Chapter V

Economic Life

The advancement of a country is considered on the basis of its economic development. The economic development is the measuring rod of a civilization. So a study of the economic life under the Bhauma-karas and the Somavamsis is necessary for making an assessment of its legacies to the civilization of early medieval Orissa. The copper plate grants and inscriptions of the period throw ample light on the economic life of the people under our study.

The Superstructure of economic life of the people under study largely depend on land. Land was the basic foundation of the economic life of the people. The land lords or the zamidars were held in high esteem and had command over others, whereas the landless people were paupers and received no respect and dignity from the society.

During the Bhauma-kara and the Somavamsi period land was divided under the following categories.

1. Fertile cultivable land. (Kshetra Bhumi)
2. Fallow land (Khila Bhumi)
3. Domiciled land (Bastu Bhumi)
4. Barren (Gochara land) Padra or Padraka (common land adjacent) to village left uncultivated.
5. Forest and garden land.

Generally the cultivable land was known as Kshetra in the medieval inscriptions. In the Somavamsi inscriptions, there is mention of Kshetra-kara (land tax) with other taxes. Fertile lands gave much produce to the people and became the key to the economic development. Khila bhumi or fallow land was not fit for cultivation and did not help to the economic prosperity of the people. It did not add anything to the state exchequer. Bāstu land was situated near the cultivable land. In the Bhauma-kara and Somavamsi inscriptions Bāstu Bhumi is described as Kheta. Gochara land was called padraka in the Somavamsi inscriptions, and was lying near the village for the use of the public.

In course of time small villages like Kubhāra-Padraka, Ketaka padraka, Baṭa padraka, Khadira Padraka developed on Gochara land. The chikākola inscriptions of Ganga king Indravarman mentions Vaṭaka which was donated with the village Tamara Cherub. Vaṭaka probably was garden land. It is guessed from the Banpur inscriptions of Dharma-rāja II that village Madhu Vaṭaka was famous for Sandal garden and Madhuvana.

Ownership of the land

The scholars differ in their opinion as to the ownership of land during the ancient and Medieval period.
Some are of the opinion that the king is lord of the land and the subjects enjoyed the land by paying $\frac{1}{6}$ (one sixth) of the produce to the king. The king also gave his approval for the enjoyment of land by the people. On the other hand, some scholars believe that land belongs to the people and the king had no authority over this. The king could not interfere in the ownership of the subjects. People paid tax to the king for good government and for maintaining law and order inside the kingdom.

From the following discussion we can ascertain the ownership of the land. King was donating land to Brâhmins, while donating lands, he kept some powers reserved for himself. If the donee would neglect his duties being addicted to prostitution and gambling, he had to lose the ownership of land. From this act of the king, it is proved that the king was all in all of land system. With this, another question comes to the mind that if the king was the real owner of the land, why did he declare donation before others? Though the king was master over land, he could not donate it without the consent of the people. The Bhaumakara and the Somavâmśî inscriptions give evidence to prove the above fact. The king had addressed Mahamattara, the representative of the villagers at first. Even the king could not donate the crown land (Khas) without the approval or consent of the people. Indirect approval of the people was necessary if not direct. It is worth mentioning
that the kings of the Bhauma-kara and the Somavamśi period were respecting the democratic principles.

The epigraphic records of the Bhauma-kara and the Somavamśi period enumerate that all fiscal rights and privileges of the Monarch in a village were given to the donee when the whole village was granted. The land charters of the Bhauma-kara period indicate the rights over land, water and forest transferred to the donee. The Dhenkanal plate of the Sulki ruler Kulaśṭambha\(^3\) refers that a village was granted to the donee with its land, water and forest that came under its boundaries. Another copper plate grant of Bhañja king Yosabhañja of khiñjali Mandala\(^4\) points that a village exempted from tax, was donated along with its trees, creepers, the right of fishing and catching tortoise.

**Bhumichhidranyāya and Akshya Nīvī**

A fiscal term mentioned in both the Bhauma-kara and the Somavamśi records is Bhumichhidranyāya\(^5\) (Maxim of fallow lands). Bhumichhidra denotes land which is unfit for cultivation. The cultivators who brought such lands under cultivation, automatically became the owner of the land by virtue of Bhumichhidranyāya. The word Bhumichhidranyāya has been found to have been mentioned in ancient literature. The Arthasāstra of Kautilya\(^6\) during Maurya rule speaks about Bhumichhidra which means Virgin land. During the Bhauma-kara and the Somavamśi period the whole village was granted.
under the tenureship of Bhumichhidranyāya. When the whole village was donated both cultivable and un-cultivable lands were donated. During eighth century AD both categories (cultivable and un-cultivable) of land came under the tenureship of Bhumichhidranyāya. This system was prevalent in Gujrat in the state of Mahāraṣṭra during seventh century AD.

During the Bhauma-kara period villages were donated by the principle of Bhumichhidranyāya and the donee exercised rights over the inhabitants like tantavayas, Sounḍhikas and Gokuṭas. The tenure of Bhumichhidranyāya states that the person who brought the fallow land (Waste land) under cultivation enjoyed it for life without paying any tax to the state. This is based on the popular maxim that the field belongs to him who first cleared the weeds and the deer belonged to him who first wounded it.

As regards, the implication of this system of land tenure, it indicates permanent tenureship and the property donated under this rule was freely handed down from generation to generation. Thus it seems to have serious legal implications as to the rights of the donee over the gifted land. Taxation system was vital element of land system and the donor abounded it to the donee to enjoy the land on permanent basis. Thus the Bhauma-karas rulers encouraged feudalism in the society which grew as a powerful political force in the later medieval period.
Another form of land tenure which was prevalent during both the Bhauma-kara and Somavamsi period was called Nividharma, or Aprda dharma or Akshyanivi. Those who were purchasing land from the State were to follow this principle. According to this principle the donee got full right over land, but he could not sell, or mortgage or transfer it to any body else. The donee could enjoy the benefits derived out of the donated plot of lands. By the principle of Nividharma, Anandaprava purchased a hut from simgh. Sometimes, the kings were the owners of all land except those held by the cultivators. The kings were also donating land on the basis of Nividharma.

**Tax-administration**

Tax administration was known as royal donation. This principle of tax administration states that the donee got a piece of land or a village from the king and was enjoying the same for life on payment of nominal rent to the king. The village of Vakavedda and Pashitala were donated to Brāhmanś in the time of the Somavamsi king Janamejaya.

Another form of tax-administration could be seen during the time of the Bhauma-kara rule of Toṣāli, that king Kulaśṭamba of Kodālaka Maṇḍala as well as Tuṅga king Gayada Tuṅga of Yamagarta Maṇḍala of Toṣāli had donated 42, and 45 number of silver coins respectively as a mark of tax administration. It is deduced that silver coins were in vogue in Orissa during the period under review.
Land Grants

The lands were granted to religious institutions, deities, and their shrines belonging to different religious sects. Queen Vāsatā granted a village for day-to-day management of the temple of Hari, situated at Sirpur, the proud capital of south Kośala of the Somavamśī kings.

Lands were also granted by feudatories, officials, and private individuals. During the Somavamśī rule, so many copper plate grants were issued by Monarchs where the donations have been mentioned. The Senakapāt charter of the time of Bālārjuna speaks of Durgāra-Kshita, a feudatory ruling Monarch issued grants to a temple. The Kamalavana merchants association granted donation to the temples of Keśava and Āditya. Private rich individuals named Śreshthi-Yasa and Dodhaka also made grants of land. The private institutions and individuals, while donated land, wanted the prior permission of Monarchs. During the Somavamśī rule in Orissa in the ninth and tenth century AD, donations were made not only to single individuals but also to a number of individuals. The donation was not only one village but a group of villages to a single person or institution. In such cases the donee had to enjoy vast and comprehensive rights par with the feudatories of the king. But when a single village was granted to more than one donee or a number of villages were granted to a number of donees the grantees enjoyed the rights over the areas falling to
their respective shares. Somavamsi king Janamejaya I granted the village Pasitala to two and four Brähmins respectively. Queen Vāsatā donated five villages which were divided into four shares, the first share was meant for the alm house, the second for repair of dilapidated part of the temple, and the third was meant for maintenance of the servants of the temple. The last and the fourth part of the donated village was again sub-divided into fifteen parts and were distributed among the Brähmans of various groups.

**Purpose of Donation**

The purpose of donation of land is varied in nature. The most common purpose of the donors was to enhance their prestige in the society. Another aim of donation was the attainment of religious virtue. Some donors were donating for augmenting social prestige of their parents. Stimulation of scholastic instincts was another intention of donation. During the Bhauma-kara and the Somavamsi rule Orissan population was based on tribal elements. Donation to Brähmaṇas aimed at aryanişng those tribal elements of the society. The Dhenkanal copper plate inscriptions of Bhauma-queen Dharamamahādevī of Toṣāli had been donated to Brähmaṇas expecting rain fall. The Somavamsi king Janamejaya had donated two villages on the eve of Superannuation of his minister sādhältara from public administration. With the donation of village, its lands both cultivable and
un-cultivable, forests, mountains, waters and air were also donated. The donee had the right to enjoy all the economic facilities available inside the donated village. The aim of such donation was the expansion of areas of Khetra land and Bāstu land. Thus large number of villages and copper plates were donated by royal and private individuals. With these intentions, grants were made to large number of students scholars who were wellversed in vedas. Monks and ascetics also received grants to fulfil the above purpose. Plots of land were granted to monks belonging to Śaiva faith for performing Yaga(sacrifice) Diksha(converting people to Śaiva faith) and Annasya sattram (free feeding house). Religious shrines and deities were granted donations of land for performing the following Charities viz Sattram, Vali(chavity), Charu(oblation) Naivedya (offering)Nritya(dance) and Vāditra(Music) with regard to God. Out of the above charities, the servants of the temple got their individual shares for Livelihood. Lands were also granted for commemoration of certain festive occasions like construction of temples and functions of other religious significance. The Śirpur stone inscription of Vēsatā mentions the construction of a temple in honour of Hari. Promotion of trade and commerce in side the state was another motive of land grant. The Kamalavana merchants' association was donated with a village. Grants were also made for the spread of education. Ratnagiri was an important seat of learning during the Bhauma-kara period. A foreign
scholar named prajña received education in this institution. As such the Bhauma kings had made huge grants for the promotion of learning. It is worth mentioning here that Itsing who visited this seat of learning during the fourth quarter of the seventh century AD says that scholars used to receive land grants.

**Royal ownership of land**

After analyzing the various purposes of donations of land it may be taken that king was the supreme owner of all the land in the kingdom. Only the kings donated the whole village and no other donors got this right. Even though Daṇḍi Mahādevī donated the whole village of Rasambha to Purussottama, the latter alienated half of it to Ravika.

The idea of ultimate ownership of land by the king can be traced in ancient law books. Manu Smṛiti speaks of the ultimate owner of land and master over land, Gautama and Brahaspati support the view of Manu as regards the royal ownership of land. The Gupta and Vakataka inscriptions also speak of royal possession of land. The kings used to donate a village, a part of the village or some land. The peasants of the village got right over tenure of land. They paid revenue to the donee and not to the king.

