Although the main occupation of the Indians during the 7th century A.D. was agriculture as it is still to-day, industries also flourished during this period. Hiuen Tsang casually refers to some professions, Bāha while describing the marriage preparations of Rājayasri and presents of Bhāskarvarman to Harisīa, incidently mentions several industries.1

The textile industry seems to have been one of the main industries of the age.

a. Textile: Hiuen Tsang states that the clothing of the people was made of silk, muslin, calico, linen and fine wool of two varieties.2 One variety of wool was made of sheep's or goat's hair. Another variety was made from the hair of a wild animal. It was fine and soft and easily spun and woven. It was prized as a material for clothing.3 The silk industry was prominent at Tekka (territory between the Sindhu and Beas), Satadru and Kānyakubja where people wore garments of glossy silk.4 Perhaps Udyāna, Punach and Mathurā were noted for cotton industry.5 People of Udyāna had clothing only of white cotton and they wore little else.6 People of Punach wore ordinarily cotton garments,7 while Mathurā produced a fine species of cotton.8 Possibly Lamghan and Kāshmir produced linen.9 The people of Lamghan and of Kāshmir
wore white linen. Kashmirians also wore leather doublets. 9

Bāṇa, while describing the marriage preparations of the princess Rājayasri, mentions the textures of Kshauma (linen probably made from the fibres of the plants of linseed), Bādara (cotton) Dukūla, Lalāntantuj, Amsuka and Netra. 10 Amarkośa gives the terms 'Kshauma' and 'Dukūla' as synonyms. The terms 'Netra' and 'Amsuka' were also believed to be synonyms. 11 But from the description of Bāṇa it appears that he uses the terms in different meanings. Kshauma and Dukūla were probably prepared from the fibres of the plants, while Lalāntantuj, Amsuka and Netra were perhaps different types of silk. 12

Kshauma was made possibly in Assam because Bāṇa describes 'Kshauma cloth' as one of the presents of Bhāskarvarman to Harsha. It must have been very soft as cloths made of it were rolled up in baskets of coloured reeds. 13 Bāṇa states that 'Dukula' was manufactured in Pundravardhanabhukti (Pundradesa). It might have been made from the bark of plants. 14 Bāṇa possibly uses the terms 'Dukula' and Dugula in the same sense. 15 From Dukula Saris, chaddars, covers of pillows and uttariyas were made. 16 Lalāntantuja and 'Amsuka' were probably made from rearing worms. 17 They were perhaps a type of silk. Amsuka had two varieties (i) made in the country and (ii) imported
from China called 'Chinamsuka'. Kālidāsa, Dandin and Bāna refer to Chinamsuka. 'Netra' was also a type of silk which was produced probably in Bengal. A silk called 'Netrasāmījna' was made in Bengal upto the 14th century A.D. 'Pingā' was perhaps a coloured variety of 'Netra' which was usually white. 'Stabaraka' probably a type of silk, mentioned by Bāna, was brought from Persia.

It appears from the evidences of Bāna and Hiuen Tseng that knitting, embroidery, printing, embroidery and dyeing of different types of cloth were prevalent in the age of Harṣa. Spotted and red coloured saris (chumdari) with various designs of flowers and birds are mentioned by Bāna. He refers to tie and dye work (Sanskrit word 'Bhakti', Hindi word 'Bhānta' and Gujarāti word 'Bhāta') while describing the marriage preparations of Rājyaśri. Ancient city matrons prepared clothes of linen, cotton, bark silk, spider's thread, muslin and shot silk. Then the textures were dyed. Sometimes they were spotted with saffron paste. Even to-day the tie and dye work of Gujarāt, Rājasthāna and Punjāb is very popular.

Hiuen Tsang observes that the dress of the kings and grandees was extraordinary. Bāna
reveals that Harṣa had a lower garment (dvitiyāmbaram) shot with silk threads and an upper garment (āmbara) spangled with worked stars. In another place he states that Harṣa wore two robes of bark-silk marked with a pair of flamingoes. Bāna mentions that Mālatī had a gown of bleached white silk, lighter than a snake's slough and underneath a saffron oecicoat with spots of different colours. The silk robes worn by the ladies of Harṣa's court were adorned sometimes with hundreds of different flowers and birds. Yasovati, while lying on her couch, saw the reflections of figures embroidered on the awning. Wonderful umbrella, soft woven cloths and smooth figured textiles are also mentioned by Bāna in the list of presents sent by Bhāskarvarman to Harṣa. The above references show that knitting, embroidery and dyeing were important handicrafts in Harṣa's time.

