PART II

ECONOMIC CONDITIONS
To begin with we must understand that the economic conditions of the 7th century A.D. did not differ much from the Gupta period. The Guptas inherited a well developed economic system with its multifarious activities from the Maurya and post Maurya age. Such economic activities were greatly developed during the peaceful and prosperous reigns of the imperial Guptas. The Gupta empire collapsed during the 6th century A.D., but the States which came after continued the economic set up of the Guptas. Kauṭalya's Arthashastra deals at length with the agricultural products, various industries and items of trade and commerce along with their different aspects of the Mauryan times. The Gupta inscriptions and literature indicate that these economic aspects continued in the developed form in the Gupta era. The testimonies of Huien Tsang and Bâṇa along with the evidence of contemporary inscriptions prove that the economic progress during this period was maintained with only small changes here and there.

A. LAND:

Huien Tsang describes the country as being about 90,000 Li (about 18,000 miles, 1 mile = roughly 5 Li) in circuit. The land was divided into
about 70 states. The seasons were particularly hot. The country was well-watered and fertile. It was bounded on the north by a chain of mountains and hills, where the land was dry and salty. The east was a well-watered plain fruitfully cultivated. The southern part was rich woodland. The western side was dry and stony." This description holds good even to-day.

Since times immemorial the economic structure of India has rested on
b. Ownership: land. Literary and epigraphic evidences describe different types of lands, their products, their ownership, the taxes upon them, their measurements and ways and means of selling and purchasing land. Hiuen Tsang and Bâna corroborate most of the facts. Originally all the land possibly belonged to the state, but some portions of land or some villages were donated to Brâhmins, scholars or religious institutions. The state gave up all rights of ownership and of taxation upon such lands or villages. It was duty of the state to protect them from the harassment of Châta-Bhâta (irregular and regular soldiers). Harsha offered to give 80 villages to a learned person named Jayadeva in Orissa. Vaitraka inscriptions, the inscriptions of Harsha and of Bhâskaravarman and Râjatarângini refer to such grants of lands. The remaining land belonging to the state was called the crown land.
The Dāmodarapura grants (6th century A.D.) mention Khila (untilled or fallow land) and Vastu land (set apart for building purposes only).  

The Māliya grant of Dharasena II (571-72 A.D.) refers to the type of land called 'padraka'. Fleet interprets it as a village land. It may mean farm land (Kṣetra) or a grazing place.

The grants of land were made on some conditions and on the basis of certain systems of land tenure.

They were mainly (i) The Bhumicchidra or Nyāya (ii) Nivi-dharma (iii) Apradā dharma and (iv) Tribhoga. The Bhumicchidra system had been well known from Kautilya's times. The Māliya grant of Dharasena II (571-72 A.D.) states that the village of Antarātra was given to the Brāhmaṇa Rudrabhūti for three generations according to the system of Nyāya (Bhumicchidra). It was given with the rights of Odranga, Uparikara, Vāta, Bhūta, Bhānya, Hiranya, Šdaya and forced labour when required. The Banskhera grant of Harsha also mentions the term 'Nyāya' in the same sense. It may be compared to the permanent land revenue system of Lord Cornwallis. The Damodarapura grants refer to terms 'Nividharma' and 'Apradā' - Nivi-dharma. The terms perhaps meant the land granted to one person for the duration of his life
time only. 'Nivi' may mean untitled land. Obviously the state reserved for itself the right to take back the land once given according to these systems and could regrant it to another person. The person who received it had no right to transfer it to another person without the special sanction of the state. The Alinā copper plate of Silāditya VII (766-67 A.D.) mentions 'Tribhoga' system which probably meant the land donated to a brahmin, a deity or a king.

Contemporary sources mention Bhūmi,

- Fātaka, Padāvīta, Kulyavāpa,
- Nivartana, Hali (Plough), Piṭaka
- etc. as different land measurements.

Unfortunately contemporary authorities do not give details about their precise dimensions. It seems that Kulyavāpa was slightly larger than an acre and a Nivartana was equal to about 2½ acres. Kulyavāpa was used in Bengal. While Nivartana was in use in south Gujarāt, Central Gujarāt used piṭaka (a basket).

