

Vol 5 Issue 5 Nov 2015

ISSN No :2231-5063

---

# International Multidisciplinary Research Journal

## *Golden Research Thoughts*

Chief Editor  
Dr.Tukaram Narayan Shinde

---

Publisher  
Mrs.Laxmi Ashok Yakkaldevi

Associate Editor  
Dr.Rajani Dalvi

Honorary  
Mr.Ashok Yakkaldevi

## Welcome to GRT

**RNI MAHMUL/2011/38595**

**ISSN No.2231-5063**

Golden Research Thoughts Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board. Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

## Regional Editor

Manichander Thammishetty  
Ph.d Research Scholar, Faculty of Education IASE, Osmania University, Hyderabad

## International Advisory Board

Kamani Perera Regional Center For Strategic Studies, Sri Lanka	Mohammad Hailat Dept. of Mathematical Sciences, University of South Carolina Aiken	Hasan Baktir English Language and Literature Department, Kayseri
Janaki Sinnasamy Librarian, University of Malaya	Abdullah Sabbagh Engineering Studies, Sydney	Ghayoor Abbas Chotana Dept of Chemistry, Lahore University of Management Sciences[PK]
Romona Mihaila Spiru Haret University, Romania	Ecaterina Patrascu Spiru Haret University, Bucharest	Anna Maria Constantinovici AL. I. Cuza University, Romania
Delia Serbescu Spiru Haret University, Bucharest, Romania	Loredana Bosca Spiru Haret University, Romania	Ilie Pintea, Spiru Haret University, Romania
Anurag Misra DBS College, Kanpur	Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Xiaohua Yang PhD, USA
Titus PopPhD, Partium Christian University, Oradea,Romania	George - Calin SERITAN Faculty of Philosophy and Socio-Political Sciences AL. I. Cuza University, Iasi	.....More

## Editorial Board

Pratap Vyamktrao Naikwade ASP College Devrukh,Ratnagiri,MS India	Iresh Swami Ex - VC. Solapur University, Solapur	Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur
R. R. Patil Head Geology Department Solapur University,Solapur	N.S. Dhaygude Ex. Prin. Dayanand College, Solapur	R. R. Yaliker Director Managment Institute, Solapur
Rama Bhosale Prin. and Jt. Director Higher Education, Panvel	Narendra Kadu Jt. Director Higher Education, Pune	Umesh Rajderkar Head Humanities & Social Science YCMOU,Nashik
Salve R. N. Department of Sociology, Shivaji University,Kolhapur	K. M. Bhandarkar Praful Patel College of Education, Gondia	S. R. Pandya Head Education Dept. Mumbai University, Mumbai
Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai	Sonal Singh Vikram University, Ujjain	Alka Darshan Shrivastava Shaskiya Snatkottar Mahavidyalaya, Dhar
Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College, Indapur, Pune	G. P. Patankar S. D. M. Degree College, Honavar, Karnataka	Rahul Shriram Sudke Devi Ahilya Vishwavidyalaya, Indore
Awadhesh Kumar Shirotriya Secretary,Play India Play,Meerut(U.P.)	Maj. S. Bakhtiar Choudhary Director,Hyderabad AP India.	S.KANNAN Annamalai University,TN
	S.Parvathi Devi Ph.D.-University of Allahabad	Satish Kumar Kalhotra Maulana Azad National Urdu University
	Sonal Singh, Vikram University, Ujjain	

Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India  
Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.aygrt.isrj.org



IRRIGATION SYSTEM OF BELLARY DISTRICT  
IN 18<sup>TH</sup> CENTURY



D. M. Mallikarjunaiah

Assistant Professor, HOD in History , Shri Shankar Anand Singh  
Government First Grade , College, Hospet.

**ABSTRACT:**

**B**ellary is the westernmost of the four Ceded<sup>1</sup> or Deccan<sup>2</sup> districts of the Madras Presidency. It is only on its eastern flank that it is connected with the rest of the province, the other three sides being bounded by the Nizam's Dominions (on the north) the Mysore State (on the south), and (on the west) by the Dharwar district of the Bombay Presidency. In Shape it is roughly triangular. Along the whole of its longest- the north-western-side the great Tungabhadra river forms its frontier, but the boundary on the other two sides of the triangle, south and east, has been formed by the accidents of history and does not follow any marked natural features. On the east, where Bellary touches the rest of the Presidency, it is flanked by the two districts of Kurnool and Anantapur. The latter of these formed part of it until the beginning of 1882 when it was detached and constituted a separate Collectorate.