Although the peasants enjoyed tenure over the land in the village and paid tax to the donee, yet the king
had kept some prerogative powers in his own hand. To maintain proper law and order the king imposed fines on thieves.  

The Gupta records indicate that the donee was not permitted to impose any new tax on the people of donated areas.  

The donee enjoying a tax free village was forbidden to encourage payment of revenue by the cultivators to the State. This would involve loss of revenue to state exchequer. In certain grants the state has certain specific rights of enjoyment. Thus the donee has no right alienate land by way of sale or mortgage etc. The Bahuma-kara kings enjoyed their prerogatives to the fullest extent and we donot find any mention of surrendering the same to the dones.  

Demarcation of Boundaries of land  

Agriculture was the main occupation of the people during medieval Orissa. With the rapid growth of agriculture, there began a change in the condition of people. People demanded more land to keep in their possession. People keenly felt this. Meticulous care was taken to demarcate the boundaries by well defined marks to avoid conflicts and litigation. The inscriptions of the Bhauma-kara and the Somavamsi period throw much light on the demarcation of land. Arthasāstra mentions that boundaries of land was marked by the Tadaga, river, mountain, and Sālmali tree. But according to Senakapāt inscriptions boundary marks consisted of a pit(garta) Śivasamudra (large tank) and Roads.
Often charters are found registering the villages with their four frontiers during the Bhauma age. The Hindol plate of Subhākara III and the Talcher plate of Sivakara III indicate that the boundaries of village appeared just like a serpent for some distance, then entered into another direction in strait and touched the other directions.

The village boundaries are found mentioned in the Kumurāṅg plate of Daṇḍi Mahādevī of Bhauma queen. The village extended up to the boundary line of Vasimlipchchhanda. It was bounded by Payada on the west and by a setu on the east.

It is a matter of great interest to mention that boundaries were demarcated in a fashionable manner during the time of Harsha. During the Bhauma-period stones were being planted for giving permanence to the boundaries.

**Measurement of land**

The inscriptions of the period under review mention that certain units of measurements were used for ascertaining the area of land. During the Bhauma-kara and the Somavamśī period the state maintained a regular department for Land Survey, Land measurement, and land revenue. This was also necessary to prevent boundary disputes among villages as well as the entry of trespassers. The pustapālas were appointed to maintain the record of the revenue department.
They had to keep careful record of all land transactions and were mainly responsible for the fiscal administration of the kingdom.

During early medieval Orissa hand and fingers were generally used for the measurement of length and breadth of a thing. One finger is equal to 3/4" and one hand is equal to 18" or one and half feet. For the measurement of fabrics this system was prevalent in Orissa. Sometimes for the measurement of land this system was also adopted.

During the Bhauma-kara period Mala was considered as unit of measurement of land as evident in the inscriptions. The Angul plate of Dharma Mahādevī records the donation of ten Mālas of land. The word māla also occurs in the records of the Tungas rulers who were the feudatories of the Bhauma-karas.

There is a land measurement called Māna prevalent in Orissa. It is equivalent to 3/5 of an acre. There is no difference between land N in the inscriptions. It is quite possible that the word Māla is a scribe's mistake for Māna. Thus Māla might have been used in the same sense as Māna.

The land charter of Gayadā Tuṅgadeva assigned to 11th century AD speaks of the following distributions of the donated village situated in the Venduṅga Vishaya in the Yamagarta Manḍala in the following way. 1. 1/6th Māla to Dado, 2. 1/6th Māla to Trivikrama and Purushottama.
3. 1/18th Māla to five brothers 4. 1/18th Mala to Bishnu,
5. 1/18th Māla to Ghallo, 6. 1/6th Māla to Nārāyan
7. 1/12th Māla to three brothers 8. 1/18th mala to Trilochana
9. 1/36th mala to Baladeva, 10. 1/12th Māla to
Manorava and Devasrama and 11. 1/12th Māla to Sadhovana.
Thus Māla was a measurement of land which was followed by
Tuṅga rulers. Since the Tuṅgas were feudatories of the
Bhauma-kara rulers, this system might have been followed
by them.

There is no mention of land measurement during
the Somavamśī rule in Orissa. The somavamśīs came to Utkal
from South Kośala after the Bhauma-karas and it is possible
that they must have followed the land measurement of their
immediate predecessor or they must have brought their own
system of measurement from south Kośala. Demarcation of
the village boundaries and division of the gifted lands
suggest that some fixed system of measurement of land pre­
vailed in Kośala. The contemporary inscriptions are silent
about the measurement of land during Somavamśī and Early
Gaṅga period, except Hala measurement. The Bhaumas
followed a land measurement known as Māla and there is no
much difference between Māla or Hala except Mā and Hā. It
may be deduced that the somavamśīs of Orissa might have
followed their predecessors measures.

It might be also a fact that Hāla and Nivartana
system of land measurement prevailed during the Somavamśī
rule. The Nivartan system of land measurement they followed from the Kalachuris in the south Kośala.

The plough measure is technically called Hala and is found to have followed during the Gaṅga rule. It is also possible that the Gaṅgas imitated this system from their predecessors, i.e. the Somavāṃśis. It is clear that Hala system of measurement was in Vogue during the Somavāṃśi rule.

Hala originally meant an area of land which can be cultivated annually with the help of a single pair of bullocks and plough. According to P. Bhaṭṭacharya a hala of land measures about 3-4 acres.

In the opinion of Hunter one hala of land is equivalent to six acres in Orissa. According to Mirāshi one hala of land measures about five acres.

According to B.P. Mazumdar a hala signifies an area of land which could be cultivated by a plough of one day and the area is equivalent to a little about 1/3 of an acre.

Hala measure of land is found to have been mentioned again and again in the inscriptions of Orissa. The term occurs as a land measure in the Narasimha Pālli plates and Ulam plates of Hastivarman. This measurement of land was in use in different parts of Northern India. In the Harshacharita of Bāna the term hāla is mentioned in the sense of land measurement.
From the above discussions conclusion may be drawn that both the Bhauma-kara and the Somavamși rulers of Orissa followed measurement of land to provide encouragement to both agriculture and agriculturists.

Rise of Feudal Lords

The rise of Zamidars and feudal lords was an important feature in the economic life of the period under review. Orissa being situated in the South East of India remained unconquered by central authorities for a pretty long time after the imperial Guptas. Taking this opportunity royal dynasties like the Mātharas, Baśisthas, Gaṅgas, Nalas and the Sarvapuriyas came to Orissa to build up their fortune. In course of time they established powerful kingdoms such as Kaliṅga, Tośāli or Utkal and Kośala. The Gaṅgas ruled over Kaliṅga, the Bhauma-karas in Tośāli and the Somavamśis in Kośala respectively, political rivalry started among these three royal dynasties for acquiring territory and sovereign authority. They took some high sounding titles like "Rājadhirāja" "Paramavaṭṭāraka" and "Parameśvara". First they tried to win over the local chiefs and petty kings to acquire their active support in administration. The powerful kings conferred titles like Sāmanta, Mahāsāmanta, Mandalika, Rāṇaka etc. The Sāmantas or feudal lords ruled over vast areas in their name and donated villages as well as Lands. The kings accepted the Supremacy and support of the Feudal Lords. They also received annual grants from them.
The Sovereign kings of Kalinga, Toṣāli and Kośala were sometimes appointing the crown princes or persons of royal blood as administrators in important parts of the kingdom. This class of administrators grew powerful in the political and economic life of Orissa. The inscriptions of the Somavamśī rulers mention the name of crown prince "Abhimanuvya" at the time of Yayāti II and crown prince "Someśvaradeva" at the time of Udyotakeśarī as administrators of Suvarṇapura (Modern Sonepur).

The royal officials of these powerful kingdoms remained in their position for a pretty long time and grew powerful in the political and economic field. They were adorned with the titles "Sāmanta" Mahāsāmanta and enjoyed trustiship of land by the law of primogeniture. The royal officials of the Bhauma-kara and the Somavamśī period constituted a powerful factor for the rise of Feudalism in Orissa.

During the period of our study lands were granted to Brāhmīns from the kings. The donee Brāhmīns enjoyed the status of Zamidars with gift land. The common men of the village held them in high esteem as a powerful class.

The Brāhmīns, who enjoyed gift land were called Zamidars in the society. Thus feudalism and Zamidary system grew up in the Bhauma-kara and the Somavamśī period. The Zamidars became capitalists and the farmers and Artisans were considered as Labour class.
Revenue System and Expenditure

The epigraphic records of the period under our review throw much light on the Revenue system. Right from ancient times up to date the political philosophers have emphasised considerably on the revenue of Government to be a factor for the strength and solidarity of the body politic. Depleted treasury paved the way for the weakness of Monarchy ultimately leading to its downfall. Sastras like Bodhayana, Manu Vaśiṣṭha and Yajñavalkya Śruti mention that the king should collect revenue for his labour in taking care of the people. Kautilya, one of the political philosophers of ancient world has given due importance to Rāj Kosha (Royal treasury) in his seventh element of state and has given advice to strengthen it. He has further stated not to collect undue revenue from the people. Forced revenue collection leads to the economic break down of the country. The inscriptions of the Bhaumakaras and the Somavamsis repeatedly mention the collection of revenue by the king according to the advice of dharma-sāstras. Tivaradeva of Kosala mentions in his inscriptions that the Somavamsis of south Kosala were not oppressive at the time of tax collection. They were following mild principles towards subjects in tax collection as the rising moon does not cause distress to the eyes by its rays (Chandra daya-iba Kruta Karoga)

Like the Somavamsis of Kosala, the Bhauma-karas
of Tosāli followed lenient policy of tax collection. It is obvious from the following inscriptions. Hindol copper plate inscription of Subhākara—DevaIII mentions "A-Tibrakara" which means the tax was not heavy, "Samyakara" of Subhākara-radeva IV in the Talcher inscriptions and Mrudukara of Tribhuvana mahādevī of Dhenkanal copper plate inscriptions point out that the Bhauma-kings remained aloof from heavy tax collection.

The subjects of the Somavāṁśī period highly advised the ministers of Yayāti I as they were strictly adhering to the principles of Arthasāstra and Dharma-sāstras in tax collection.

It is mentioned that Chāṭas and Vātas were oppressive officers. They used to tour in the village areas and forced these people to pay who refused or failed to pay revenue to the Government. But they were strictly prohibited to enter into the donated villages to Brāhmaṇas at the time of emergency when additional revenue was required they applied coercive methods of revenue collection.

Though the inscriptions under study mention mild method of tax collection, yet it does not seem to be correct. Probably tax collection was based on oppression and force.

Sources of Revenue

The epigraphic records of the period under review mention a number of sources of revenue terms such as
Bhāga-Bhoga-Kara, Kara-Bhāga Bhoga, Bhoga-bhāgadhi kam, Bhogabhāga, Bhāga-bhoga, Kara, bhoga, Uparika-ra, hiraṇya, PravaniKara, Kshetra Kara, Lavanakara, Nidhi-Upanidhi etc. These fiscal expressions are found in the land charters of the Somavamśī and the Gaṅga rulers but not in the Bhauma-kara period except Kshetra kara Upāri-kara.