The measurement of Hali (Plough) was common in central India in the empire of Harša. Bāna records how Harša in the region of Sarasvati, bestowed upon the Brāhmaṇs a hundred villages measured by a thousand ploughs. The length of the plough is unfortunately not mentioned, although the stipulated number of plough lengths made up the length and breadth of the village. In modern times one plough land is
equal to 50 acres, one village has roughly 5 to 10 plough land. It means that each village has 250 to 500 acres of land. The grant of Silāditya III (dated A.D. 666) mentions padāvarta measure. The ruler granted to three Brāhmīns a field of 50 padāvartas in a village of Saurāṣṭra. One padāvarta may mean one foot square as suggested by Fleet and not one square foot as supposed by Williams. Thus 50 padāvartas may mean land measuring 2500 square feet (50x50) and not 50 sq. feet of land which is too small to be donated. Land measuring 50 padāvartas (2500 sq. feet) is just equal to one bighā of land in modern terminology.

There were special officers appointed by the state to survey, measure and donate lands. It appears that 'Dutaka' or 'Sandhivigrāhaka' was the chief officer in charge of land donations. He was assisted by 'Lekhaka' a writer or engraver. A grant of Maitraka king Silāditya Dharāsena I (A.D. 606) mentions a Sandhivigrāhakarita Divirapati as the lekhaka. The grant of Dharāsena II (A.D. 633) mentions Sāmaṇṭa (feudal king) Śilāditya as the Dutaka. The grant of Silāditya III (A.D. 676) mentions Rājaputra Kharagraha as the Dutaka. The Banskhera plate (A.D. 626) and the Madhuban plate (A.D. 631) of Harsha refer to
Mahāsamant Skandagupta as Ḍutaka and Iśhvara and Gurajara as writers respectively. The Nidhānpur-plate of Bhāskaravarman (A.D. 643) mentions officers like simāpradāta (possibly the officer marking the boundaries of land), a Kāyastha (scribe) and a Sāsāyita (officer entrusted with the execution of the charter). Just like Valabha grants the Rājatarangini also refers to 'Divira' and Stein translates it as a writer or a Secretary. Grants were made on certain conditions and the documents pertaining to these were safely preserved under the royal seal by the state. Hiuen Tsang also refers to ni-lo-pi-tu (state papers) in charge of separate officers.

B. Agricultural Products:

Hiuen Tsang writes, "The climate and the quality of the soil being different according to area, the produce of the land varied in character. There were people whose duty was to sow, plant and reap according to the seasons." The same authority informs us that among the products of the ground, rice and corn were most plentiful. Ginger and mustard may be named as edible herbs and plants. Like his predecessor Fa-Hien Hiuen Tsang also states that onions and garlic were not common and very few persons ate them. The flowers and plants, the fruits and trees were of different kinds and
had distinct names. According to the testimony of Hiuen Tsang rice, wheat, cereals, sugar cane, oil seeds, cotton, various types of vegetables and different kinds of fruits and flowers seem to have been the main products of Northern India.

It was produced in Tamgham, Tekka, Jalaun, Paryatra, Kosambi and Magadha. Paryatra (probably Bairat) produced a strange kind of rice which ripened after sixty days. Julien calls it a species of 'dry rice' or mountain rice. Magadha yielded a kind of rice with large grains and of extraordinary fragrance called by the people the rice of grandees. It had an exquisite taste and shining colour. Julien supposes that it was probably the rice called Mahasali and Sugandhika. This type is also mentioned by Kalidasa and Bana. Rice was grown in Khedaka (Kheda) region and in some parts of Gujrat. Kashmir produced a large quantity of rice and probably it was used there as one of the articles of barter. According to Bana the region of Shahrivar also produced rice and other crops. Bengal also possibly produced rice as farming was done on an extensive scales there.

