewāḍa was frequented by the pañcalohāla behārulu,<sup>50</sup> the guilds which traded in five or more metals.

The Telugu poet Manchana writes in the Keyūrabāhu-caritra<sup>51</sup> that people in the great town of Dhanadupura

(Chandol - capital of Durjayas of Velanāḍu, Guntur District) did not wear gold ornaments without diamonds. The diamonds of Āndhradeśa during the medieval and early modern periods were famous all over the world.

The diamonds and precious stones were mined in the Krishna valley.<sup>52</sup> Diamond mining industry greatly flourished during the Phase-III of our period. Marcopolo writes, "it is in this kingdom that diamonds are got; ---- there are certain lofty mountains in those parts and when the winter rain falls ---- the waters come roaring ---- in great torrents ---- when the rains are over ---- they search the beds of the torrents and find plenty of diamonds. In summer also there are plenty to be found in the mountains and people collect them with the help of kites".<sup>53</sup> But what Marcopolo wrote about diamond collection appears to have been based mainly on hearsay.

The tools, implements and moulds used by the goldsmith are noted in the Palnātivīra Caritra.<sup>54</sup> Some of them are given in the Table X.

### Ivory

The Warangal Fort inscription (A.D. 1228) refers to trade in ivory by the Ubhayanānādeśi Pekkandru. The Motupalli charter of Gaṇapatideva also mentions the trade in ivory. This material was used to manufacture among other articles, caskets used by women to keep jewels and cosmetics.<sup>54-a</sup>

The Kriḍābhirāmam refers to an ivory box. Ivory was also used in ornaments and toys.<sup>54-b</sup>

During the Kākatiya period gold and silver were used for coinage. The gold coin gadyāna<sup>55</sup> and the silver coin, rūka<sup>56</sup> were in circulation and minting of these coins was carried on under the supervision of government. The coinage in use, during the period under study is discussed in the Appendix.

#### Stone work and Building Industry

The Telangāna region abounds in granite, dolomite, sandstone and limestone.<sup>57</sup> The kāśe community had specialised in stone work including cutting and carving. During this period big tanks were provided with stone kunds and sluices.

The Kakatiya period witnessed vigorous building activity. Temple building was widespread all over the land. Even the māṇḍalikas and officers built large temples and therefore temple-building became a big industry. Various temple towns witnessed continuous building activity between the 11th and 14th centuries. These included Ālampur,<sup>58</sup> Pānagal,<sup>59</sup> Pillalamarri,<sup>60</sup> Warangal,<sup>61</sup> Gaṅgāpuram,<sup>62</sup> Perūr,<sup>63</sup> Kollipāka,<sup>64</sup> Panmi,<sup>65</sup> Kaṭukūr,<sup>66</sup> and Būrugugaḍḍa.<sup>67</sup>

A large number of forts were also built during the time. Rudradeva built the fort of Warangal<sup>68</sup> to which Gaṅgapatī<sup>69</sup> and Rudrama<sup>70</sup> made additional fortifications.

The several māṇḍalikas and nāyankaras built hill and mud forts, using stone and mud at several places in Telangāṇa. The most important forts in the region that were built in the period, apart from Warangal, include Pānugallu,<sup>71</sup> Munnalūru,<sup>72</sup> Vardhamānapuram,<sup>73</sup> Pillalamarri,<sup>74</sup> Allādurg,<sup>75</sup> (Śrīvardhanakoṭa), Sirikoṇḍa,<sup>76</sup> Kūcimañci,<sup>77</sup> Nagurūr.<sup>78</sup>

A number of inscriptions refer to the stone masons as sūtradhāri, (sūtradhāri Juvapāchārya<sup>79</sup> and sūtradhāri Brahmoju<sup>80</sup>) who belonged mostly to kāśevaru. It is interesting to note that Mailambika, wife of Ēruva Tonḍaya Coḍa donated a village Kāsyapalli near Pānugallu as ekabhoga to sūtradhāri Brahmoju.<sup>80</sup> It is not unreasonable to think that Brahmoju gathered around him a group of apprentices and the Kāsyapalli agrahāra might have developed into a school of architects and sculptors.