The most important of the above fiscal terms was Bhāga Bhog-kara. Fleet considers that the term Bhāga-bhoga may be taken as one word meaning enjoyment of taxes literally it means enjoyment of Shares. If Bhāga-bhoga can be accepted as one word, then Bhoga-Bhāga may also be accepted as one word and its meaning will be share of Bhoga or enjoyment.

According to R.S. Tripathy, the word bhāga-bhoga-kara gives the meaning of three different taxes namely the bhāga (grain share of the produce (king) bhoga (enjoyment of certain rights by the land lord when the land is kept follow) and Kara (rent proper payable in cash or kind). KautiLyā mentions that Bhāga meant a portion of the produce payable to the government. D. C. Sircar also interprets bhāga as the kings share of the produce. In his opinion, Bhoga meant periodical supply of fruits, firewood flowers etc. by the villagers to the king. There is a good deal of difference among the scholars as regard to meaning of the term "Kara". "Kara" means tax in general as expressed in different terms, namely Karanikara (all taxes),
Sarva kara\(^6^4\) (all taxes) Bhavishyata Kara\(^6^5\) (future taxes) and Akarikritya\(^6^6\) (after making tax free).

**Upari kara (Extra cess or additional tax)**

Uparikara is found to have mentioned frequently in the Bhauma-kara\(^6^7\) and the Somavamsi\(^6^8\) records. According to fleet it is a type of tax levied on the cultivators who had no proprietary rights in the soil\(^6^9\). Ghosal suggests it a tax imposed on the temporary tenants\(^7^0\). But according to L.D. Barnett, Uparikara is the counterpart of the Tamil expression Melvaram meaning royal share of the produce\(^7^1\). Altekar regards it identical with Bhoga-bhāga-kara\(^7^2\). But both the views of Barnett and Altekar seem to be erroneous because in a Marañjumura charter of Somavamsi\(^7^3\) king Mahāśivagupta, the word Upari kara figures along with the term bhoga-bhāga-kara\(^7^4\). Hence Uparikara was neither similar to bhāga the royal share of produce as indicated by Barnett nor to Bhoga-bhāga-kara as suggested by Altekar.

D.C. Sircar\(^7^4\) and V. V. Mirashi\(^7^5\) have expressed the meaning of the term as extra cess. According to the letter, it may have been included in the miscellaneous taxes in kind which the Artisans and traders had to pay\(^7^6\). This view seems to be possibly correct. The term Uparikara is the combination of two words Upari and Kara. The term Upari means extra in Sanskrit, Bengali, Hindi and in Oriya. It evidently implies that it was an additional tax or extra
cess. It is not same as bhāga-bhoga-kara which was a regular tax of the period under study. The kings were collecting extra cess or additional duty at the time of emergency. It is probable that Uparikara might must have been collected during the Bhauma-kara and the Somavamśī period in Orissan history as an additional duty or extra tax.

_Hiranya_

Hiranya has been mentioned as a kind of tax in the Somavamśī inscriptions. Hiranya means Suvarṇa(gold). The donee Brähmins received Hiranya from the subjects according to the previous traditions. Hiranya was also paid to the royal treasury in cash. According to N. C. Bandypadhyaya, it was a tax on the hoard or capital or on the annual income which was a sort of income tax. Dr. Beni Prasad symbolised the term Hiranya the right of the state to gold and probably other mines as well. D.C. Sircar held it to be the royal share of certain crops paid in cash. Mr. Ghosal mentions it a tax in cash levied upon certain special kinds of crops. It was fully different from the tax in kind levied upon the ordinary crops. Senart and Keilhorn regard it as a tax in money. Thus it is generally held as a levy in cash. According to Arthasastra, Hiranya is one of the different forms of Payment like dhyanna, Pasukupya, Vishthi etc.
Nidhi-Upanidhi

Nidhi-Upanidhi constituted one of the important source of royal revenue found in the epigraphic records. The Lodhia plates of Bālarjuna mention them as Nidhana and Upanidhana. According to Vishnu Purāna, Nidhi signifies hidden wealth of an unknown owner. Amarakosā mentions Upanidhi as buried treasure. The Gahadevala inscriptions use the term nidhinikashepa which implies hidden treasure. In ancient times many people buried their wealth and hid them. In case of their death the wealth remained unknown forever. The ancient law givers mention that the king was getting lion's share of the treasure trove except when the same has been discovered by a Brāhmaṇ. It was the usual practice of ancient world to bury wealth as the banking system did not develop. According to Yajñavalkya (1135-36) if a person other than Brāhmans finds a treasurer trove (nidhi), the king was entitled to 1/6th of it. According to Kautilya, the discoverer of nidhi-upanidhi had to receive 1/6 of the treasurer trove as a mark of reward after the matter was intimated to the king and the rest was deposited in the royal treasury. But he further states that if the value of the hidden treasure was above 100,000 (Panas) the detector had to forfeit his share. Narada holds that the king had no share of nidhi Upanidhi if the discoverer was a Brāhmaṇ.
Aputrika Benī : (Heirless)

Another source of royal revenue was Aputrika Benī which is referred in the Bondā plates of Tivaradeva of Kośala as Aputrika Benī bhojya. The king enjoyed the property of wealthy people if he died without a heir. This fact is evident in Abhijñana Śakuntala of Kāli Das, the greatest dramatist of Gupta era. In the 6th Act of the drama, it is mentioned that after the accidental death of Dhanamitra, a rich merchant, all his wealth came to the royal treasury.

Rājim copper plate inscriptions of Tivaradeva mentions Daradranak as one of the sources of royal revenue. Dara means wife or cultivable land. At the time of edition of this plate Fleet opines that it is probably an agricultural tax or marriage tax.

The inscriptions of the Somavamsī refer to some dues of uncertain character which are not found in the inscriptions of other dynasties of Orissa. These are Hastidanda, Varabalivardḍa, Chittola, Andhārūa, Pratyandhārūa, Ādatta, Pedāṭijivya, Antarāvaddi, Ahidanda, Haladanda, Bandhadanda, Vandāpaṇā and Vijayandāpaṇā, Rintakavaddi, Vasavaki, Vishayāli. Most of these are found to have been mentioned in the Narsinghapur plates of Udyota Kesārī and the Kelga plates. The above taxes are yet to be determined. The word Daṇḍa is found to have been mentioned in the inscriptions of this period Sadanda Daśāparadha. Kautilya
says that Danda (Punishment) is given if anybody commits crime or involved in civil offences. Scholars differ in their opinion as regard to the ten offences (dasaparadha). Fleet has explained dasāparādha in the Bondā inscriptions of Tivaradeva that out of the ten offences, three are of physical, four are by word or speech and three are mental. This view of fleet has been refused by scholars that there is no punishment for the mental offence. But despite various discussions, the scholars have not arrived at any conclusion as to the occurrences of ten offences. The king was collecting taxes from those who committed the ten offences. The word Danda also signifies tax and is mentioned along with Hiranya, Vishti and Tolls in the Arthasāstras.

The following Dandas provided regular Source of income to the King.

1. **Hasti danda:** According to D. Mitra, those who wanted to maintain elephants, had to pay Hastidanda to the King. But B. Mishra suggests that it means the right of killing elephants. It may be that Hastidanda is a tax levied on people engaged in catching elephants and selling them in the market.

2. **Ahidanda:** Like Hastidanda, Ahidanda was also another tax imposed on the snake charmers who caught snakes from the jungles and sold them in the market or exhibit them in the public places. Debal Mitra points out that Ahidanda
is tax on the snake charmers. According to B. Mishra, it meant that right of killing serpents. The view of D. Mitra seems to be erroneous and unconvincing. During medieval times the king had imposed several types of taxes on the people. Hence the tax like Ahidanda might not have been imposed on the snake charmers.

3. **Bandhadanda**: Another Danda namely Bandha danda is considered to have imposed on the people during the period under study. Real meaning of Bandha danda is yet to be ascertained. B. Misra mentions that it meant the power of conviction and punishment. Many scholars opine that Bandha danda is similar to that of Dasabandha occurring in some inscriptions of medieval south India signifying a tax or allowance of land or revenue amounting to 1/10 (one tenth) of the revenue as compensation for the construction and repair of tanks, wells, Channels etc. The king must have income from this power also. In the opinion of D.C. Sirkar Bandha danda was a kind of tax paid by persons committing crime. The criminals did not prefer to be confined in the jail and they were released on the payment of Bandha danda as a measure of security.

Suvarṇa danda was collected as a source of revenue from the gold smiths (Swarnakara) engaged in the business of making and selling of jewellery. The Kalachuris collected Rasavati danda. Mirashi mentions that fines were imposed on illegal distillation. The word Rasavati
denotes toddy (juice) of date palm and palm which is a favourite drink of the people living in the rural areas. It can be said that Rasavatidaṇḍa is a tax collected from the people engaged in the profession of collecting and selling palm and date palm juice.

The Somavamśī inscriptions mention the name of many new taxes namely Vandāpanā- Vijayabandāpanā, Trunodaka, Margaṇika, Vavabalivardda Andharuva, and Pratyandharuva, Padatijivya, Khaṇḍapaliya, Antaravaddi, Adatta and Chittola.

Vandāpanā and Vijaya Vandāpanā is mentioned in Somavamśī charters as a source of royal income. According to D. Mitra these two terms denote tribute paid to the king after he obtained victory. But B. Mishra opines that Vijayabandāpanā meant the right of receiving presents on the occasion of welcome, because Vandāpanā means reception. Whenever the king visited any village or town people were required to pay respectful visits to the overlord with various presents. Perhaps such customs prevailed in the erstwhile ex-States. If this interpretation is true, the tribute (Vandāpanā) is certainly one of the sources of royal revenue during the period under study.

Trinodaka is a term which literally means "Grass and water". D.C. Sarkar mentions that it is a tax on Gochara (Gochara kara). According to Lalaṅje Gopala, Trinodaka is called little tax in tax administration. The
expression probably refers to the supply of pasturage by the villagers to the king.

Marganīka or Marganaka is found mentioned in the Ratnagiri Copper plate inscriptions. It is also found in the inscriptions of Chalukyas of south India. In the opinion of many it was collected from the merchants. The word marganīka is used by some in the sense of request and considered it as a tribute to the king. According to B. Mishra it is as a tax imposed by the king on festive occasions. But it is probable that the term is derived from Marga (Road) and Marganīka is a road tax collected by the king from the merchants.

Varabalivardda is taken to mean taxes on the maintenance of superior bulls or active bulls. But possibly it meant supply of bulls and bullock carts for the conveyance to royal agents as it is learnt from the Vakataka inscriptions.

Andhāruvā and Pralyandhyaruva have been referred in the Somavamsi charters and defined by professor kuñja Bihāri Tripathy as water tax (Andha=water, ruva=coin or rupee and a surcharge on the water tax when the same was not paid in time. There is no satisfactory explanation about these two taxes. It is probably a tax collected by the king at the ferries from the merchants who evaded the customs. It may be considered a fine on the smugglers at the ferries. Padatijivya seems to indicate subsistence for infantry. D. Mitra and Professor K. B. Tripathy
think that people had to pay this tax for maintenance of army or infantry (Padate). When the foot soldiers pass through country side people had to contribute taxes towards maintaining infantry in side the state.