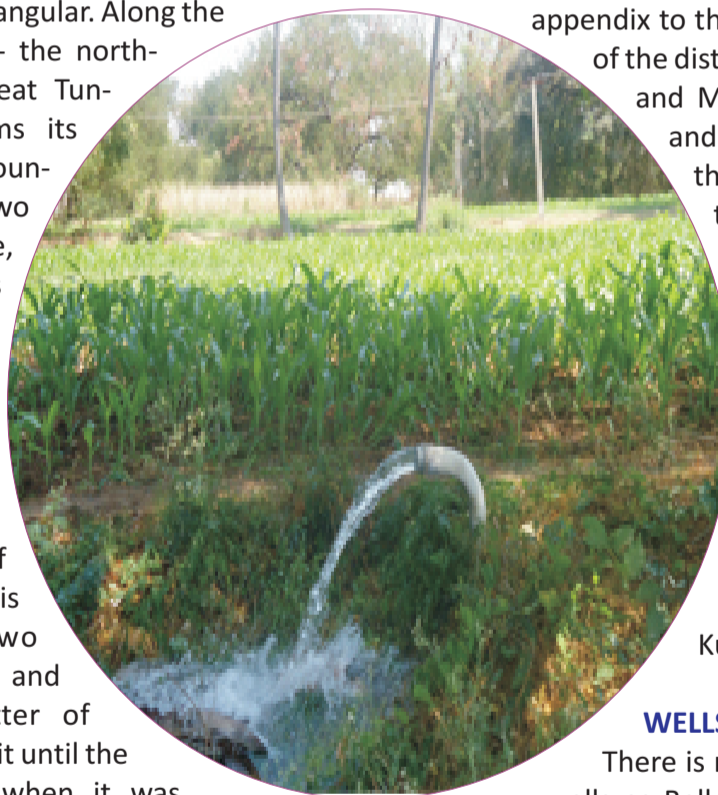
Laxman kumar  
soren

**KEY WORDS:**

Bellary, Deccan, Ceded, Adoni, Alur.

**INTRODUCTION:**

Bellary is made up of the eight taluks of Adoni, Alur, Bellary, Hadagalli, Harpanahalli, Hospet, Kudligi and Rayadurg and includes within its limits the little Native State of Sandur. Statistical particulars of the population, etc., of these areas will be found in the separate appendix to this volume. The capital of the district is the Cantonment and Municipality of Bellary, and the head-quarters of the various taluks are at the towns and villages from which they are respectively named. Besides these, the only noteworthy towns are Kosgi and Yemmiganuru in Adoni taluk, Siruguppa in Bellary, Kampi in Hospet and Kotturu in Kudligi taluk.



**WELLS:**

There is no district with so few wells as Bellary. In the Cotton-soil taluks, where they would seem to be most wanted, the reasons given for not digging them are that cotton-soil does not take kindly to

#### IRRIGATION SYSTEM OF BELLARY DISTRICT IN 18<sup>TH</sup> CENTURY

---

irrigation; that the sub-soil water lies at a great depth and beneath the stratum of limestone which so often underlies the regard; that when reached it is often too brackish to be of any use; and that in the loose black earth the wells have to be expensively reverted to keep their sides from falling in. But these reasons do not apply to Harpanahalli or Hadagalli and yet the number of wells in these taluks is far fewer than in their neighbor Kudligi, where the conditions are very similar. During the famines of 1891-92 and 1896-973 many wells were dug in the district with money obtained under the Land Improvement Loans Act, but in these two taluks (and Hospet) less was done than elsewhere. There are a few "supplemental wells", mostly in the Rayadurg taluk under the Hagari and its spring channels.

#### TANKS:

Bellary possesses fewer tanks than any district except Coimbatore, there being only some 280 of them in all. Only seven of them have an ayacut of over 500 acres; only two of them, those at Kamalapuram and Kanekallu, are river-fed; and many of them are greatly silted up some of the smaller ones having been entirely put out of action from this cause. Practically all of them were made by native administrations before the district was ceded to the English. The difficulties in the way of constructing others are that(as Munro remarked a hundred years ago) all the best sites have already been seized upon, and that in a country of such light rainfall a large catchment area is necessary to ensure a reliable supply. Statistics show that in the eight years ending with fails 1310 less than half of the existing tanks received an full supply. In the black soil taluks there are the additional difficulties that irrigation is not popular and that the tanks would quickly silt up. The area irrigated by tanks is largest in Kudligi taluk, where the nature of the ground lends itself to the construction of reservoirs.