### Wood crafts

Wood craft was an essential part of agricultural economy of medieval times. The plough was made of wood but had an iron point. The basic transport vehicle, the cart, was made of wood. It was drawn by bullocks or buffaloes. The blacksmith prepared the iron belts to strengthen the wheels. Thus the carpenter and the blacksmith formed essential components of agricultural community.

The carpenter played an important part in house construction. He prepared the beams, doors, and windows.

The household furniture which included chairs, tables, cots and cabinets, was made by him. Attakas and stair railings<sup>80-b</sup> made of wood were mentioned in the contemporary literature.

### Pottery

Pottery is an ancient and important craft. Pots were used to store grain and seed. They were also used to carry water to fields. Oil was preserved in pots. The Nāgulapāḍu inscription<sup>81</sup> (A.D. 1303) mentions the potters among the Aṣṭādaśapraja. Tikkana refers to the potter's wheel in the Āndhra Mahābhāratam.<sup>82</sup>

Brick making is another industry of the medieval period. The Navābpet inscription<sup>83</sup> refers to itakavāmu chenu (field used for burning bricks). Itikāla in Mahabubnagar district is another place known for the brick industry. This industry was, perhaps, carried on by the kummari (potter) community. Literary sources point to the use of glass mirrors, glass bangles and beads.

### Bamboo Cane Industry

Many household and agricultural articles made of bamboo were in use in medieval times. Gāde, a large storage vessel made of bamboo, was widely used for the storage of paddy. Putti, made of bamboo, was used for crossing rivers and canals. It is a basket with leather covering which is still in use in Rāyalasīma. Gūda, a device for lifting water from tanks and

canals was also made of bamboo. The Kriḍābhirāmam refers to cots made of bamboo and cane.<sup>84</sup> Bamboo was also used to make chairs and stools.<sup>85</sup> The medara community was engaged in this profession. In the city of Warangal there was a Medaravāda<sup>86</sup> which indicates the large number of workers engaged in the profession.

### Leather

The cobbler's craft or leather working also is very ancient in Āndhradeśa. Leather was used in the making of various kinds of articles. Leather buckets known as the etamu, were used to draw water from wells for irrigating the fields. Contemporary literary works point to the use of sandals made of leather. These were known as kirru cheppulu<sup>87</sup> made of two layers of leather. These sandals make noise and were used by peasants probably to frighten away snakes and scorpions while working in the fields.

The most popular musical instrument of these times was the drum using leather on both sides. The Telugu literary works Palnātivīracaritra<sup>87</sup> and Kriḍābhirāmam<sup>88</sup> mention a variety of musical instruments that were made of leather. They are naubat, kanakatappeta, maddela and bheri. The playing on drum by women was a favourite theme of Kākatīya sculpture.<sup>89</sup> Inscriptions of the time mention that the kings and sāmantas were always accompanied by five musical sounds (pañcamahāśabdās).<sup>90</sup> During the war, drums (yuddha bheri)<sup>91</sup>

were played to rouse soldiers. Leather was used in making these different drums.

#### Miscellaneous industries

There were many other industrial occupations to which reference is found in contemporary inscriptions and literature. The manufacture of musical instruments was an important industry. The Vīna was the most popular instrument.<sup>92</sup> In the Panditārādhyā Charitra, Pālkuriki Somanātha gives a list of the types of Vīna.<sup>93</sup> Other types of musical instruments made of wood and leather were popular among common people as suggested by the Kṛidābhirāma.<sup>94</sup> Several hundreds of people were engaged in the manufacture of musical instruments like vīna, tappeta, bheri, naubat, kāhali and others.

The manufacture of toys was another industry.