Though Hiuen Tsang and I-Tsing in the 7th century A.D. declared that tailoring: Indian clothing was without tailoring but this does not seem to be quite true. Bāna mentions that some textures were measured and cut by matrons expert in the art. Garments such as waist-coats, coats etc. worn by males and clothes like bodice, skirts etc. worn by females probably indicate that the art of tailoring was not unknown. Some of the Ajantā paintings also
suggest the same thing. Vātsāyana (4th century A.D.) also mentions tailoring as one of the arts. Therefore Shri Vaidya's statement that tailoring was introduced probably after Harṣa's time by the Ārabs in the 8th century and perhaps even later by the Turks in the 11th century does not appear to be quite right. Both uncut and sewn garments were in use.

Bāṇa and Hiuen Tsang mention varieties of ornaments, vessels, instruments and weapons. Ornaments worn on the head, in the ears, round the neck, the forearms, wrists, fingers, the waist and ankles, are mentioned by both the authorities and some contemporary inscriptions. As already noted Hiuen Tsang refers to abundance of gold, silver and copper in different parts in India. He also mentions iron, white jade, crystal lenses and precious stones. Bāṇa states that several gold workers were engaged in hammering gold at the time of the marriage preparations of Kājyaśī. Valuable ornaments with the finest gems, drinking vessels embossed by skilful artists and different types of cups were presented to Harṣa by Bhāṣakaravarman. Hiuen Tsang mentions vessels of gold, silver, copper, iron and other materials. According to Hiuen Tsang the common people mostly used utensils of earthenware, but metal vessels were not uncommon among the upper classes. The same authority also refers to the full size statue of
Buddha in gold made for worship at the assembly of Kanauj, to which the king also presented as an offering a golden dish, a golden cup, seven golden ewers, one golden staff and 3000 gold coins.43

Hsiuen Tseng mentions weapons like spears, shields, swords or sabres, bows and arrows, battle-axes, halberds and javelins.44 Bāna names bows, arrows, helmets, mace, lance, swords and sharp pointed spears.45 Dandin also mentions the bow, discus, lance, dart, spear, club and the mace.46 Thus it may be inferred that the metal industry was well developed during the age.

Ivory work also seems to have been an important profession in the age. Hsiuen Tsang states that Konyodha, Kalinga and the forests of the country produced elephants which were highly valued.47 The kings of those days had thousands of elephants in their armies, naturally it encourages the ivory industry. Ivory was used for making or adorning furniture in manufacturing seals and for other such purposes. The presents sent by the king of Assam to Harsha included ivory boxes and rings of hippopotamus ivory.48 The four legs of the king's Simhāsana (throne) were inlaid with ivory.49 Kādārabhī mentions ivory-fan and bed-stead with ivory legs.50 Daśakumāra carita also mentions ivory fans.

Besides precious metals the country abounded
Jewellery: in rājagam. And again, various kinds of precious stones of different names were collected from the nearby islands.  

Sthānesvara, Rānyakubja, Atali, and Valabhi, Kapisa and Tekka were the great centres of gems and other precious things. An exquisitely ornamented umbrella with jewelled ribs, crest jewels, pearl necklaces, quantities of pearl, shell and sapphire were among the presents of Bhāskarvarman to Harsha.

No Jeweller's art appears to have been followed with such industry and success in ancient India as that of pearl setting. This art was so highly developed that it gave rise to a branch of science called Ratnaparikṣā (examination of Jewels) which was sufficiently old as to be included in the list of 64 Arts mentioned by Vātsyāyana. Both the Brāhata-samhitā and Arthaśāstra of Kautilya mention pearl necklaces ranging from one to a thousand and eight strings, while the Amarakosa gives a shorter list.

Bāna mentions Ekāvalī (pearl necklace of a single string) and 'Nakṣatramālā' (pearl necklace of 27 strings). Pearls were used for inlay work in the manufacture of ornaments, drinking vessels and sword handles and also for decorating dresses. The art of cutting and polishing diamonds, rubies, sapphires and other gems was practised. The diamond
in particular was used for piercing other precious stones, while rubies were generally utilised for inlay work. Bāna and Hiuen Tsang refer to beads and other small articles made of valuable stones. Mālatī wore a golden bracelet with an emerald crocodile-shaped signet. Her neck was adorned with a collar of pearls. Bhandi had ear rings of sapphire and pearl and diamond bracelets round his fore-arms. The feudatory chiefs who came to visit Harsha wore anklets inlaid with precious stones. Vyāgraketu had glass rings and a tin armlet decorated with white godanta beads.

