



**ORIGINAL RESEARCH PAPER**

**History**

**MINING AND METAL INDUSTRIES IN HOYSALA DYNASTY: A HISTORICAL REVIEW**

**KEY WORDS:** Mining Industry, Metals Works, Jewellery, Household studies, and Weapons of war.

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**ABSTRACT**

The paper observes the historical review of performance and growth for mining and metals works in Karnataka during the early period. The mining industry is also contributing to valuable aspects of economy as well as rural economy. It may be noted that this paper different kinds of works of metals like Jewellery; Household studies; and Weapons of war. It has been pointed out that achieve mining for reef gold was going on in several of the goldfields of South India when the Vijayanagara rulers held sway, and during the regime of Tippu Sulthan in Mysore. The metals work also has been craft jewelers may be reflected to has reached a high state of excellence. Certainly, the works of luxury as well as need; ended out of several metals such as – gold, silver, copper, bronze, etc., frequently find note in the archives and literary studies of the time.

**INTRODUCTION**

The mining industry is a key role economic activity, which subsidizes expressively to the economy in the country as well as State. The practiced of mining in the area is ancient and underwent contemporary concept.

It plays a vital role in Karnataka industry, which contributes relates to the value of gross domestic products. It present study was discussed about the functioning and performance of mining and metal works in the State. The paper was mainly based on three important industries are given following – 1) Mining Industry and 2) Metal Works – (Jewellery, Household studies, and Weapons of war.

**1. MINING INDUSTRY**

The mining industry is a very prominent role in the economic development.

The wealth of mineral is a main variable in its economic development as a country.

The mining had been practiced in the country for at least more than 2000 years.

Mining of relates to metals such as iron, gold, etc., was a well understood and practiced industry in the country from moderately previous period.

Specially, gold is a need commodity to back up the business oriented of the country its worth is all the more imperative under the increased industrial development.

It interesting point that the gold is one of the relatively less ample but varied contributed elements in the earth's layer and compounds of gold are very few.

Nearly all the goldfields in the country carry traces of earliest outward quarries as well as underground working in the form of shaft associated by galleries.

Furthermore, dynamic recovery of gold is also showed by the occurrence of crusher stone, implements and mortars, by which the one was crushed and ground earlier criticizing for gold.

It may be noted that evidence in the Old Testament goto depict that gold was distributed from the Deccan through West Indian ports to the Mediterranean nations.

According to Sir john Marshall, he was pointed out that the ornaments in this metal revealed at Mohenjodaro were of gold extracted in the Deccan.

Functions of gold mining in Karnataka may be outlined back

to some ancient time.

During the Neolithic time and Dr. Alchin, these are mentioned that the settlement grouping around the Maski and Hutti fields are also includes large number of vast crushing and rubbing stones found by Munn in the wreckage of Wandalli and Gaudur ash mounds, proposes the indigenous mining of gold on surface on a small scale.

Therefore, Hungunda, Honnavara, Honnali, Pumgame have been found a very place would show that gold was linked with them during the early gold works.

Primary deposits of gold are establishing in ridges of quartz in areas involving of Dharwar Schists; and traces of such existences have been revealed in nearly all the districts in Karnataka.

The being of some earliest period by the European prospectors were concerned to the works of Kolar Goldfields. Iron is feels that one of the shared minerals in the earth's crust. It has been noted that the Bellary region was about 5/6 of it, was protected with Archaean mainstay/ rock.

The Dharwar rocks are also rich in the haematite beds quartzite of powerful inflexibility and the Sandhur hills are also include rich in unlimited haematite beds. These are rich in iron express that the "perhaps the richest in all India".

The numerous studies of iron were in use, as has been amply proved by the excavations at many places are – Brahagiri, Maski, Jadigenahalli, etc.

The iron mineral initiate strength has been demoralized for the drive in Karnataka.

In ancient period, iron producing industry in Karnataka was near Kuditini in Bellary district.

As per well refer to Punnata in Karnataka, which has thought in the Greek and Roman books.

As per Ptolemy, it has been briefly found therein.

Certainly, that area had a wealthy trade in beryl with distant western nations like Rome, etc.

As evidence from some gold mines as also to some taxes imposed likely on the mining of gold, iron, etc.

Somesvara work is a distinct interesting matter, for it permits us to known about the mining industry as understood and possibly trained during the previous period.

Somesvara recommends found that the ruler to protect such

places where the deposits of gold (Suvarna), silver (rajata) and valuable stones (ratna).

Vijanesvara feels that to have a situation of expert over all mines under the ruler's instruction, would amount to an act of lesser sin (upapataka).

In the places of gold mines at Kolar and Hutti, when the mining functions were newly renewed, there were found fragments of pottery/ earthen, wooden logs, etc. Gadag (Dharwar district) as a goldfield too there are illustrations of ancient works on reef gold all over the region.

### 1. METAL INDUSTRY

In this during, the metal industries are very most important work for craft jewelers may be reflect to has reached a high state of excellence.

Certainly, the works of luxury as well as essential, ended out of different metals such as – gold, silver, copper, bronze, etc., frequently find note in the archives and literary studies of the time.

An inscription of Mysore (1116 A.D.), it was evidence from the practiced craftsmen as Visvakarma, who used exertion on gold (hema karma) as well as other metals such as iron, copper, etc., (loha karma) as also several valuable stones are - diamond, emerald and ratna karma. Wide spread was metal work considered in the making of classification into three important metal works as given below:

- A. Jewellery;
- B. Household studies; and
- C. Weapons of war.