Nannecōḍa mentions toys made of ivory, glass and wood.<sup>95</sup>

Toys made of lac were also mentioned in the literature.<sup>96</sup>

*Table X summarises the industrial activity.*

#### Taxation on Industry

Just as kara or pannu was the general tax levied on farmers, ari appears to be the tax on artisans. An inscription from Durgi dated in A.D. 1269<sup>97</sup> records the grant of arisunkamu collected from every oil-mill at the place of god Gopinātha by karanam Nāmaya, a subordinate of Jannigadeva. The arisunkamu amounted to one visam in every gadyāna of oil produced. This would amount to a tax of 1/16 of a gadyāna on oil costing one gadyāna. An inscription from Pedaganjām dated in A.D. 1270

TABLE X

Industrial Activity

Industry	Raw Materials	Products	Tools and implements	Community engaged	Reference
(1)	(2)	(3)	(4)	(5)	(6)
Cotton Textiles	Cotton	Coarse cloth, fine cloth, sarees.	Rāṭnam (spinning wheel), Maggam (Handloom)	Sālevāru, Sāliyāṭṭā janulu, Pattasāḅu.	I.A.P. Wl. 61 Tel.Ins. II
Silk	Silk thread	Silk cloth	--	Paṭṭasāli	Tel.Ins. II, 57-62.
Oil	Oil seeds (Gingelly, mustard, castor etc.,)	Oil, Oil cake	Oil mill using animal power	Teliki, Tallikulu Telikivevuru- setṭis (Teliki-1000) Siddivāru	Tel.Ins. II, 161-162. I.A.P. Wl. 28 I.A.P. Wl. 87
Jaggery+ Sugarcane Sugar		Jaggery and sugar	Cane press, kiln etc.,	Peasants themselves appear to be manufacturing these articles on fields.	P.I. No.6. I.A.P. Wl. 63
Jewellery	Gold and Silver and diamonds and precious stones	Ornaments for men and women and temple-dieties	Iron forceps, moulds, hammer, scissorses etc.	Kamsāli	Palnati Vira Carita, Chap.42
(Alloy making) Brass, & Bronze	Copper, zinc, Tin and lead	Household utensils, Temple utensils, lamp posts, lamps etc.	(Iron smelter)	Kanchari	Ibid.

(1)	(2)	(3)	(4)	(5)	(6)
Iron	Iron	Agricultural implements weapons for war	Vayyandi (iron smelter)	Kumhari Metal workers	Ibid., 4-95.
Wood	All types of wood	Agricultural implements such as the plough etc.	--	Vaḍrangī	K.C.S.C.S., p. 40
Stone and Building	Stone	Building materials, stone for sculpture etc.	--	Kāśe	Tel. Ins. II, pp. 115-121 C.I.T.D. IV, p. 39
Pottery	Earth	Pots, Jars etc.	Potter's wheel (Sare)	Kumhari	Tel. Ins. I, pp. 89-90.
Bamboo	Bamboo cane	Cane containers such as puṭṭi, Gāde, Peruka	Knife	Domhari	Krīdābhirānam, v. 70, 68.
Ivory	Ivory	Caskets, Ornaments	--	Carpenters	Ibid., v. 77, I.A.P. Wl. 63
Leather	Animal hides	Chappals (Pādarakshas)	--	Cobblers	Ibid., v. 162
Jute	Jute	Bags, coir, Thin coir	--	Perikavāru	S.I.I. X, pp. 304.
Toys	Ivory, wood, glass	--	--	--	Kumārasambhavam canto III, v. 36
Glass	Earth	--	--	Potter	S.I.I. X, p. 274

(1)	(2)	(3)	(4)	(5)	(6)
Musical instruments	Wood, iron wire etc.	--	--	--	Kṛīdābhīrāman, v. 136.
Brick and tiles	Earth	Moulds and kiln	--	Kunnari	S.I.I. X, 274.

records<sup>98</sup> the grant of ari on salt pans at Pedaganjām and the neighbouring salt-producing villages by the Pekkandru to god Pinneśvara.