The only tanks worth separate mention are the four given in the margin. Some account of the first of these and of the damage it sustained in the flood of 1851 is given below in the notice of the village after which it is named. It is the last of a group of seven tanks. The six above it have a catchment area of 81 square miles, and an ayacut of 797 acres. The surplus from these run into the Narihalla which itself has a basin of 336 square miles, and between them they supply the Daroji tank. After discharging from this last the Narihalla runs on to join the Tungabhadra near Ittigi, irrigating as it goes, from seven small anicuts, another 950 acres.

The Dhanayakanakeri tank is also the last of a chain. The tradition regarding its builder is mentioned below. The three tanks above it have a catchment basin of some 30 square miles and irrigate 354 acres. Their surplus and the drainage from an additional 18 square miles feed the Dhanayakanakeri tank and the surplus from this forms Gauripuram Tank which runs into the Tungabhadra near Malapur.

The Daroji tank is also the of a chain. The tradition regarding its builder is mentioned below. Its Catchment area is 58 square miles, and irrigates 1272 acres. The Kanekallu tank has a catchment basin of only 20 square miles with on tank in it, but receives a supply by channel from the Hagari.

#### CHANNELS:

The only spring channels of importance in Bellary are those in Rayadurg taluk which are annually dug from the Hagari. They are 28 in number and the nominal ayacut under them (though it is not all of it always irrigated) is nearly 7000 acres. The channels silt up every year and every year they are cleaned out again by the ryots who benefit by them, the provisions of section 6 of Act I of 1858, under which any one not contributing his share of labour is fined twice its value, being strictly enforced. Bellary taluk also contains some similar channes from the Hagari.

There are no dams across the Hagari or the Chinna Hagari. On the Chikka Hagari there is on near Bachigondanahalli which irrigates about 150 acres in that village and Anandevanahalli.

#### IRRIGATION SYSTEM OF BELLARY DISTRICT IN 18<sup>TH</sup> CENTURY

---

The only anicuts of any importance are those across the Tungabhadra. They are ten in number, as under. The list gives them in their order on the river, beginning with the highest. The waste water of the Raya and Bella canals forms the Kalaghatta channel, four miles long. From the Kampli canal branches the Belagoduhalu channel, 7.5 miles in length, and from the Siruguppa canal the Bogavadi channel, 3.5 miles long.

Besides these ten anicuts, there are three others in ruins at Modalukatti<sup>4</sup> in Hadagalli, Suguru in Bellary and Mantsala in Adoni taluk. All of these anicuts and channels were constructed by the Vijayanagar kings some 300 or 400 years ago, and it has been stated by competent authority<sup>5</sup> that "the positions for the anicuts have been chosen with great judgment and the channels have been formed with consummate skill". Our Engineers have since made many improvements in them, such as supplying them with head sluices, devising means to check their tendency to silt, and so on. The tradition regarding them is that they were all built by an officer (Dhanayak) of king Krishna Devaraya (A.D.1509-1529) called Mudda. This Mudda, says the story, started life as herd-boy to a Brahman astrologer. The Brahman foretold that he would be famous, as one day he found a cobra with outstretched hood watching over him as he slept in the fields.<sup>6</sup> Mudda is said to have first built the big tank of Dhanayaknakeri and then the Tungabhadra channels.

The Vallabhapuram anicut was undoubtedly built in Krishna Deva's time, for an inscription on the bank close by, dated 1521, says so, but nothing is definitely known about the construction of any of the others and the Turuttu anicut seems<sup>7</sup> to have been made by Bukka II, who ruled from 1399 to 1406.

The Vallabhapuram anicut runs straight across the river to an island and is 330 yards long. On the other side of the island, connecting it with the western bank, is another dam, called the Korragal anicut, which belongs to the Nizam. The Vallabhapuram anicut as it now appears is a reconstruction on improved principles of the original dam. Some of the loose stones of the latter used to be washed away in every flood and constant repairs were necessary. In 1847-49, brick in chunam being used for the interior of the work. The remains of the old dam are still to be seen about 50 feet upstream.