Khaṇḍapāliya and Antarāvaddi were two sources of income of the King. Khaṇḍapāliya is derived from the word Khaṇḍapāla (head of a khaṇḍa) and probably supply of food and drink and other amenities supplied by the villagers to the royal officers on tour. Antarāvaddi is mentioned in the Banpur plates of Indraratha. It may be mentioned as a tax imposed at intervals or occasional tax. But in the Somavamsi plates, there is no satisfactory explanation sofar.

Chittola and adatta seem to be obscure and it is difficult to throw any light on their meaning.

One of the principal incomes of the king in ancient times was Śulka, which occurs in a land grant of sulki ruler Jayastamba. Panini in āsthdhyai mentions Śulka as a tax in general. Amarakosha states that sulka comprises the ferry duties the tolls paid at the military or police station and the transit duties paid by merchants. Manu's commentators interpret the terms as tolls paid by merchants. Kautilya defines Sulka as a tax collected at the customs houses located near the main gate of the town. On the whole it may be said that Sulka was a sort of commercial or excise tax collected by the Saulikya.
from the merchants. We do not find mention of Sulka in any inscriptions of the period. The kings were not willing to allow the donee Brāhmans to collect this Sulka or internal tax. Of course the Bhauma-kara inscriptions mention that the ferries and banks of the river were gifted to Brāhmans along with the village. The Brāhmans were not in a position to collect Sulka. So the inscriptions during Bhaumas are silent about Sulka.

But Bhauma copper plates throw some light about sources of revenue. The Bhauma kings bestowed on the donee the right to collect some additional taxes or Upāri karas. Such taxes were professional taxes and were imposed on weavers (Tantavāyas) for weaving cloth, cowherds (gokutas) for tending cows on pasturage and distillers for distilling spirituous liquors. Similar taxes might have also been collected from people of other professions such as potters (Kumbha kāra) blacksmiths (Karmakāras) goldsmiths (Śvaranakaras) carpenters (Pātakāras) etc. Such taxes were also collected from Sakhetas i.e. hamlets or group of houses, ghattas i.e. landing places for boatmen, naditarasthana, i.e. ferry places and gulmaka, i.e. forests. Thus the treasury of Bhauma-karas was replenished by revenue collected from various sources. It is an admitted fact that taxation was very moderate during Bhauma-kara period. They were not collecting additional fines on the ten offences mentioned in the records of Jivita gupta II.
Expenditure:

The epigraphic records of the Bhauma-kara and the Somavamsi period do not specifically mention the items of State expenditure. The Accounts of Hiuen Tsang highlights us about the items of expenditure incurred during his time. He mentions that in the 7th century AD the income derived from royal land was divided into four divisions. The first part was for the expenses of the government and State worship, the second part was for the endowment of great public servants, the third was reward for high intellectual eminence, the fourth and the last was meant for acquiring religious merit by gifts to the various sects. In a way this arrangement seems to have applied in Orissa. The contemporary inscriptions especially the Bhauma-kara inscriptions show that vast amount of wealth was spent on religious activities. Brähmins were brought from other parts of India to settle in Orissa. They were granted revenues of villages for observance of various religious ceremonies and sacrifices. The lands of the village were granted to them. Some times even the whole of a vishaya was gifted to them as mentioned in the records. During the Somavamsi period the state incurred heavy expenditure in erecting large number of temples and granting rich endowments to the Brähmins for their maintenance. The king could spent a lot from the royal exchequer according to his sweet will. For this, the king was not bound to pursue any rule or plan. But it is an admitted fact that
the king was consulting ministers and top royal officials. In Tosali (Utkal) and Kosala strong govts. were established and it was not possible to spend state income thoughtlessly. According to Sukranitisāra the State expenditure was incurred in the following way.

1. Valam (Expenditure on Army) 50 percent
2. Dānam (Expenditure on public good) 8\(\frac{1}{3}\) per cent
3. Prakrutayah (Development of commerce and industry) 8\(\frac{1}{3}\) percent
4. Adhikāvini (Administrative expenditure) 8\(\frac{1}{3}\) percent
5. Atmabhoga 8 \(\frac{1}{3}\) per cent
6. Kosha (Reserve money) 16 \(\frac{2}{3}\) percent

| Total | 100 percent |

But this arrangement of expenditure of the state income was really followed or not is not known either from the inscriptions or from the literature.

From the above table it is evident that the kings were spending major portion of royal income on the maintenance of army and were waging aggressive war fares.

Another important item of expenditure was the remuneration to ministers and officials. The copper plates of the period mention a good number of officials but it is not definite whether they were paid in cash or kind. Few epigraphic records show that civil and military officials
were granted land for their services to the State. \(^{131}\)

Another source of expenditure was maintenance of royal establishment. The king had to look after palace servants, foreign envoys, the needy and the helpless, \(^{132}\) who depended on him. He kept probably a reserve to meet the calamities such as famine, pestilence and war.

**Agriculture**

The economic condition of the Bhauma-kara and the Somavamśi period was based on agriculture. Agriculture was the main occupation of the bulk of population. Almost all the families possessed land and cultivation was the principal means of livelihood. If any cultivator was unable to cultivate his land due to unavoidable circumstances, he had to give the same to another for a temporary period and the produce was divided between the two on the basis of a contract. The cultivator had to enjoy 33% to 50% of the total produce as share.

In those days irrigation facilities did not develop in Orissa as we find today. Agriculture fully depended on the monsoons. When the monsoons were not favourable, there was failure of crops and drought followed by famine was inevitable. When there was good rainfall in the monsoons, double crops were produced. Sometimes, the area receives a few showers during the month of October which helps the rabi crops. Thus the main harvest of Orissa
The accounts of Hiuen Tsang mentions that the soil of Orissa (Odra desa) is fertile and rich and yields abundant crops. The land system of Kangoda was low and moist and produced abundant crops and every kind of fruits. It was regularly cultivated and productive. Further he praises the fertile land of Kalinga, which produced abundant flowers and fruits. From the above narration of Hiuen Tsang, it is guessed that Orissa was a place of profuse in the production crops and fruits. It would be difficult to name the strange shrubs and the famed flowers that grow here.

Further with reference to Kalinga, it is regularly cultivated and fertile. Flowers and fruits are abundant. The forests and jungles are continuous for many hundred Kosas. The climate is burning. This reveals that Orissa was an important fruit-growing area. Among the principal areas, the soil of Kosala (Western Orissa) was the most fertile and rich of other areas of Orissa.

The earliest settlements developed on the bank of the fertile rivers. The Orissan agriculture followed the course of the river system of the state which acted as a powerful fertilising agent of the soil in its neighbourhood.
Due to the migration of Brāhmaṇas from different regions of India to Orissa during the reign of the Somavamśī kings, there grew up steadily the cultivated areas which is evident from the inscriptions. The Somavamśī charter of Mahābhavagupta IV mentions that the Brāhmaṇas were given lands for cultivation in a forest region with the right of killing snakes and elephants. Thus from the land grant in a forest area, it is obvious that jungles were reclaimed and gradually brought under cultivation. These instances suggest that there came about a steady extension and improvement of cultivation and rural settlement. Some scholars hold that only during the Somavamśī rule in Orissa, thousands of Śaivite Brāhmaṇas migrated to Jajpur from Oudh to perform Dasaśvamedha Yajña. The religious zeal of the kings was also responsible in bringing fallow lands under cultivation.

Irrigation:

The epigraphic records of the period under study throw scant light on the irrigation facilities. It may be speculated that famines followed by pestilence, frequently visited Orissa due to lack of irrigation facilities. Orissan agriculture depended on the mercy and whim of the monsoons. Scarcity of rain and lack of irrigation facilities in the modern sense led to the frequent occurrences of drought conditions. The miseries of the people knew no bounds.
It is a significant fact to note that the head of the State was held responsible for the occurrence of such natural calamities. References to non-occurrence of the Divine calamities owing to the virtues of Prithivideva I\textsuperscript{138}, the Kalachuri king indicates that the kings during the Somavamśi and the Bhauma-kara rule, assumed the responsibility for the happenings of natural calamities like drought, famine and epidemics.

Artificial water facilities were absolutely necessary to counteract the vagaries of nature. It was the duty of the ruler to provide with irrigation facilities to the cultivators by digging canals\textsuperscript{139} and tanks and excavating wells.

The inscriptions of this period mention the construction of Vapi, tataka, Sarah and Pushkarini etc., by the kings of the Bhauma-kara and the Somavamśi dynasties. But we do not find irrigational Projects. Tatakas\textsuperscript{140} were excavated both for bathing as well as irrigational projects. Rivers and streams were also utilised to meet the drought situation in Orissa. Digging of tanks for the benefit of the public has been considered the best form of charity as revealed from the verses of the charters. Some of the benevolent rulers and rich persons had undertaken measures to provide facilities for irrigation by digging of tanks and wells on religious grounds.
The inscriptions of the Somavamśi kings in the capital cities have made some references about the construction of numerous Vāpi, Kupa and Tadaga. A tank at Ratnapura resembling the Ocean was excavated by Prithivī-mahādevī. Charters also mention that river beds were utilised for the purpose of irrigation. We donot find any other reference about any persons who constructed tanks for the benefit of agriculture. But this much seems certain that there were some reservoirs of water or stream created either by natural process or human agency which added to the fertility of Orissan lands under study.

Products of Land

It is not easy on the part of any scholar to prepare a list of agricultural products as very few inscriptions throw light on this subject. Even the accounts of Hieun Tsang does not specifically mention what were the actual products produced during the period of our review. It only refers to abundant grain in general way. The Brihatsamhitā of Barāhamihīra Part V mentions various system of agricultural process followed in different parts of Orissa. Further it states that Orissan lands yielded double cropping every year. Grain was generally known as paddy (dhanya) in the inscriptions. The Hindol plate of Bhauma-kara king Subhākaradeva mentions the sowing of paddy (Dhanya).
The Āṣṭāṅgahṛdayā of Bagbhātta mentions that varieties of rice were produced during the Bhauma-kara and the Somavāṃśī period. And pāḍḍy (Dhanya) was divided into three categories. Such as Sukadhana, Trunadhanya, Simbidhanya, Sāli and Vrihi grains included in Sukadhanya. The Chief paddy that grew in Orissa was Mahāsāli and it was the staple food of the Monarchs of Orissa. It is evident from the accounts of Hiuen Tsang. We also get reference to white rice (sita tandula) and Vyañjana (Curry, vegetable products). Rice was by far the most important of the rain crops. Seeds (pāḍḍy) were sown at the advent of the rainy season.

Truna dhanya was a forest product and more labour was not needed for its production. Kodrusa, Yaba, Nivāra and Godhuma (wheat) were included in this category of crops. Kośrusa (Paspalu scrobiculatum) has been one of the principal autumn products of poor Ādivāsīs of Orissa besides rice. At the time of scarcity of rain it is widely cultivated as a substitute to rice. Cultivation of Kodan, needed less rain and less fertile land. Godhuma (wheat) cultivation was not popular form of farming during this period of Orissan history. The epigraphic records of the period do not mention anything about pulses. But rice being the principal foodstuff of the people, pulses must have been cultivated as an essential food stuff to be taken with rice.
Among the pulse products of this period Mudga (Muga) (green gram) Chanaka (Ciceraric tinum) (Chana) Kulutha (horse gram) (Sesamum) Mashura and Til (Tila) were worth mentioning. Tila (Rāshi) Sesamum was cultivated for the production of oil. The above products were mentioned as Simbidhānya, Sarshapa (mustāred) was another kind of oil seed produced by cultivators for consumption.