An inscription from Velpūru<sup>99</sup> (A.D. 1247) mentions the taxes gānuvula mudra sunkamu, and varusarūkalu. The former term may be taken to mean a registration fees payable from an oil-mill. We may say that the mudra sunkamu was paid by the looms as well. The Pātarlapādu inscription (A.D. 1300)<sup>100</sup> records the grant of amounts payable by several communities to the local temple at the instance of Pratāparudra. The salevāru (weavers) paid the amount on the basis of the number of the looms held by the community. From this, we may infer that the mudra sunkamu and ari sunkamu were collected from the looms as well as from oil-mills.

An inscription from Perur (A.D. 1119)<sup>101</sup> records the grant of nelarūka (a rūka per month) by trade guilds including the Telivāru to the local temple. This nelarūka might be the same as Varusarūkalu mentioned above.

Other taxes on artisan products included Kolapoḍuvu and Karrakūli.<sup>103</sup> These two taxes were paid by the wood craftsmen (vayāraṅgi community). Similar taxes might have been levied on other artisans. Gāndisunkamu<sup>104</sup> and burra-sunkamu<sup>105</sup> appear to be such levies.

References

1. Mackenzie, G. Manual of Kistna District (Madras, 1883) pp. 77-247.
2. G. Yazdani, A.B.O.R.I., Vol. XXII, pp. 171-185.
3. K. Satyanarayana - A Study of the History and Culture of the Andhras - Vol. II (New Delhi, 1982), p. 50.
4. Irfan Habib, An Atlas of Mughal Empire, Sheet 15 B.
5. K.A.N. Sastri, Foreign notices of South India, From Megasthenese to Ma Huan, (Madras, 1939), p. 175.
6. Ibid. pp. 174-175.
7. I.A.P. Wl. 63.
8. Palkuriki Somanātha, Basavapurānam (Hyderabad, 1969) Canto 3. ll. 100-130.
9. I.A.P. Wl. 63.
10. Vijaya Ramaswami, Indian Historical Review, VI, Nos. 1-2, (1979-80) p. 123.
11. Palkuriki Somanātha, op.cit. (Hyderabad, 1969). Ibid.
12. Ibid.
13. E.E. XII, pp. 188.
14. I.A.P. Wl. 63.
15. Tel.Ins. II, pp. 60-62.
16. Ibid. pp. 57-59.
17. K.A.N.Sastry, op.cit. p. 175.
18. I.A.P. Wl. 63.
19. Vallabhāmātya, Kridābhirāmam, (Secunderabad, 1960), v.232.
20. I.A.P. Wl. 18, I.A.P. Kn. Nos. 22,24.

21. K. Gopalachari - Early History of the Andhra Country  
(Madras, 1976), pp. 118-119.
22. I.A.P. Wl. 28.
23. Vallabhāmātya, op.cit, v. 103.
24. Refer Table XIII.
25. Tel.Ins. I, pp. 169-172.
26. P.I. No.6.
27. I.A.P. Wl. 63.
28. Ibid.
29. S.I.I., X pp. 304.
30. Mancana, Keyūrabāhucaritra (Hyderabad, 1966) Canto I.  
v. 90.
31. I.A.P. Wl. 68.
32. Ibid. 62.
33. G. Kurian, India - A General Survey (National Book Trust)  
(New Delhi, 1970), pp. 105.
34. Andhra Pradesh year book (Hyderabad, 1984).
35. Tel.Ins. II, pp. 103-107.
36. Memoirs of the Geological Survey of India, Vol. VIII, 10.
37. Irfan Habib - An Atlas of Mughal Empire (Delhi, 1986)  
Sheet 15 B, p. 62.
38. C.I.T.D. III, pp. 31-35.
39. Ibid.
40. Tel.Ins. pp. 83-84.
41. E.I. XII, pp. 188.
42. S.I.I., X. 556.
43. Śrīnātha, Haravilāsam, Canto I, v. 26.