Masonry and architecture seem to have been well developed. It appears that most of the towns had walls all around. Hiuen Tsang observes that the walls of the towns were built mostly of bricks or tiles. The walls had wooden or bamboo towers. The houses had balconies and belvederes made of wood with a coating of lime or mortar and roofs of tiles. The houses were built of bricks or boards and were covered with common or coarse grass. The walls of the houses were covered with lime and mud and the floors were purified with cow-dung. The evidence of the Chinese authority shows that bricks, tiles and wood were the chief building materials; but lime or mortar was also in use.
The architect of the Buddhist monasteries was wonderful. A three storeyed tower was erected at each of the four angles. The beams and the projecting heads were carved with great skill in different shapes. The doors, windows and low walls were painted profusely. The monks' cells were richly decorated on the inside and plain on the outside. There was a high and wide hall in the middle of the building. There were various storeyed chambers and turrets of different height and shape, without any fixed rules.

Hsüen Tsang refers to several such Deva Temples and so many saṅgharamas (monasteries). The stupas of this type spread all over the country and this type was also adopted by neighbouring countries. Thus we find that the arts of building, architecture and carving were highly developed.

Hsüen Tsang saw a mahābodhi vihāra 160 to 170 ft. high at Bodh gāya. It was a three storeyed building with a high tower shaped like a pyramid and was built of bricks coated with lime. It had tiers of niches with gold images. Its four walls were adorned with exquisite carvings of pearl strings. On the roof there was a copper Amalaka. There were three lofty halls one behind another and the wood work of which was adorned with gold and silver carvings and studded with precious stones of various colours. Hsüen Tsang
also describes the great temple at Nālandā erected by Narasinha-gupta as being 300 ft high and resembling the great tower at Bodh-gaya.69 The king of mid India (probably Harsha) also built a great vihara at Nālandā.70

Bana’s description of Prabhakarvardhana’s palace gives us glimpses of the construction of royal palaces. It was a great establishment broadly divided into three main parts (i) Skandhāvāra (outer part of the palace) where feudatories, animals and common people were accommodated (ii) Rajakula (Next to Skandhāvāra inside was the residence of the royal family and of the royal guests and (iii) Inside Rajakula the inner most part was called Dhavalagriha where the king and the queen resided.71 There was also a separate apartment for the princesses.72 The palace had several vestibules, closing and opening doors, windows, quadrangles and courts.73 The courtyards had terraces protected with awnings.74 The royal palace was surrounded by a wall and protected by a moat.75

The houses of the common people were mostly made of wood, bamboo and mud. Probably the village houses and forest dwellings were made of slips of bamboo, leaves, stalks,
reeds and mud. They had garden enclosures with clumps of various flowers and different types of plants and creepers. 76

The contemporary sources also refer to industries such as pottery, carpentry, cane-work, leather work, glass work, hunting, fishing and shipping. Washermen and barbers are also mentioned. 77

Hiuen Tsang writes that the household utensils of Indians were mostly earthenware. 78 Bāna states that multitudes of modellers moulded clay figures of fishes tortoises, crocodiles, coconuts, plantains and betal trees. 79 Bāna describing the royal camp of Harṣa enumerates a number of vessels some of which (water pots, frying pans, simmering pans etc.) were probably made of dry clay. 80 The Ajantā paintings also reveal a number of cooking utensils, other vessels and toys. 81 As already noted the houses of ordinary and low class people were usually made of clay and wood with roofs of tiles or grass. 82 Bricks and ovens were quite common. 83

Carpentry seems to have been well advanced during this age. Hiuen Tsang 56 and

(i) Pottery

(ii) Carpentry:

Bāna mentions carts, chariots, boats, ships, wooden furniture, vessels, toys and handles of
Hiuen Tsang mentions beams also. Ordinarily corded benches were used for seats. The royal family, the grandees, officials and gentry adorned their benches in different ways. The sovereign's dais was exceedingly wide and high and it was dotted with small pearls. The Lion's seat (throne) was mounted by a jewelled foot stool. Bāṇa mentions the bamboo couch and bamboo baskets.

I. Tsing states that small chairs were used by the senior Buddhist monks and wooden blocks were used by the Junior monks. Mats are also mentioned by Hiuen Tsang. Bāṇa mentions carpenters planning out the marriage altar at the time of Rājyaśrī's marriage. He also refers to cane stools and baskets of coloured reeds.

