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## IRRIGATION SYSTEM OF SIRUGUPPA TALUKA

**N. RAMAKRUSHNAIAH AND H.M.CHANDRASHEKARA SHASTHRI**

### Abstract:

*India, a south Asian democratic country, has many evidences on irrigation structures, systems and managements, almost from 8th century A.D. onwards. They captured India's long history of human interventions in the management of village water bodies for agriculture. Such interventions are irrigation tanks, wells, channels and dams. These were simple earthen banked rain water harvesting and storage structures, designed by the early settlers using their indigenous wisdom and constructed with the generous support of native rulers and chieftains over the past several centuries. Surprisingly these earthen structures have withstood the test of time and survived over many centuries.*

### KEYWORDS:

Irrigation, Siruguppa Taluka, democratic, systems and managements.

### INTRODUCTION

Siruguppa is the headquarter town standing on a narrow branch of the river Tungabhadra at a distance of 56 kilometers on Bellary-Raichur road. The name Siruguppa perhaps means 'pile of wealth' and is well earned by it on account of its rich wet lands watered by the channels from the river. The river Tungabhadra is one of the sacred rivers of India at it is called 'Dakshina Gange' (Southern Gange) in the inscriptions of Siruguppa and Kammarchedu, and its ancient name Pampa finds mention in the epics and puranas. Pampa, as a teertha (holy place), is also mentioned in the Sanskrit drama, kaumudi mohatsava and in the Kannada work, Harishchandra kavya of Raghvanka. In the latter, it is identified with the ashrama of Vishwamitra. The earliest mention of this place is found in an inscription dated in the year 1034-14 A.D belonging to the reign of the Chalukyan king Vikramaditya which records a gift to the temple of Mahakaladeva of Pampa. This epigraph mentions also Iriva Nolambadhiraja and his queen.

The temple inscription of Mallayyanagudda states about the grants which was given to the Mailaradeva, a local deity. There is a river called Hagare, it may be a Vedawati which is a sub-river of Tungabhadra. The local people were utilized the water for their irrigation.

### TANK IRRIGATION:

In the history of Karnataka, Kadambas were the first who constructed the tanks. The inscription of Kudatini in Siruguppa taluk dated 996 A.D states about a tank; it is a first tank in Balakundi. The ancient kings constructed the tanks as a donation to the people for irrigation purpose and also to drinking water. They did not stop their work after creating tanks. They also provided grants and tax remissions to those maintaining the tanks to ensure their good require. The striking feature is the care which they took to maintain all these structures for sustained irrigation. They had a very elaborate system of management including repairs, maintenance and improvements. The tanks, channels and sluices, especially those which

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were not wholly built of stones, bricks and mortar, required great care in order to maintain them in good condition. Frequent removal of silt was considered to be the most essential aspect of the maintenance of tank complexes. The breaches in tank bunds and supply channels due to excessive rainfall and floods had to be repaired promptly. But, the wanton damage done to irrigation works was certainly not known in those days. Many south Indian inscriptions contain description and references to the damages caused to irrigation works on account of heavy rains and floods, the action taken by rulers and chieftains for the upkeep of the tank complexes and also the endowment created for the maintenance and repair works by individuals.

Most of the kings and chieftains created tanks as a form of donation for their social work the local people called the tank with donor's name. Some of the tanks in Balakundi called as Kesari Mahadharma Prabhu keray (tank), \*\*\*Maiyyan keray, Champpan keray, Chaudaiyyan keray, Dittapa keray, Pundarikana keray, Manchimarasana keray and Araliyyan keray. Similarly in Kurugodu, Balakundi, Raravi and Gundiganuru there is also tanks were available having inscriptions.

In Kurugodu there is a famous tank constructed by one of Havinahala Kallisetti. Keasri Mahadharma Prabhu constructed a tank in Balakundi along with; they left land as a grant for the maintenance of the tank. The Raravi inscription dated 1121 A.D give description of family of Kampli Tipperetti and Marisetti who were constructed a tank in Raravi. In Balakundi inscription dated 1017 A.D give details of maintenance of tank called as a 'Bittuvat'. During the reign of Chalukyan kings Jagadekamalla, Nolamba Pallava Permanadi they left land as a grant for renovations and repair of the tank. The inscriptions of Balakundi give details of 9 tanks few of these were used for irrigation.