44. Marco Polo II, pp. 389-390, quoted by K. Sundaram, in Studies in Economic and social conditions of Medieval Āndhra - Machilipatnam, 1968 - Page 18.
45. Pāḷkuriki Somanātha - Panditārādhyā Caritra, Parvata Prakaraṇam.
46. Ibid.
47. Tikkana, Āndhra Mahābhāratam, Virātaparvam (Hyderabad, 1970) cont. 5, vv. 133, 237, 272.
48. Gona Budha Reddi, Ranganātha Rāmāyaṇam, Bālakāṇḍam
49. Ketana - Daśakumāracaritra (Hyderabad 1967) III, v. 77.
50. I.A.P. Wl. 68.
51. Mañcana, op.cit. Canto I, v. 19.
52. K.A.N. Sastri, op.cit, p. 174.
53. Ibid.
54. Śrīnātha, Palnātivīra caritramu, Bālachandrūni Yuddham.
- 54a. Vallabhāmātya, op.cit. v. 77.
- 54b. I.A.P. Wl. 63.
55. S. Dasarathi, Proc. A.P. H.C. Vol. X, 'Numismatic References in Nannaya's Mahābhārata', pp. 117-119.
56. Vallabhāmātya, op.cit. v. 116.
57. Ch. Lilanandam, Building stones in Andhra Pradesh, Journal of the Deccan Geological and Mining Society-I, 1 pp. 27-32.
58. M. Radha Krishna Sarma - Temples of Telingāna, (Hyderabad, 1972) p. 39.
59. Ibid, p. 84.
60. Ibid., p. 100.

61. Ibid. p. 105.
62. Ibid. p. 77.
63. P.I No.6, 9,
64. Op.cit. p. 66.
65. C.I.T.D. III, 31-35.
66. C.I.T.D. III, 16-17.
67. Tel.Ins. I, pp. 83-85.
68. Kāse Sarvappa - Siddhesvaracaritra (Hyderabad, 1960),  
p. 108.
69. Ibid. p. 113.
70. Ibid. p. 129.
71. B.N. Sastri, Kandūru Codula Sasanamula Caritra Sanskriti,  
Introduction pp. 5-44.
72. Ibid.
73. Ibid.
74. Tel.Ins. I., Miscellaneous Inscriptions No. 11.
75. Tel.Ins. I, pp. 143-144.
76. B.N.Sastri, op.cit.
77. C.I.T.D. III, pp. 19-21.
78. I.A.P. Kn. 25.
79. Tel.Ins. I, 169-172.
80. K.C.S.C.S. pp. 166-173.
81. Tel.Ins. I., 89-90.
82. Tikkana, op.cit. Udyogaparvam (Hyderabad, 1970) contq IV,  
vv. 116-117.
83. S.I.I. X 274, pp. 141-142.
84. Vallabhamatya, op.cit. v.70.

85. Ibid.
86. Ibid. 68.
87. Ibid. v. 162.
88. Ibid. v. 147.
89. S. Gopalakrishna Murthy, - The Sculpture of the Kākatīyas (Hyderabad, 1964). Plate- 45 B.
90. Srīnga, Mridanga, Samkha, Bheri, Ghana , Śāsana śabdakośamu, K. Isvaradātt, (Hyderabad, 1967) p. 172, S.I.I, IV 811.
91. Śrīnātha, Palnāti viracaritra - op.cit.
92. Vallabhāmātya, op.cit. v. 136.
93. Pālkuriki Somanātha, Panditārādhyā caritra, Parvata-prakaranam.
94. Vallabhāmātya, op.cit. v. 147.
95. Nannecoda, Kumāra sambhavam (Hyderabad, 1968), canto III, v. 36.
96. Ibid. canto II, v. 46.
97. S.I.I., X 422, p. 225.
98. S.I.I. X. 427.
99. S.I.I. X. 314.
100. P.V.P. Sastri - The Kākatīyas (Hyderabad, 1978) pp. 230.
101. P.I. No. 6.
102. S.I.I. X. 314.
103. K.C.S.C.S. pp. 138-140.
104. Tel.Ins. I., pp. 79-80.
105. Ibid.