### A. JEWELLERYWORKS

The work of jewelers may be reflecting to have been one of the significance luxury traders, which must have depended mainly based on the temples and the imperial court, besides the encouragement of aristocracies. The works of jewellery that were produced had speciously only a limited market and various of the inferior person could not have afforded the luxury of buying them. Sources of modernization relates to various types and varieties of gold ornaments, often inlaid with several expensive stones such as – diamond, emerald, ruby, etc.

The terms of ornaments are jeweled ear-rings and necklaces, gold band (patta), bracelet (tolabandi) as also to an ornament known as gandapendra.

Marasinga Prabhu in Sirur (1049 A.D.), revealed that the list of jewels and he illustrated to the temples of Visnu of that residence like, bracelets (kankana), waist band (kati sutra), anklets (nupura) ear-rings (kundela), armltes (keyura), crown (makuta) and three sets of necklaces with suitable pendants (haradi padakam trikam).

Furthermore, Somesvara feels that the long list of such gold ornaments, worked with well and expensive gems, namely ear-rings, necklaces, medals, bracelets, bangles, ring, girdles, etc.

Merchants (1147 A.D.), it was evidence from the Soviseti by name who used to supply in wealth all sorts of jewels to the Chalukya ruler of Jagadekamalla, as also to his commonly Barmmadeva.

Racanna and Rayanna as the senior inspectors of the treasury of jewel under the king of Manikyabhandri as per Hoysala (1237 A.D) at Arasikere.

Moreover, included that the Vacana of Basava felt by way of analogy to the several steps in the process of producing a gold

ornaments for instance, melting, purifying, beating, moulding, etc.

Nayasena also interesting point mention that works of gold and silver, used specifically in the temples and the imperial courts are golden horn or trumpet, images, the jeweled lamps and mirrors, etc.

Gold plates were frequently reflected to temples and Bangalore (1278 A.D) show that the silver tray was reflected to temple.

Somesvara was relating several seats for the kingdoms use (asana bhogah) references to the golden lion seat (simhasana) and provided to golden chains (Suvarna srikhala).

### B. HOUSEHOLDWORKS

In ancient period, the household studies make of metals were in uses are- vessels and furniture. In terms of vessels of valuable metals namely, gold and silver. They were made specifically in temples and royal courts. The vessels relate to copper and bronze that were commonly used by the person. As per Sikaripura (1159 A.D), it was reflected that the Dandadhipa Kesiraja constructed the city, Virakesvapura and provided it filled with ample houses having among several other things 'all manner of vessels' to a host of Brahmanas. Another important inscription of 1078 A.D., states that the gift of copper vessels made by one Mamma to Sun god at Mulasthan temple.

Certainly, Somesvara mentions that rice preparations may be made in the copper vessels as well as tamrakrtayam sthalyam.

Copper smith and Nacoja, they were funded some land as per 1054 A.D. Furthermore, the vessels made of bronze for instance, basins/ cups, plates, ladle/ spoon and other are noted in the works of Nayasena, Basava and others. However, some tax also lived on the trade in bronze vessels i.e., kancina bhandava kondalli kottalli.

The 17th century A.D., when Viramitrodaya was composed by Mitramisra, glasses were of only bell-metal. Besides, India started to import foreign European glasses only from 1550 A.D., on. However, vessels and other works of metal may also be made of the metal furniture. In detail, metal seats (lohasana) are noted in many evidences as well as by Somesvara.

In circumstance, a group of bronze was explained like - Nataraja, Siva, Parvati and two feminine gods has been currently revealed in Kudalur, a village about 4 miles from Cannapatna at Bangalore district.

The 11th century A.D., given to the bronzes are consisted to be many of the rare and costly/ valuable metallic monuments presented in the State.

Yevur (1110 A.D.), it was noted that the guild of the braziers. An inscription of 1094 A.D., it is illustrations that a convinced merchant (vyavahari) taken an image of Lord Mahu Manikya to Jakaladevi, the queen of Vikramaditya VI, who bought that image.

Metals were highly used in the meaning of coins. The metals works is used on different aspects of performance in the ancient period and now it.

### C. WEAPON OF WAR

Weapon of war another important work of metal in the State.

Implemented as well as weapon were made of iron/ steel.

The sources of various weapon like swords, daggers, spears,

arrow-heads, and battle-axes.

An inscription of Mysore of the 11th century A.D., it was mentions that a people (ballasiya) whose work looks to have been that of manufacturing steels.

Nayasena means to way of analogy to iron smiths (kammara) who used to make the weapon are steels and the like (khadgadi sastrangal).

The study was some of the notes made by Somesvara in this background.

He was also giving convinced suggestions in order to test such weapon.

Swords should be tested by the angusthaparva method, as explained to be three types of swords have been notable as given below:

1. Swords that is 50 fingers in length belongs to the first class;
2. The second class swords were between 25 and 50 fingers in length is placed in; and
3. The third class of sword measures only 25 fingers.

The three important kinds of spears like to be used should be of 7 arm's length; 6 arm's length; and it should be 9 arm's length. Somesvara witnesses that the king should in the existence of all the invitees, reveal his skill and deftness in the art of using all these weapons.

### CONCLUSION

It may be concluded that the above explained about two important industries like mining and metal works.

The study was considerable of metals works like Jewellery; Household studies; and Weapons of war.

The mining and metals work for significant role in the development of country as well as state economy.

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