So far as the cultivation and production of oil seeds were concerned there is no direct proof, but inscriptive evidences of the period focus flood of light. There were permanent lamps burning in the temples in honour of gods and goddesses. From this we can infer that oil seeds were cultivated abundantly. One land charter clearly mentions that three puṭṭis of land were granted for the supply of castor oil to a god. Til (Sesamum) was the most important oil seed produced in Orissa for the purpose of observing some religious rites like the libation of water at the time of endowment of land. This suggests that Orissa was very rich in oil products.

Besides oil products certain variety of crops like wheat, Barley, Sugar cane (Yava-godhu-Mekshu) were produced by the people to meet the deficit of food stuffs. The epigraphic record mention that fruits and vegetables were considered to be the Chief food stuffs of the people of Orissa. Gardens or Vātakas were maintained near home for its cultivation.
Among the fruits Āmra(mango), cocoanut, bassia Latifolia(Madhūka), Banyan (bata), Palm, Bel(Vilva), Palmyra(Jambu) and Tentuli(tāmārind) were grown in Orissa during the Somavamśī and the Bhaumakara period. The inscriptional evidences of the period frequently mention two fruits such as mangoes and bassia Latifolia and as such it may be guessed that these two kinds of fruits were very common and popular fruits in Orissa during the period under study.

These two kinds of fruit trees are found to have mentioned in all the charters of the period. They were donated to different persons. Mango(Āmra) groves were planted by the rulers.

Madhuka(Bassia Latifolia) contributed much to the economy of Orissa under study. The flowers of the Modhūka tree(mohula) were highly demanded for brewing intoxicating liquors. The souṇḍhikas had got monopoly right to produce liquors and were selling in the markets. Besides this, Modhūka flowers were also used as food of the general poor and the cattle. Its fruits(Tula) were utilised as vegetables and the oil was extracted from the kernel. Many other trees mentioned in the inscriptions, strengthened the economy of Orissa. They are Śīśu(Sisām) and Khadira (khaira) probably grown for getting the best variety of timber. Khadira was used in the preparation of betel quids.
Some villages have been named after the name of the trees such as Vatapādraka, Vilvapādraka, Khadirapādra, Tambugrama and Śrīparṇikagrāma. Tala and Tentuli were enjoyed by the people being given to them by the donees. Palm leaves were used as writing and thatching materials respectively. Vilva might have been used for worshipping Lord Śiva.

Orissan jungles during the period under study contained different kinds of trees mentioned in the records. They are Arjuna (Terminalia arjuna), Nimba, Śalma, (silk cotton tree) Kadamba, Timir (Sanskrit translation of the Telugu chikati) Karanja, Tinduka, Pindara, (Vikantatatre) Āśvatha (the holy fig tree) bāmboo (Bānugulma) etc.

Cultivation of Sugarcane considered one of the profitable businesses of the people living in the rural area. A little refined variety of Guda (molasses) was called Sarkarā. Some places like Guda Sarkarāka and Sarkarā pātaka existed during the period under study. It is guessed that sarkarā or refined guda was produced abundantly in the above area.

Cultivation of betel leaf (Tambula) was also encouraged. An inscription of the period suggests that tambula was to be daily offered to God Krittivāsa (Śiva worshipped in the Liṅgarāj temple at Bhubaneswar).
This grew, perhaps, in the coastal region of Orissa. Right from the Indus-Valley culture, up to date, cotton has been regarded as one of the important commercial crops of India in general and Orissa in particular. The epigraphic records of the period do not mention of cotton. But in the land grants references have been made frequently about the weavers living in Orissa. Reference to heaps of cotton (Tula rāsi)\(^{175}\) and grant of black soil (Krishnata)\(^{176}\) suggest that cotton was cultivated to feed an important industry of Orissa.

We learn from our inscriptions\(^{177}\) that silk cotton trees grew in Orissa. The Koshatas of western Orissa are famous for their silk weaving. Bilaspur Gazetteer mentions\(^{178}\) that the chamārs and Kewats cultivated cocoons (silk worm) for the production of silk threads to meet the needs of the Industry. All these factors suggest that silk fabrics were produced in Orissa under study.

Like cotton and silk, Sana (hemp) was also cultivated in Orissa during the Bhauma-kara and the Somavāṃśi rule. It was used in various purposes. Manu\(^{179}\) mentions that the garments of Brāhmaṇa students, the sacred thread of the Kshatriyas and the girdle of the Vaishyas were made of Sana. The sculptural representations of the temple walls indicate that the Sanyasis and the local tribal people used to wear Katisutras of Sana.
The inscriptions suggest that vegetables abundantly grew in Orissa. The vegetables were Bartāka (Brinjal)Kushmandaka, Kalinga(Melon),Karbolaka or Karela karkaru(Cucumber) Srungataka, (water Singara)Mulaka, Lasuna(Garlic)Plandu(onion)Sorisha(Mustard seed) and different kinds of Sag were the most important.

Production of spices was an important item of Orissan agriculture. Of these pepper, ginger,cumin seeds, cloves, and cardamom were the most important. Turmeric was also cultivated in large scale. It was used both as a spice and cosmetic. Perhaps it was cultivated in the hilly areas of Orissa. Pepper was another important product. It was widely cultivated by the people. Poor people used it as a necessary item of vegetable curry. Thus the Bhaumakara and the Somavamsi period forms one of the milestones in development of agriculture in Orissa.

FORESTS

The vast forest resources largely influenced the economic condition of the Bhaumakara and the Somavamsi period. The Kanāsa inscriptions of the Lokavigraha describes Orissa as a land of forests. The Accounts of Hiuen Tsang mention vast and wide forests of Orissa. On his way to Konagoda from Odra he had crossed twelve hundred Li forests and he had to cross 14th. or 15th Li forests on the journey from Konagoda to Kalinga. His accounts again mentions
that Kosala was surrounded by dense forests and 18 hundred Li, the distance from Kosala to Kalinga was full of forests. Every village and its outskirts were surrounded by dense forests, is known from the epigraphic records.

The dense forests of Orissa during the Bhaumakara and the Somavamšī rule contained a great variety of trees, bushes and Vines which contributed a lot to its economic growth. The inscriptions of the period state that the donees were granted various trees like Āmbra, Madhuka Tāla, Tentuli, Śīśu and other trees. A particular tree grew abundantly in a particular area and the area is named after that tree. Thus we find place names like Jamvugrāma, Śrīparnikā, Vargulaka, Vilvapadraka, Vatapadraka and Khadirapadraka etc. The entire forest areas was covered with vast Sal trees. Vāmanapurana mentions that Dandakārnya which was a part of Trikaliṅga of the then Orissa, was called Salavana.

Among the wild animals that infested the Orissan forests the elephants and the tigers were the most important. The Narasimhapur charter mentions that elephants, lions and serpents moved in the forests of Orissa. Reference has been made to wild deers living in the forests of Orissa during the period under study.

Catching of elephants from the Orissan jungles, was considered praise worthy and courageous work. Many
elephants were caught and they were tamed by the people. Catching of elephants is known as "Kheda". The elephant pictures depicted on the temple walls of Parśurāmeśvara temple at Bhubaneswar give a clear proof of the popularity of catching of elephants during medieval age. Kaliṅga was very famous for huge war elephants. Orissa got monopoly right of exporting elephants to the foreign countries and the kings of other countries purchased them at a high price. Thus the elephants added much to the economy of Orissa. Orissa earned good reputation for exportation of elephants to Rājstan.  

Besides, elephants, ferocious tigers lived in the forests of Orissa. Hunting of tigers was considered as an act of courage and bravery and the hunters were rewarded for this. It is a healthy pastime of kings and princes. The kings of Orissa got monopoly rights to collect skins of tigers. Some times, the kings gave rights to donee Brāhmīns to collect tiger skins and that was mentioned in donated records.

The vast forest resources largely influenced the economy of Orissa during the Bhauma-kara and the Somavamsi rule. The encircling jungles provided both food and shelter to the people. The tribals of Orissa inhabiting the forest clad regions largely depended on the forests for earning their livelihood, collection of food and house building
materials. The Ādivāśis used to collect fuel, valuable timbers, bamboos, Lac, Wax, honey different kinds of gums, hides, horns, ivory, animal bones, medical herbs, sandal wood and fruits from the forests. They were selling them in the nearby market and were paying various kinds of taxes to the government. Thus the state exchequer was greatly enhanced. Forests regarded as one of the wealths of the kingdom. Often the king donated forest to Brāhmins. For example Sapadraka Arānya, Sakhatavitapa Arānya, were granted to Brāhmaṇs and they won high profits out of it.

Crafts and Industries

The predominant feature of Orissa's economy is agriculture. Much attention was paid during the Bhauma-kara and the Somavamsī rule. Crafts and industries were not neglected. Much impetus was given for the growth of crafts and industries. Detailed information about the crafts and Industries of Orissa is not available. Some existing monuments, epigraphic records and the literary texts as the Mānasollāsa and the Yuktikalpatalu throw a flood of light on the growth of crafts and industries.

Textile industry

Manufacture of cotton fabric with beautiful designs carried on with great success in Orissa. Several charters of the Bhauma-kara period mention the existence of Weavers in Orissa. Since the time of Kautilya Kalinga
had earned great reputation and attained celebrity.\textsuperscript{185} in Textile industry in the manufacture of fine clothes. Sculptural representations on the vaital temple and Śisir-esvara temple give testimony that fine brocated fabrics were manufactured in orissa. Referring to a specimen of cloth on the medieval sculpture of Orissa. R.L.Mitra remarks "In neatness and elegance and richness of design and execution, it was no less inferior to the finest production of the Banaras loom of the present day"\textsuperscript{186} Such fabrics must have been highly prized articles of luxury which the rich section of the community alone could have afforded to use. The Mānasolāsā of 1137-38 AD states long list of production of royal fabrics and mention the places of their origin. The name of Kalinga figures in it along with other names.\textsuperscript{187} The tradition recorded in this work of the Ganga period must have gone back to the Bhauma-kara period.

**Iron Industry**

During this time metal industries flourished and considerable programme was made in the field of metallurgy. According to R.L.Mitra, Talcher was the depository of iron and was of excellent quality.\textsuperscript{188} The Somavāṁśī rulers were great builders and they had used iron in the building of temple. Oriya architects used iron beams in the temples of puri and Bhubaneswar. About 239 beams ranging up to 17 feet long and upto 6' by 4"(six feet four inches) or 5' by 6"
section have been used in one of the purī temples (the garden temple) alone. Stirling mentions that not a single wooden beam had been used in Bhubaneswar temples. In the Gāṅga period when the temple of Koṇārka was built the architects used iron beams in the temple.

Forging of iron beams was in Vogue in Orissa. Perey Brown remarks that beams were forged and that larger ones were evidently produced by welding together a number of "blooms" of wrought iron by means of a hammer. The ruins of the monument amply prove that there existed huge iron industries in different parts of Orissa during the Bhauma-kara and the Somavamśī rule.