The Ramanna anicut runs between the upper end of the Kurudagadda island and the further bank of the river and was designed to drive the stream between the island and the Bellary bank so as to increase the supply at the durudagadda anicut. This is three miles lower down, run from the Bellary bank to the island, and is 250 yards in length. The Raya channel which takes off from it is the most important of the whole series. It led to the Kamalapuram tank. "Great science and ingenuity are displayed in the selection of the line so that the level of this channel should be preserved above that of the bed of the tank, and to effect this the line is carried along the side of a range of low hills at the considerable height above the valley below. The work is in some places excavated in solid rock and in others it is embanked with stone, plastered with chuan and backed with earth."<sup>8</sup>

The Bella anicut, Turuttu anicut, Ramasagaram anicut, Kampli anicut,<sup>9</sup> Siruguppa anicut, Desanuru anicut,<sup>10</sup> Rampuram anicut and a number of small projects for increasing irrigation in the district have been suggested at different times.<sup>11</sup> The Tungabhadra project is a revival of new lines of previous proposals to utilize the water of this river. Largely at the suggestion of Sir Arthur Cotton, the original scheme of the ill-fated Madras Irrigation Company<sup>12</sup> included, when it began work in 1859, two alternative canals from the Tungabhadra to irrigate land in Bellary. They were known respectively as the High Level and the Low Level Lines of the Upper Bellary Project. The High Level Project consisted of a canal from the Vallabhapuram anicut to Bellary which was to irrigate 150,000 acres and also supply the town and cantonment with water. The Low Level project contemplated a canal from Hosurn to near Bellary and thence to the Hagari. The Irrigation Company speedily fell into difficulties and in 1866 was

#### IRRIGATION SYSTEM OF BELLARY DISTRICT IN 18<sup>TH</sup> CENTURY

---

required to agree to complete the Kurnool-Cuddapah canal, which it had already taken up, before dropped. Since they modifications of them have been several times examined<sup>13</sup> and recently the Irrigation Commission recommended that the possibility of irrigation from the Tungabhadra should be reinvestigated. Mr.A.T.Mackenzie was appointed to the duty and has proposed<sup>14</sup> that a masonry dam some 145 feet high and 4000 feet long should be made at Malapuram, about three miles above Hospet where the river cuts through the continuation of the Sandur hills. This would hold back the water for the distance of nearly 40 miles and form a lake with an area of 160 square miles and a capacity of about 180000 million cubic feet of water, or four and a half times that to the Assouan reservoir. From this a canal would be led along the valley up which the road from Kamalapuram to Daroji now passes, through the Daroji hills to the foreshore of the Daroji tank by a tunnel, thence to Bellary, passing above the town, and thereafter across the Hagari, through the watershed between it and the Penner, and down into this latter river. Such a canal would Command a great part of Bellary.

#### Reference:

- 1.The "Ceded districts" are Bellary, Anantapur, Cuddapah and Kurnool. They are so called because (except four taluks of Kurnool) they were ceded to the Company by the Nizan in 1800.
2. "Deccan" or "Dakkhan" represents the vernacular pronunciation of the Sanskrit word Dakshina, meaning "Southern," which was used to designate that portion of the Indian Peninsula which lies south of the Narbada river.
- 3.Department of Land Records and Agriculture, See No.35.
- 4.See Land Record.
- 5.Major Henderson C.B., in Report on Important Public Works for 1852.
- 6.The same story is recounted of many other celebrities.
- 7.Forgotten Empire, P.No.51,301.
- 8.Major Henderson's Report above quoted.
- 9.C.T.M Kottrayya- Irrigation System of Vijayanagara Empire, Hampi University, Hampi.
- 10.Dr.N.Ramakrushnaiah- Historical and Cultural Study of Siruguppa Taluku. 2014.
- 11.Mr.H.E.Clerk's Preliminary Report of the Irrigation Commission, 1902.
- 12.The melancholy history of this venture is given in Vincent's monograph recorded in G.O., No.455, Dated: 10th June 1882.
13. Mr.Clerk's Note in the report above quoted give details.
- 14.See His preliminary report.

# Publish Research Article International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Book Review for publication, you will be pleased to know that our journals are

## Associated and Indexed, India

- \* International Scientific Journal Consortium
- \* OPEN J-GATE

## Associated and Indexed, USA

- EBSCO
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Database
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Golden Research Thoughts  
258/34 Raviwar Peth Solapur-413005, Maharashtra  
Contact-9595359435  
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com  
Website : www.aygrt.isrj.org