#### Wells:

Wells are the most important source for the irrigation and also used for drinking water. In all, there were in Siruguppa taluk 387 wells were found. Most of them were seen near the temples, gardens and in public places. According to the inscriptions of this taluka some of famous wells are Siruguppa-Shambulingeshwar temple, Kallutiganaahalu, K. Belagal, Sirigeri, Hacholli, Raravi, like these several wells were constructed. The water of these wells was used for Pooja and irrigation.

#### ANICUTS (SMALL DAMS) AND CHANNELS:

The kings of Vijayanagara Empire were the patrons of Architecture they constructed most of dams and channels. According to Robert Sewell, he says "their great work was the construction of a huge dam across the Tungabhadra River, and the formation of an aqueduct, 15 miles long, from the river into the city. If this be the same channel that, to the present day, supplies the fields which occupy so much of the site of the old city, it is a most extraordinary work. For several miles, this channel is cut out of solid rock at the base of the hills and is one of the most remarkable irrigation works to be seen in India".

To the Tungabhadra River there were near above 18 dams were constructed in different districts like Raichur, Bellary and Karnool during the period of Krishnadevaraya in 1509-1529 A.D

#### SIRUGUPPAANICUT:

Kenchanagudda in Siruguppa taluk, is a village on the banks of the Tungabhadra, about six kms south-west of Siruguppa. There is a dam constructed with big rock stones and connected to several channels for utilizing the water for irrigation. The place contains two forts, a lower fort in which most of its inhabitants used to reside formerly and an upper one on the top of the rock called Kenchanagudda, which gives the village its name and on which Kenchana Gowda, a local chief, had his mansion.

On the upper side of Siruguppa dam there are seven dams which are as follows;

1.Arali Katte	1450	feet
2.Usoogina Katte	2200	feet
3.Agasargudi Katte	270	feet
4.Kulenayakan Katte	250	feet
5.Bellakki Katte	1100	feet
6.Hanuman Katte	780	feet
7.Gangammana Katte	1100	feet

These all above mentioned dams were stored water which explained before it.

**DESHNURANICUT:**

There is another dam in nearest to Siruggupa dam called as Deshnur or Modalaghatta dam means 'the first platform or dam'. Madalaghatta is a hamlet of this village situated on the right bank of the Tungabhadra River. It is said that the village was so called, because it was the scene of the first attempts of the Vijayanagara kings to construct an anicut across the river. The remains of the old dam could be seen till recently, before they were submerged under the Tungabhadra reservoir.

In 1896 A.D the British Settlement officer visited to the area and says that 'I never seen before this type of soil in other districts. (Under eight districts of Madras state) and further says the land of Deshnur is the highland.

In the taluka of Siruguppa, which covered mainly by black soil, rabbi crops like jowar, cotton and paddy are grown. In some quarters, the black cotton soil is believed to be derived from basalt by surface decomposition; in others, it is said to be argillaceous earth impregnated with organic matter or ancient forest humus and in yet others to have been deposited at the bottom of lakes or lagoons. It contains a larger proportion of organic matter than most other soils, though the percentage is not really high and a considerable admixture of carbonate of lime. Its properties of retaining moisture, of cracking deeply in every direction in the dry weather and becoming impassably sticky in wet weather are well known. Several theories have been propounded to account for its color. Dr. Leather who particularly investigated the black cotton soils, disproved the idea that this is due to organic matter, as boiling with concentrated sulphuric acid has little effect upon it, but leaves a dark brown residue which is apparently due to some mineral peculiar to this soil.

Above two mentioned anicuts (dams) having two channels, which are Siruguppa canal and Deshnur canal. These two canals were covered 1209 hectare land (Siruguppa canal in 752 hectare and Deshnur canal in 457).