In the then Orissa village economy depended on iron industries. Various types of agricultural articles like shaves, sickles, and smithy tools and implements like hammer, axes, knives, were made of iron. In every village workshops of the smiths existed and iron industries earned profits.

Iron was also probably used for the manufacture of weapons or armaments. From the sculptural representations of the temple walls we know that battle axe, sword, dagger and other weapons were used at the time of war. In the Great Towers, Lord Gaṇeśa is found to have hold many elaborate axes in the hands. The epigraphic records of the period mention that sword was used in large number. Kālīṅga was a noted centre for the manufacture of swords like Benāras,
Magadha, Nepal and Saurāśṭra. The Bhauma records mention that the people of Kaliṅga extorted-enemies with the power of their bright sword. The inscriptive evidences of Śailodbhava king Mādhavarāja mentions that he drove back the armies of the every country with the help of sharp edge of sword. A sculptural representation in the temple of Gaurī at Bhubaneswar gives the proof of a double bladed strait sword. Daggers or the short swords were used in Orissa as evident in the sculptures of the temple walls. Again R.L.Mitra mentions that this weapon seems to have been a great favourite. The inscriptions of Brahmeśvar temple describe that the Somavamśī king Jānamejay Śvabhāvatunga killed the king of Odra desha (Śivakar III) with a sharp pointed dagger (Kunta). The dagger or Kunta was made of iron. From the above discussion, it is clear that iron industry had progressed much in Orissa during the period under study. The various forms of battle axes noticed in the vaital and Śiśiresvara temples, in Ratnagiri, Lalitagiri and Udayagiri caves show that iron was manufactured in large numbers. The image of Mahisāmardini at vaital temple holds a dagger and a sword in two of her right hands as well as a shield in one of her left hands.

The temples and images belonging to this period speak eloquently of the artistic activities of the Bhaumakaras and the Somavamśī rulers. The sculptures of Lalitagiri, Ratnagiri, Udayagiri, the Liṅgarāj temple and the temple at
Puri are master pieces of sculptural art. The fine workmanship and the strongness of the temple indicate that iron instruments of great fineness were used. The iron instruments which were used in inscribing the stones and constructing temples were manufactured during the Bhauma-kara and the Somavamsi period. This indicates the progress of iron industry under the period of study.

Innumberable copper plates and bronze images discovered in Orissa, indicate that copper industries were in a flourishing state during the Bhauma-kara and the Somavamsi rule. The copper and bronze industries might have solved the un-employment problems by absorbing large number of artisans in it. After iron copper was possibly the most useful metal at that time. Another useful metal known as "Kāṇṣya" was prepared during this period. Copper mixed with tin is known as Kāṇṣya. The proportion of mixture is 8 to 2. This Kāṇṣya industry was very popular in Kalinga. Even to-day it is very popular in Orissa. Common people like to take their food in Kāṇṣya plates. Kings and rich people took their food in gold and silver plates. Iron plates were not suitable for charters of land grants, for iron corrodes easily owing to moisture. So copper was usually employed for permanent charters. The art of inscribing letters in the copper plate is a technical skill of the artisans and the engravers were permanently maintained by the state for this work.
Existence of large number of bronze images give testimony of bronze industry in Orissa under study. The bronze statues discovered at Bānpur in Puri district give an interesting picture of the standards of bronze casting in those days. Casting was the process of making bronze statues in most cases, but in few cases the objects were hammered after heating. In some of the temples, female statues are found to be combing their hair with mirrors in hands. Mirror was considered as one of the general house hold articles. But glass of mirror was not manufactured in Orissa. After 1550, mirror glasses were brought to India by Europeans. Before that, mirror was made by the Kānsakāras by coating copper or Kānsya plates.

Precious stone Industries

The sculptural representations of this period give testimony of variety of ornaments used by both men and women. They are Kundala (earrings), Karnaphula (ear flower) ratnahāra (necklace) Chandrahāra (necklace), Katibandha (Waist ornament), Keyura (arm let) Kiṅkinī (leg and foot ornament), Bāju, tābij, tad etc. Use of ornaments in large number in this period attest to the prosperity and advance of jewellery.

We donot come across any reference in the inscriptions to the ornaments made of gold and silver but as some coins of gold and silver were current in Orissa during this period, it may be deduced that most of...
the ornaments used by the people may have been manufactured either from gold or silver. The Bhauma queen Dharma Mahādevi in her Kumurāṅg plate 200 compares herself with a gold stick and mention of Śāntikara II’s "golden feet" in the Talcher plate of Śīvakara III 201 indicate that gold was used by the kings, feudatories, nobles and rich people. Pearl was another precious metal from which ornaments were manufactured. The Chinese traveller Huien Tsang states that ornaments made of pearls were available in Kōṅgoda in the 7th century AD. 202 The Kumurāṅg charter of Dandī Mahādevi 203 and Taltalī charter of Dharma Mahādevi 204 give references about Mukta (Pearl).

Diamond was a precious stone helped much to the economic development of Orissa during the Bhauma-Kara and the Somavamśī rule.

According the Garuda Purāṇa 205 diamond was available in Kālinga and Kośala. Huien Tsang states that diamond was exported to the foreign countries from the Orissan ports. Probably diamond was coming from Kośala. We get many references about diamond exported from Sambalpur region upto the 19th Century A.D. The Jhara Adivāsīs collected it from the sands of river Mahānādi and river Ib. The feudatory rulers used diamond on the crowns. As such the crafts of Jewellery might have flourished in the Bhauma-kara and Somavamśī period.
Ivory industry was another important industry which augmented the economic growth of Orissa. Some scholars are of the opinion that Dantapur, the capital of Kalinga, was the famous centre of ivory work. Orissa was very rich in elephants and we may therefore presume that it may have been a centre of ivory industry. An inscription mentions the grant of land including the donee's privilege to enjoy hastīdanda (ivory) which obviously suggests that luxury articles were manufactured from ivory for kings and princes. Periplus mentions four places famous for ivory work and Orissa is one of them. Ivory of Orissa is the best of all. They were exported to the foreign countries from here.

**Stone work Industry**

It is known from the sky kissing massive temples and the art of image making that stone work industry had reached to high water mark during the Bhauma-kara and the Somavamśi rule. A large number of massons, sculptors and architects had been employed in the construction of temples, palaces and houses. The temples were constructed in scientific manner following the principles of Silpa Sāstra. The construction of numerous temples from 7th century AD to 13th century AD apparently provided a lucrative means of livelihood to a large section of the people. Bhubaneswar, the present capital of Orissa, which was called Ekāmbra Kānana in those days became the main centre of temple building activity. Now we find large number of temples great and
small with architectural designs on the stones, exist in various stages of preservation. The temples were constructed all along the coast in the north east and south east. Each temple was a fine specimen of stone work industry in Orissa. Stones for building up the temples were brought from the neighbouring hills. Stones used at Bhubaneswar temple were reddish granite resembling sand stone but the temple of Jagannath at Puri was built of coarse granite, plentifully available in southern part of Cuttack. It is matter of great wonder and surprise that how the Oriya architects and sculptors took such heavy blocks of stone and iron beams and were raised to such a height and fitted in the best possible manner when modern contrivances were completely unknown. Huge and massive stones with architectural designs found in the Sun temple at Komarka speak eloquently of the stone industry during Ganga rule in Orissa.

The sculptural representations of the period under study are vivid and decorative. The Buddhist sculptures of Ratnagiri, Udayagiri, and Lalita-giri of Cuttack district are masterpieces of sculptural art. Present Jajpur (Tosali) the capital of the Bhauma-kara kings was a great centre of fine sculptural art. Discovery of the four big images of Bhodhisattva, Padmapani and the Mattrikas give the testimony of artistic activity on the stones during the 7th. and 8th century AD.
Big pieces of stones were cut from the main hills and statues of the great architectural designs were made to be placed inside and outside the temple. Two huge rock cut statues of Anantasayana Vishnu of 50 ft. and 42 ft. 6 inches, discovered at Sarâng and Bhimkand along the Brâhmanî valley in Dhenkanal and Talcher Sub-divisions of Dhenkanal district speaks eloquently of the craft of creating sculptures in the 9th and 10th century AD. The eight cardinal deities and statue of Varuna found to have been placed in Rājārāṇī temple are fine specimen of sculptural image of permanent beauty and grace.

It is therefore, probable to draw a conclusion that the stone work industry during the period of our review, was highly profitable to the people. Such industry had contributed a lot to the economic augmentation of Orissa.

Wood work industry

Wood work industries play an important role in shaping the rural and urban economy of the state. During the period of the Bhauma-kara and the Somavamśi rule it was a means of livelihood to large section of population. The archaeological and inscriptional evidences of the period mention that wood work industry was in a flourishing condition. The carpenters were named as Vardhaki. Generally woods like Sāl, Shishu, Sāndal and Jackfruit were used in the manufacture of furniture. The popular vehicles like Bullockcart
and chariot were made of wood. Doors and windows of temples and private houses were prepared by the carpenters. The Talcher plate of Śivakara III makes a reference to bedsteads. The sculptural examples of this is found in the mukteśvar temple walls assigned to the Somavamśi period.

The sculptural representation of a lampstand is also noticed on the walls of the vaital temple belonged to the Bhauma-kara period. The doors of the temple used to be made of Sandal wood, the single specimen of which is seen in the porch of the Great Tower of Bhubaneswar. It is made of Sandal wood and carved in a pattern having affinity with the gates of Somanath temple. In the inscriptions of the period term Pātakāra (splitter) is found to have used. It indicates that carpenters in large number existed during the period under study. The term pātakāra is used in the Nāgarī charter of Anaṅgabhima III of the Gaṅga dynasty.

Bows and arrows were used as weapons of self defence in medieval Orissa. People in general used them in the battle field. So many wood industries prevailed all over Orissa.

**Boatmaking industry**

Orissa is situated on the coast of Bay of Bengal and land of network of rivers. During medieval times
rivers were used as journey routes and means of transport. As a result boatmaking industries grew up in Orissa. Many merchants (Saudagaras) sailed over the sea to islands like Ceylon, Jávā, Sumātrā for the purpose of carrying out trade and commerce. Big boats were required for the journey over the sea and that was called Bahitra (Boita) or "Arṇava Pota". The Yuktī kalapataru-Bhoja states that ten kinds of boats were used in the journey during medieval Orissa. Such as Kshudra, Madhyama, Bhima, Chapala, Patala, Dirgha Bhaya and Putra Putra. Out of these boats two boats, Bhima and Bhoya incurred bad results. Dirgha and Umata were two kinds of boats used to be made during medieval period. Dirgha were ten kinds and urnatas were five Kinds. The boats were decorated in most beautiful manner and in different colours.

The Bhogamandapa of Puri temple represents the shape of a boat. Purushottamdeva's Trikanda śesha mentions that the boats plying in the rivers of Orissa were given different names. The word padaraka used by the pulindas (Nuliās) has been mentioned by him in the same record. The Pulindas are identified with the Nuliās of the coastal region particularly of Puri and Ganjam district, whose hereditary profession is catching fish. All these facts establish the proof that boat making industry played a Key role in the economic development of Orissa.