Leather work also seems to have been known.

(iii) Leather work: Bāṇa and Hiuen Tsang mention leather garments, leather beds, bucklers, strings, drums, girdles etc. Bhairavāchārya had an antelope skin, a girdle and other things. The Śābara youth Sarabhaketu had only a short black antelope skin as his garment and on his back he had a leather-quiver made of a bear's skin and covered with a leopard's skin. While describing a chāndāla colony Bāṇa states that their beds were made of dried skings. It appears that only some ascetics, certain forest dwellers and some low class people used leather garments and beds. At the time of Rājyaśrī's marriage leather worked vigorously played the festal drums, till they boomed again.
leather bucklers with charming borders and pillows of Äśamūrka leather were among the presents sent by the king of Äśām to Harṣa. Hiuin Tsang also mentions leather doublets, strings, gridles etc. He writes "People mostly go bare-footed, few wear sandals." But this does not seem to be quite correct. Bāna mentions sandals, but we are not sure whether these sandals were made of canvas, wood or leather.

Glass work also seems to have been familiar.

(iv) Glass work:

Hiuin Tsang states that Kāśmir and Kuluta produced crystal lenses. While describing the chamber of Grahavarman and Rājaśrī Bāna writes that Grahavarman spent the night in gazing at the reflections of Rājaśrī in the mirrors of the Jewelled walls. Bāna mentions a lady holding a looking glass in her left hand. Some of the Ajantā paintings reveal women holding oval shaped mirrors with handles. We have references to the mirror in Ṛṣṭakumāra carita also.

Both large boats and big ships continued to be made during the age of Harṣa. Also, Hiuin Tsang saw large ships plying through the Ganges. He, with about eighty other fellow passengers, sailed through the Ganges - on the way to Hayamukha. Kumārārāja of Äśām came to see Harṣa at Kājughara with a fleet of 30,000 ships. On the way to the assembly at Prayāga, the military followers of Śīlāditya Rājā (Harṣa) and of Kumārārāja (Bhāskarvarman)
Dr. R. K. Mookerji writes that large ships with capacities of 200 to 500 passengers were built throughout the Hindu period. The Ajantā paintings in cave No. 2 indicate the same fact. Dandin also refers to the arts of ship building.

Moreover Huien Tsang and Bāna mention hunters, butchers, fishermen, public performers and even robbers. Bāna refers to hunters roaming in the countryside, therefore hunters, butchers and fishermen must have been an important part of the economic life of the age. Huien Tsang was troubled by robbers twice during his travels in India. Once while traveling through the palāśa wood in the Punjab, Huien Tsang met a band of fifty robbers and had to run away to save his life. At another time sailing down the Ganges from Ayodhya, his ship was captured by ten pirate boats and he was to be sacrificed to the deity Durga but he was miraculously saved. Dandin refers to a prince heading a pirate ship. The country between Sinhapura and Taxila was frequented by robbers. Bāna refers to villagers who were angry because their ripe grain was plundered and censured their sovereign.

Bāna also refers to medicinal roots, timber, charcoal making and some forest products. At the time of his fatal illness Prabhākaravardhana was attended by Susena and Rasāyana who had mastered the Āyurveda in all its eight divisions. Kuluta produced medicinal roots of much value. Bāna notes wood cutters going with strong
axes to collect timber. He mentions blacksmiths intensifying the heat by burning heaps of wood for charcoal. The forest people gathered bundles of sindhi bark, countless sacks of recently uprooted Dhātaki flowers of the colour of red ore, plentiful loads of flax and hemp bundles, quantities of honey, peacocks' tail feathers, wreaths of compressed wax etc. Village women carrying baskets full of fruits hastened to neighbouring villages to sell them.

Bana's mention of various types of cosmetics and ointments proves that such fine articles were made in abundance. The ladies of high status who attended the marriage ceremony of Rājyaśrī, prepared cosmetics made of saffron paste, clotted by Bālācana essence unguents (Mukhalepanāṇī) as well as strings of cloves (lavanga mālā) mingled with Kakkola fruit, containing nutmegs and large bright lumps of crystalline camphor. Harsha received Goshirsa sandal, cool and pure camphor, scent bags of musk oxen, Kakkola sprays, clove flower bunches and nutmeg clusters as presents from Bhāskaravarman.

The above analysis suggests that various industries were well advanced during this period.