Wheat was grown extensively in various parts of India such as Tekka, Paryatra, Ahikshetra, Kundravardhana.
(Rṣṇagaprj, Mālāvā and Sindh. The soil of Mālāvā and of Sindh was specially suitable for wheat cultivation and great quantities of winter wheat were produced in these countries.46

Cereals were grown in several places like Kapisa and its dependencies, Nagar and Gandhāra (Peshāwar), Kāshmīr, Jālandhar, Satdrū, Matipura, Ayodhyā, Visoka, Śrāvasti and Sindh.47

Sugar cane was produced in Langham, Gandhāra (subject to Kapisa), Punach, (subject to Kāshmīr) Kausāmbi and Pundravadhana,48 (country of sugar cane). Gandhāra prepared sugar candy from sugar-cane.49

Moreover Huien Tsang mentions that the soil in most parts of Northern India was rich and fertile and therefore they yielded good crops, Taxilā, Kuluta (Kulu), Mathurā, Sthāneśvara, Brahma-pura, Prayāga, Kapilvastu, Benāras, Magadha Kājugha, Kāmarupa, Ėdra (Orissa), Mālāvā, chi-ki-to (North East of Ujjain), Vallabhi, Sindh and Multān produced various crops in abundance.50

Mathurā produced a fine species of cotton cloth.51 Bāṇa also refers to the wide use of cotton (Bādar) and other cloth.52 Chi-ki-to (Bundelkhand) yielded beans and barley in
abundance, Sindh produced millet and pulses besides wheat. Various kinds of grain grew in Udyana. The fertile soil of Takshashila bore good crops. Tekka produced silk. Kullu (Kulata) had a rich vegetation and many valuable medicinal herbs because it was close to the snowy mountains.

Though Hiuen Tsang mentions that most places in Northern India produced rich crops, there were some regions which were not suitable for cultivation. The soil of Bharukoucha (Broach) was brackish and vegetation was sparse. Salt was made by boiling sea water and the people were supported by the sea. (Perhaps by maritime trade). Surat had also saltish soil and fruits and flowers were scarce there. The original word 'su-la-ch-A' is interpreted by Beal as "surastra", while Watters explains it as 'Surastra' (Surat). The latter interpretation seems to be correct because the land of Su-la-ch-a is said to be saltish. As the sea is very near to Surat, its land could have been impregnated with salt at that time. But we cannot accept that Surastra (Sraath-Girnar district) was brackish and fruitless. On the contrary it must have been rich in vegetation. Hiuen Tsang also states that Mo-hi river (Mahi) is on the
west side of Su-la-ch-a. These facts help us to identify su-la-ch-a with Surat.

Irrigation was not uncommon at that time. The Aphasad inscription of Adityasena (probably 672 A.D.) states that the queen of Adityasena got a big reservoir constructed for irrigation purposes.

Maitraka inscriptions mention occasionally the donation of wells and step-wells (Vāpis). Bāna mentions the use of Persian wheels in farming. Hiuen Tsang informs us that water led from the river or from banked up lakes (reservoirs) flowed round the towns.

C. Fruits, flowers, trees and forests:

Hiuen Tsang names various types of fruits and flowers that were grown in different states of Northern India. He mentions mangoes, melons, grapes, plantains, apples, coconuts, pears, peaches, plumbs, pomegranates, apricots, jujube, tamarind, Wadhuka, Jack-fruit, sweet oranges and wood-apples. The Chinese pilgrim refers sometimes to the saffron flower. He gives the names of several trees some of which have not yet been identified. He states that great forests bordered some cities and villages.

Punach (a dependency of Kashmir) produced Āmras (mangoes), Udambas (figs), Mochas (Plantains)
and other fruits except grapes. The country yielded sugar-cane and flowers also. The fruits though abundant, were prized on account of their taste. The fruit trees were grown in orchards near the dwelling houses. The people of Mathurā carefully cultivated the Amalaka or Āmra trees (Mango) which grew there abundantly. According to Bāna the products of the Sṛiṅgaṇṭha region including the Stāṁviśvara tract consisted of different corns, sugar cane of the Pundra variety, vines and of pomegranates. Udyāna produced grapes in abundance. Vaiśāli abounded in fruits and flowers and Āmra fruit (mango) and the moccha (banana) were very plentiful and much prized. Pundravardhana was famous for sugar canes and the panas fruit (Jack or bread fruit). It was as large as a pumpkin. Though plentiful, it was highly valued. Kāmarūpa produced the panas fruit and the Na-Lo-Ki-Lo (Nārikela) coconut fruit. Though there trees were plentiful, they were considered valuable. In Udra (Orissa) every kind of fruit was grown extensively. Hiuen Tsang writes, "It would be difficult to name the strange shrubs and the famed flowers that grow here." OTa (Orissa) fruits were larger than those from other parts.