Pottery:

Since the inception of civilization pottery
has been one of the main occupations of essential section of the society both of the rural and of the urban population. Next to metal industry pottery was the most essential manufacture of day to day life. The contemporary literature, sculptural representations in the temple walls and the inscriptions throw a flood of light on the pottery industry which was in a flourishing condition during the Bhauma-kara and the Somavaṃśī rule. The Kalasas of vaītal and Śīśireshvara temples give the testimony of excellency of pottery industry during the Bhauma period. The Talcher plate of Śivakara III mentions about pots. A great variety of terra cotta (Terracotta) pots ranging from miniature bowls to big storage jars which were the essential daily articles right from the poor to the rich families were manufactured during the period under study. During Somavaṃśī period, pottery industry reached to the highest degree of perfection which is proved by the discovery of a Lady at Saintala pouring water from her Jug to the Pot of a mendicant. Another picture represents a milkwoman with Jars on her head.

Old potteries have been discovered at various places in Orissa belonging to Ganga rule. The places were Salihundam Mukhalingam, Nagarikotakam and Danta puram (all in the district of Ganjam) where gangas ruled till 1132 A.D.

In the votive inscriptions of Liṅgarāj temple of Bhubaneswar mention has been made about the potters who supplied cooking vessels to the temple for preparation
of daily bhoga. For this purpose lands were granted to potters. An epigraphic record dated the 12th Century AD refers to the grant of two vātis of land to a potter to provide pots for preparation of daily bhoga offered to Lord Liṅgarāja. This shows that potters were attached to temples. Various types of Kalasas at least fifty to be seen in the Yamesvara temple situated in the west of the Great tower of Bhubaneswar. The sculptural representations of cups or goblets for drinking wine and water pots with a spout on one side are also noticed in Bhubaneswar.

R.L. Mitra thinks that the bulk of them were of baked clay of terra cotta such as are now so common in every part of India. Thus it seems that pottery industry was well developed in Orissa during the period under study. As such a number of potters probably earned their bread by making it during the Bhauma-kara and the Somavamsi period.

Glass Industry

In view of the large number of sculptural representations holding mirrors in their hands it is a fact that glass industry also developed during the Bhauma-kara and the Somavamsi rule. In the niche of the Southern side of the Satrughneśvara temple, assigned to 600 AD, in Bhubaneswar there is a figure of six armed Natarāja, who holds a mirror in the upper hand. Another female figure preserved in the museum of Asiatic Society of Bengal from Bhubaneswar
is found holding a circular convex mirrors by a cross trap on its back. Some other sculptural representations to be seen in the temple walls of Kośalaśvara temple in the form of Alasakaryas looking in to mirrors to put a tikā on the forehead or to adjust the head jewel. Excavations at Malhar also have brought to light glass pieces belonging to the period (650 to 900 AD). These specimen of fine art may lead us to conclude that mirrors were possibly manufactured in Orissa during their period. During the Bhaumakara period copper and brass mirrors were in vogue.

**Perfumery industry:**

Inscriptional evidences throw ample light about existence of perfumery industry in Orissa during this period understudy. There are references to the offering of Sāndal paste and incense to gods. We find the mention of a word Gandhika in the Nāgarī plate of Anaṅga-bhima-deva III that perfumery was another occupation of people. Rich and faboulous people used perfumery. They washed and anointed their bodies with sweet smelling unguents. There is mention to the use of añjana(Collyrium) in the eyes, and Kumkuma (red paste) on the fore head of the ladies. Musk paintings were also used by the fashionable ladies on their cheeks. The above discussion indicates that perfumery industry provided the means of living to a number of persons during the Bhaumakara and the Somavamsī rule.
Garland making industry

Temple worship and augmentation woman beauty necessitated the existence garland making industry in Orissa. Inscriptions of the period mention to the Mālākāras or florists. During the Somavamsi rule in south Kośala. Keśava and Nagadeva made a permanent deposit with the guild of the florists of sirpur for the supply of flower garlands to the temple of Lord Śiva at Sirpur. Mention has been also made for supply of flowers to a Buddhist temple.

Tanning industry

Like other crafts and industries tanning also developed during the Bhauma-kara and the Somavamsi rulers. The land grant of the period refers to the rights of the enjoyment of the tiger's skin (Vyaghracharma). This ancient industry existed in the vedic age, also grew up in Orissa during this period.

Sugar industry

Cultivation of sugarcane was in vogue in Orissa during the period under study. The word gaudika(maker of sugar) occurs in an epigraph dated 1230 AD clearly indicates that sugar was manufactured in Orissa. But there is no evidence about the process of manufacture.
Salt Industry:

It is generally believed that manufacture of salt and trade were carried on in Orissa from very ancient times. But no inscription, except the inscription of Ganga King Chodagaṅgadeva throw light on the production of Salt. There is the mention of salt officer (Lavanakaradhikari) in the Ganga inscriptions. There is also no historical evidence about salt manufacture during the period under study.

Liquor making industry:

In the land grants of Bhauma-kings there is frequent mention of brewers (Saundhikas) liquor makers ruling over Uttara Toṣāli, Dakshina Toṣāli and Koṅgoda maṇḍala in between 8th and 11th century AD. They made land grants to their feudatories like the Bhāṃjas and the Tuṅgas. They were transferred to the donees along with other subjects of village. Thus transferrence may lead us to conclude that liquor making was probably an indispensible rural craft in Orissa during those days.

The above mentioned industries and crafts seem to have been carried on by individual families. The artisans were held in high esteem and perhaps this is the only reason for the success of various industries. Thus the economic condition of Orissa largely depended on industrial progress.

Trade and Commerce, Roads and highways

Rivers, roads and highways played an important
role in the economic development of Orissa. It is a fact that there were no roads for the transportation of goods and commodities from one place to another. Roads passed through dangerous jungles and life of a traveller was not safe on the roads. During rainy season roads became muddy and travellers faced a lot of inconveniences. But even then, it cannot be said that there were no roads. We have already seen that a large number of Brāhmins came to Orissa from different parts of India. During the Bhauma-kara period twelve thousands Brāhmins came to Jajpur. It is a fact that roads and highways were there in Orissa. Foreign invasions during the period under study prove that roads existed during Bhauma-kara and the Somavamśi rule. The invasions of Orissa by Chalukya king Pulakesin II in the 7th century and Raṣṭra-kūṭa king Dantī Durgā in the 8th century and Govinda III during 9th century give indication of highways that led to Orissa. In 1022-23, army of Rajendra chola invaded Orissa through another route. They invaded through Bastār districts and entered into Koraput-Kalahandi region of Orissa and proceeded up to Suvarṇapur on the bank of river Tel. Then they passed through Soudha and invaded Jajātinagara and defeated Indraratha.

Inscriptions evidence of this period indicate that Rajapathas existed in Orissa. Sumanḍala copper plate inscriptions dated 570 AD mentions that Parakhala was
some of the Rajpathas of Orissa during this period. Construction of roads, plantation of shaddy trees, establishment of inns were considered some of the pious duties of the people.

The rivers of orissa such as Mahanadi, Tel, Shankha, Mandakini, Salmi, Vyaghra, Salaanki, Baitaranji, Rushikulya, Godavari became the means of transport and communication and helped economic development of Orissa.

From the very ancient times internal and external trade of Orissa existed. The accounts of Hiuen Tsang, who visited Orissa in the 4th century AD, forms the main source of information for the study of trade and commerce. But Hiuen Tsang's record does not throw much light in this direction. The inscriptive informations supplemented facts to the accounts of chinese pilgrim. Secondly Fa-Hien, another Chinese pilgrim, states Orissa's commercial relationship with ceylon and China.

**Internal trade**

During the Bhauma-kara and the Somavamśi rule internal trade was in a flourishing condition. People sold their products in the local market or haṭṭah. One inscription from Jajpur dating the 7th and 8th century AD states that there were hattahs or markets serving a number of villages. Here the villagers probably sold a portion of their produce or purchased necessary articles as we find today. In those
days, generally, markets used to sit near the temple to fulfill the needs of the pilgrims coming from the distant parts of Orissa. Some places became great commercial centres due to the abundance of products. The copper plate grant \(^{239}\) of Nettabhāñja belonging to the 8th century AD. mentions that Angulaka or Angulaka pātna (signifying present Angul in the district of Dhenkanal) was a prosperous centre of trade and commerce where the merchants communities sold goods and commodities on large scale. Orissa is situated in the proximity of the sea and abounds in many rare and valuable articles. People used cowrie shells and pearls as medium of exchange for selling and purchasing of goods and commodities.

Orissa was the land of greenish elephants which helped transportation of commodities from one place to another as we know from the description of Hiuen Tsang. An inscription \(^{240}\) of Gaṅga king Anantavarman, dated 11th century AD informs us that bullocks, Buffaloes, asses and horses of an inferior breed were used for conveyance. We donot find any reference in the inscriptions of the period as to the use of bullock carts in transportation of merchandise from one place to another. Since bullocks were used in this regard, it may be assumed that bullock carts must have been used. However, the Buddhist literature mentions that the Utkalas (people of Orissa) used to come to Gayā with carts loaded with goods for sale.\(^ {241}\)
Internal trade during the Bhauma-kara and the Somavamsi rule carried on chiefly on water ways which linked some of the important commercial towns of Orissa. The Vaitarani, Brahmani, Mahanadi, Godavari and their tributaries served as arteries of commerce.

Availability of commodities in particular areas led to the growth of townships. Nagarī plates of Ganga king Anangabhima III dated 1230 AD mention the grant of Townships situated near the present village Nagarī, in Cuttack district of Orissa. Various categories of Merchant dealers and artisans carried on internal trade there. The perfumers (Gandhika) dealt with fragrant substances, the Sākṣhikas with conchshells, the splitters of wood (pātakāra) with furniture, the Swarna karas with Ornaments, the braziers (kamsyikah) with bronze goods, the Tambulika (sellers of betel leaf) with betel, the Gudika (dealers in sugar) with sweets, the weavers (Tantuvaya) with cloths, the Kumbhakāras (Potters) with earthen vessels and the fishermen (Kaivarttah) with fish etc. Commodities of daily consumption such as food grains, (rice and wheat)vegatables, milk, oil, fruits etc. must have been sold in village market. Besides these, intoxicating articles like spirited liquor, opium, Bhāṅg and Indian hemp were included as goods of internal trade. Diamond was another precious commodity of sale in Kaliṅga.

While discussing internal trade of Orissa during
the Bhauma-Kara and the Somavamši rule, a question comes to our mind whether Orissa had trade links with other neighbouring states or not. From the inscriptional sources we do not find any material to clarify the doubt. However, Hiuen Tsang gives reference to the sale of elephants in the neighbouring provinces of Orissa. It may be presumed that Orissa had trade relations with neighbouring states ruled by the Pālas, Senas, Kalachuris, Cholas and eastern Chalukyas. Thus the internal trade of Orissa strengthened economic backbone of both rural and urban population during the period under study.