**SIRUGUPPACANAL:**

The canal of Siruguppa started from center of the taluka, it measures 6 kms long and covers 752 hectare land (1857.44 Acre) this canal was utilized by the three villagers of Siruguppa, Kenchanagudda and Ibrahimpur for cultivation.

**DESHNUR CANAL:**

This canal flows via Kenchanagudda it measures 8 kms long and covers 457 hectare land (1130 Acre). The canal utilized by the people of Deshnur for cultivations to their land.

**DEVARASAN CANAL:**

In the Kenchanagudda dam on the wall there is an inscription dated 1466-67 A.D it give the description about the construction of dam and the Devarasan canal. Once the dam was damaged, it was renovated by one Veernayak who was a governor of Ariraya Todarmall – Guttidurg Jagatapi. He reconstructed the dam in the tribute of his father Somanayak and Salagundeya Basavambika.

<sup>1</sup>'Irrigationa Tanks and Their Traditional Local Management: A Remarkable Ancient History of India', National Seminar on Water and Culture, Hampi, June, 2007, p.2

<sup>2</sup>Devarakonda Reddy, Inscription No. 01, 1092, Siruguppa, Dist. Bellary, p.91-92

<sup>3</sup>South Indian Inscriptions, vol-IX, part-I, No. 114, 1054 December 15, Kammarchedu, Dist. Bellary

<sup>4</sup>Karnataka Gazetteer, Bellary District, Government of Karnataka, p.3

<sup>5</sup>Devarakonda Reddy, Inscription No. 01, 1092, Siruguppa, Dist. Bellary, p.91-92

<sup>6</sup>A.R 83/77-78, 1057, Balakundi, Tq. Siruguppa, Dist. Bellary

<sup>7</sup>Devarakonda Reddy, Inscription No. 24, 1120, Kudatini

<sup>8</sup>Devarakonda Reddy, Inscription No. 22, 1099, Kudatini

<sup>9</sup>Devarakonda Reddy, Inscription No. 03, 1147, Kolluru

<sup>10</sup>Devarakonda Reddy, Inscription No. 23, 1148, Kudatini

<sup>11</sup>Devarakonda Reddy, Inscription No. 18, 1173 and 1181, Kurugodu

<sup>12</sup>South Indian Inscriptions, vol-IX, part-I, Kurugodu

<sup>13</sup>Devarakonda Reddy, Inscription No. 7, 1136, Kurugodu

<sup>14</sup>Ibid

<sup>15</sup>A.R 83/77-78, 1057, Balakundi, Tq. Siruguppa, Dist. Bellary

<sup>16</sup>Devarakonda Reddy, Inscription No. 13, 1121, Raravi, Tq. Siruguppa, Dist. Bellary

<sup>17</sup>A.R 83/77-78, 1057, Balakundi, Tq. Siruguppa, Dist. Bellary

<sup>18</sup>South Indian Inscriptions, vol0IX, part-I, No.260, 1199, Hampi

<sup>19</sup>On a bastion of the fort, here stands an old temple of Shambhulingeshwara the oldest temple of the place.

This temple have a inscription, Devarakonda Reddy, Inscription No. 3, Siruguppa, Dist. Bellary

<sup>20</sup>Devarakonda Reddy, Inscription No.22, 1067, Kalkutiganahalu

<sup>21</sup>Devarakonda Reddy, Inscription No. 36, K. Belagal

<sup>22</sup>Devarakonda Reddy, Inscription No. 39, Sirigeri

<sup>23</sup>Channabasappa S. Patil and Vinoda, Eds, Inscriptions of Bellary District, Directorate of Archeology and Museums, Mysore, 1995, Inscription No. 584, Hacholli, Siruguppa Taluka

<sup>24</sup>Ibid, Inscription No. 628, Raravi, Siruguppa Taluka

<sup>25</sup>Bellary District Gazetteer, p.234

<sup>26</sup>Ibid

<sup>27</sup>Ibid

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