The same authority states that from Kāśmira pears, plums, peaches, apricots and grapes were planted here and there. Hiuen Tsang mentions pears,
plums and peaches rarely in his account of India. Therefore it seems that these fruit trees were not common in India. Perhaps they were imported from Kāshmir. Ibn Batutā does not mention them. Probably they were grown in the region between Kāshmir and China and not in India. Karisā, Udyāna, Jālandhara, Matipura, Kānyakubja, Ayodhyā, Prayāga, Karṇasuvaraṇa, Kalinga etc. produced various fruits and flowers in abundance. While fruits and flowers were scarce in Paryātra, Braoch and Surat. The date, the chestnut and the red and green persimmon were not known in India.

Bāṇa mentions various trees, plants and shrubs growing in the forests of the Vindhyas. He names trees such as banyan, bamboo, karṇikar, champaka, nameru, sallaki, Nārīkela (cocoanut), Nāgakeśāra (Harikesāra), Sarela, kurbaka, Red Aśoka, Bakula, Keśāra, Tilaka, Hinga, Priyangu, Muchukund, Tamāla, Devadāru, Nāgavalli (Betal nut), Jamura, Nimbu, Dhuilikadamba, Kutaja, Pilu, Sharīfa (sadañala), Katfala, Shefālikā, Lavalilata, Lekucha and Jāyafala (Jāti fala). Most of the names cannot be identified, but it is certain that some of them supplied great quantities of fruits, flowers and wood. Bāṇa refers to some kind of tax on the selling of fruits and other vegetable products. Some of the trees might have been good sources of income to the state as well as to the
individuals.

As already noted Hiuen Tsang enumerates several fruit trees. He also refers to timber and saffron flowers. Atali (still unidentified, N.W. of Mālawā) produced the Pepper tree and the perfume tree (Olibanum) from which spices and scents might have been prepared. In Kalinga there were extensive forests for some hundreds of Li. Between Southern Kosāla and Mahārāṣṭra there were great forests inhabited by wild beasts, yielding ample wood and animal products like hides, bones, horns etc. Forest dwellers had garden enclosures with clumps of gavedhuka, garmut, sigru, Granthiparṇa, Suraṇa, Suraga, Vaśgaka, Vaca and the castor plant. They grew different vegetables, perfumes and medicinal herbs. The statement of Hiuen Tsang that in Gāndhāra he saw a pippala tree over 100 feet high with wide-spreading foliage affording a dense shade seems to be an exaggeration. In Ahikshetra and in Kanauj there were many woods and fountains. There were beautiful gardens. Near Kuśinagara on the western bank of the river Ajitavati, there was a grove of śāla trees with a greenish white bark and very glossy leaves. Four of the trees were of unusual height. The Maithraka inscriptions also mention trees such as Banyan, Ankoll, Śāka, Khādir, Baduri (Berry), Salmali, Mango, Udambara, Jaṁbu, Nimba Falāśa, Pippal, Bilva, Bamboo, Śami, Kadamba and Shirisha.
We have mention of parks and gardens.

Wines were prepared from the leaves of certain trees, fruits and flowers. According to Hiuen Tsang there were distinctions in the use of wines and other beverages. The Kshatriyas distilled wines from vine and sugar cane. The Vaisyas drank a strong distilled spirit. The Brähmins and the Buddhist monks drank syrup of grapes and sugar cane. The middle and low castes used any type of drink. Ban also mentions 'Ullaka' a kind of drink sipped from cups. Hanisavega brought from the king of Assam cups of 'Ullaka' which gave out a fragrance of sweet wine.

The fruits and other products of the forests described above, might have played a great role in the economic life of the age. We have no means to ascertain how much income was derived by the states and the people from these sources. But it is certain that it was fairly good.