External trade (Foreign trade)

The contemporary economic condition of India largely influenced the economy of Orissa. India's foreign trade was inter-oceanic trade with many foreign countries like China, Ceylon, Indonesia. The commercial intercourse of Orissa with many parts of the world seems to have been established since very early times. The merchants of Kalinga maintained commercial relationship with Islands of Bāli, Jāva, Sumātra, Borneo, Mālaya, Shyām, Burma, Ceylon and Indonesia. R.C. Mazumdar relates the commercial relation between Kalinga and Jāva in ancient times. The Merchants of Kalinga established colonies in Jāva and other islands of South East Asia. There was a Hindu Kingdom in central Java which the Chinese called Ho-ling or Kalinga. It is very likely
that Orissa used to carry on oceanic trade with China during the 8th and 9th Century AD. This fact finds the testimony of the visit of Prajña from Orissa to China during the reign of Bhauma king Sivakardeva I. He perhaps started his journey in a merchant-ship to China from Tambralipti (Modern Tamluk), one of the important sea Ports of Orissa, the citadel of trade. The volume of trade with China must have been carried on a large scale during the Bhauma-kara and the Somavamsî period. Perhaps Orissa's main imported article from China was silk. The discovery of Chinese coin at Sirpur belonging to the 8th Century AD gives ample proof of Orissa's trade relationship with China during the Bhauma-kara and the Somavamsî age. We also know that Gândavyuha, a Mahâyâna text was written by a Bhauma king and presented to the king of China. This cultural relationship testimonises Orissa's commercial relation with China. Tambralipti not only had commercial relationship with China but also with Ceylon. To and fro journeys from this Port to Ceylon have been mentioned in the pâli literature of Ceylon. Special ship from Tambralipti used to sail to Ceylon being loaded with elephants since elephants from Indian mart greatly demanded by ceylonese kings. Cosmos's accounts of 6th Century AD states that the price of elephants was fixed according to its size in Ceylon. The kings of Ceylon paid good prices for the elephants coming from Indian market.
Since Orissa was rich in various categories of Elephants she might have exported elephants to Ceylon. Pearl was imported from Ceylon to Orissa has been stated by Fa-hien in his account as pure pearl was plentifully available in her seas. It is aptly said by M.S. Pande that Tambralipti was the most famous port in the Bay of Bengal from which people travelled to China, Ceylon and South East Asia.

Palur situated near modern Chicakola was a prosperous port of Orissa. Direct Voyages were made by Orissan merchants from this Port to the East. Suvarnapur situated on the confluence of river Tel and Mahānāḍī was a port town of Orissa. It is identified with modern Sonepur of West Orissa.

It was also a rich port of West Orissa. This fact is corroborated by the Maranjamura Charter of Somavahṣī King Mahāśivagupta dated 11th Century AD.

Hsiuen Tsang has mentioned Che-li-ta-lo, another famous port of Orissa. It was situated on South East of Odradesha. Scholars like Cunningham and R.D. Banerjee have identified this port with Puri. It was also called Charistrapura some other scholars say that charistrapura was near Chandrabhāgā or Kurama (Chitreswara). Hsiuen Tsang has says that, he could see the bright light of Boudha Dantastupa on the shore of Che-li-ta-lo port. According to the pilgrim the aforesaid city was a thorough fare and resting
place for sea going traders. 255

It is worth mentioning that a number of ports existed in Orissa flourishing during the period under study. The foreign trade of Orissa made commendable contributions to the economy of Orissa. This is possible due to the glorious achievements of Oriya Soudāgara.

Currency:

The economic history of Orissa at the time of the Bhauma-karas and the Somavamśis will remain incomplete without any reference to the use of currency. Inscriptions of medieval period state availability of gold and silver coins only. It is significant that there is no mention of copper coin in the records. Mādalā Panji256 also does not mention, the use of coins by the common people. People preferred barter system in day to day transactions. Barter system is a system by which goods were exchanged against goods. But this system could not be applied in all cases of transaction. Cowries or Kapardakās were the most popular medium of exchange.

The Bhauma-kara and the Somavamśi kings were most powerful rulers of Orissa. We donot find any reference in their inscriptions issuing new coins to glorify their reign even though rulers before them and after had issued gold and silver coins. Perhaps during the period of our study cowries were considered as medium of exchange in the economic field. Due to huge circulation cowries metallic coins were not
Issued by the Bhauma-karas and the Somavamśīs. In Orissa the cowries currency was popular as it was in Bengal, Assam or in other parts of India. Inscriptions of this period are silent as to when this cowrie currency came to Orissa. The earliest possible evidence of the prevalence of cowrie currency was the accounts of Hiuen Tsang who visited Orissa during the reign of Harshavardhan in the 7th Century AD. The next reference in this regard is found in the copper plate grant of Subhākaradeva II of the Bhauma-kara dynasty. The relative value between cowrie and metallic coins is not known in the numismatic records of Orissa. The Mādala Pāṇji, which was completed during Mughal rule in India is the authentic source of history of Orissan kings. During the rule of the Gāngas and the Gajapati kings, Mr. M.M. Chakravati had tried to ascertain the value of cowries. Though cowries served as measuring rod of commodities during the Bhauma-kara and the Somavamśī rule, yet cowries can not regarded as coin proper.

Cowrie was regarded as Kapardaka. In arithmatic calculation four Kapardaka made one ganda, twenty gandas make one Pana, and sixteen panas make one Kāhāna. The word Kāhāna is considered to have been derived from the Sanskrit, word Karsapana. Karsapana is generally understood to have expressed the value of a silver coin whose weight was 80 rati (146.4 grain) Exactly like pana was expressing the value of a copper coin weighting 80 ratis. However, the value of silver was sixteen times more than the value of copper.
Now-a-days cowrie currency is not seen but its foot prints are to be noticed in the culture of Orissa. Cowrie constituted the most popular currency as the medium of exchange. It is an admitted fact that in ancient and medieval India rulers of a particular dynasty issued coins and those coins were allowed to be in Vogue in the subsequent reigns also. The fact mentioned by me earlier that the Bhaumas and the Somavamsis were very powerful but they did not strike any coin in their names. There is no satisfactory answer to this doubt in the inscriptions. The Nalas and the Sarbhapuryas before the Somavamsis of South-Kosala issued gold and silver coins.

**Banking system:**

Net work of Banks as we find today, there was no bank in Orissa during this period. In the epigraphic records of the period we find nidhi-Upanidhi which means deposit or buried treasures. As there was no bank in modern sense of the term, conventionally people buried their valuable cash, ornaments etc. as a measure of Security. But this method was not safe and free from robbery. Some times robbers plundered the buried wealth of the people when they discovered the identifying mark. Thus people were induced to keep their treasures in safe custody of the trading community which sometimes worked like banks.
Prof. Basham is of the opinion that "At all times until the coming of the Europeans, banking in India was the by-product of trading". Reciprocity was maintained properly between the depositor and depositary. The merchant traders were in need of capital to augment their business and the depositors eagerly craved for safety and security of their wealth. To encourage the depositor for savings, an alluring interest was paid. Thus people were induced to deposit their treasures not only with guild banks but also with private bankers called the Sresthins. But the epigraphic records of the period do agree to this. The Sresthins were traders who have achieved distinction in the field of trade and commerce. The co-traders considered them as men of honour. They were also administrators of high calibre. And thus they demanded and commanded respect from the people as administrators.

Besides this measure there was another method of mortgaging the valuables with rich person or organisations for borrowing money on interest. The Smriti writers have framed elaborate rules regarding the safe custody and delivery of the pledge to depositor. According to Manu, the pledge must immediately be transferred to the depositor on demand or else the depositary forfeited his claim on the pledged money. If the depositary enjoyed the pledge by using it, he received no interest and had to make goods damaged. Kautilya also has made seven prescriptions against loss,
mortagage, mis-appropriation etc. of the pledge. Despite this measure, corruption had its deep root in the business organisations.

**Economic life of the people**

The economic progress achieved during the time of the Bhauma-karas and the Somavamsis indicates that two parallel economies, quite contrast to each other developed. One is urban economy and another was rural economy. Economic life in the cities was maintained with great vigour and the rural economic life was in a muribund condition. The kings, ministers, persons relating to royal blood, merchants, bankers and wealthy citizens were leading luxurious and happy life. They were at the highest point of comfort and appulence. The magnificent and splendourous courts that the Monarchs maintained suggest that Orissa's economy was great success. In the rich bazzars of the cities, people belonging to different professions and occupations lived very happily. The princes and nobles were intrepid soldiers, benevolent and wise rulers but indulgent and indolent. Leniency towards the conquered, protection and security to the weak and the feeble, patronage to culture, were the great deeds of the monarchs and lords. The monarchs had shown their skill and dexterity both in the field of the battle as well as in the arena of love. The palaces were surrounded with military establishments, slendorous courts, harems, groves, tanks and pleasure gardens. They were
the citadels of amorous life and culture. The beautiful
mansions of prostitutes and unchaste women stood in the
city lanes. Rich and wealthy people visited them to enjoy
their lives. The sculptural representations in the temple
walls suggest that ardent couples indulged in conjugal
enjoyment with erotic poses and postures. The prostitutes
to please their counterpart parts were decorating themselves
with pearl ornaments. Despite these improved features of
city life poverty existed. The poor fishermen, butchers,
scavengers, public performers and executioners must have
lived outside the city walls. The city life was active,
festive and luxurious.

On the contrary life in the village was simple
and devoid of pomp and grandeur. The villagers lived in
small huts and resorted to hard labour to keep their body
and soul together. Agriculture which was the mainstay of
the multitude masses largely depended on the mercy of the
monsoons. Lack of modern irrigational facilities, Orissa
during the Bhauma-kara and the Somavamśi rule fell pray to
drought and famine very frequently. It appears to be true
that a villager could manage to earn a square meal either
working in the field or engaging in some other occupations.
Lion's share of the income replenished the depleted treasury
of the Monarchs. They silently bore the repression of the
royal officials. They had neither money nor opportunity for
the enjoyment of life. They were the first victims of famine
and pestilence. Valuable cornfields were destroyed when the enemies invaded the country bringing untold misery to the villagers. The intermittent wars among the Soma-vamśis kept the state in a constant state of emergency and thereby the powers of the bureaucracy must have increased putting the villagers in great difficulty. The common people during the period of study, must have been exploited by the despotic administrative and military officers. Greedy money lenders, the profiteers, the traders and bankers must have sucked the blood of the people through exploitation. Gambling, drinking and prostitution were the common pastimes of the multitudes and major portion of income must have been appropriated in this way.

We find a very gloomy picture of the country side as illustrated in the poetic expressions of apabhramsa poet Bābbar who lived during the reign of Karna Kala-churi (1040-1070 AD). He states that"the cold winds and rains of winter sent a shudder through the frail limbs of the poor. Biting cold conspired with severe starvation to intensify their suffering with empty bellies and sad hearts they coiled their hands and feet and lapsed into silence". The description might be applicable to the state of affairs prevailing in Orissa during the Bhauma-kara and the Soma-vamśī rule.

Despite the above sufferings, the people were
happy and contented. Epigraphic records of the period reveal that taxes were low. The Monarchs were liberal and tolerant towards people. The excellences of the political system can be appreciated by its effect on the material prosperity of its people. If we apply this criterion to the Bhauma-kara and the SomavamŚi rule in Orissa, it must be pronounced a great success.
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