D. Animals and animal products:

The contemporary evidences show that the domestication of animals was well advanced during this age. These give a hint that various animals were used for economic, military and social purposes. The hunting of wild animals was
a regular profession. The forests of the Himalayas, Kamarupa and Vindhyas abounded with elephants in those days. Some parts of Gujarat such as Rajapipala and Chatoanagapura also had elephants. Konyodha and Kalinga produced dark wild elephants which were capable of long journeys and were much prized by the neighbouring countries. Contemporary sources occasionally mention ivory articles.

Excellent horses were bred in Kapisa. Kashmir yielded horses of the dragon stock. The horses from Tekka were greatly valued. Persian horses fetched high price in the Indian market. In Caryatra (Bairat), oxen and sheep were numerous. Sindh bred oxen, sheep, dromedaries (the Arabian camels who were comparatively small in size and had only one hump), mules and other beasts. Naturally Caryatra and Sindh must have produced much wool. Nepal yielded yaks which were perhaps beasts of burden there. Farming was done with the help of oxen. Of course the cow, the buffalo, the goat and others must have been common animals. They must have formed the backbone of the village economy. Huen Taang and Banya mention milk, butter, curds and ghee as common items of food of the Indians. Fish and mutton of gazelle and deer were eaten fresh or salted. Dandin describes how a deer was shot, skinned and
Lions were possibly found only in the forest of Gira (Soratha) as they are found even to-day. Bāṇa mentions 'Lions' dwelling in the forest of the Himalayas also, but this is very doubtful. Other wild animals were probably found almost in all the forests of India. Bāṇa states that hunters roamed with their traps in the forests. Skins and bones of big animals might have been used for making various articles. Garments of skin and ornaments of bones are mentioned by Hiuen Tsang and Bāṇa. Animals such as horses, camels, mules, asses and elephants served as vehicles during this period.

E. Mineral Products:

The mineral products seem to have increased in this period. Hiuen Tsang takes note of a number of states which produced metals like gold, silver, iron and copper. Gold and silver coins appear to be very common. Copper coins seem to be rare. Precious stones were found in some states. Salt was procured from hills as well as from the sea.

Kapisa, Udyana, Tekka, Kullu, Satadru and Sindh yielded gold, silver and copper. Udyana and Tekka also produced iron. Tekka and Kullu (Kuluta) were also famous for bell-metals. The Crystal lenses of Kullu and precious substances of Satadru were famous. Many rare commodities from different places
were collected at Kapisā, Sthāneśwar, Kānyakubja, and Valabhi.¹²³ Suvarṇagotra in the midst of the great snowy mountains (the Himalayas) produced a superior sort of gold and hence it was called suvarṇa.¹²⁴ This place is perhaps the śvarṇabhu or gold-region mentioned in the Brihat-Sanhita, which Kern regards as "in all probability" a mythical land.¹²⁵ Mathurā also yielded a superior quality of gold.¹²⁶ Nepal produced red copper and it used copper coins as the medium of exchange.¹²⁷ Atali produced valuable gems and precious substances in great quantity.¹²⁸ The houses of O-Tien-Po-Chil-Lo (probably Kachchh, province of Sindh) were richly ornamented and many possessed rare and costly substances. The country of ḍangala (subject to Persiā) abounded in precious gems and stones.¹³⁰

From the above discussion it seems that most of the places in North-western India were rich in mineral products. Precious metals and rare commodities were perhaps transported from these regions to other parts of India. The states of mid India seem to have been rich in agricultural crops, while the eastern and southern regions mostly abounded in forest products. Most of the states boasted of rich luxuriant vegetation and abundant fruits. The salty land of Bharukaccha, Surata, Sindh, Kaccha and Pitāsīla¹³¹ produced salt. The first two prepared salt by boiling sea water.¹³² Sindh produced
a great quantity of salt of various colours such as red salt like cinnabon, white salt, black salt and rock salt. This salt was used for medicines in places far and near.
AGRICULTURAL PRODUCTS

△ RICE.
■ WHEAT.
□ SUGARCANE.
▲ BEANS-BARLEY.
○ SILK.
● MILLET-PULSES.
■ SALT.
‖ FRUITS.
CHIEF CENTRES OF INDUSTRY

- JEWELLERY.
- EMBROIDERY.
- SILK.
- GOLD.
- LINEN.
- LEATHER.
- COPPER.
- PEARLS.
- FOREST PRODUCTS.