



## Development of Irrigation in Hassan District: A Geographical Study

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### Introduction:

Water is the most important for sustained of an agricultural region; Agriculture Development of any region depends mainly upon the availability of water resources for irrigation along with the favorable quality of the land soil resources. Among the inputs essential for agricultural Development, Water is one. Its use is conditioned by several variables. While low rainfall and its variable nature necessitate the development of artificial means of moisture supply, the increasing utilization of fertilizer and to some extent, high Yielding variety of seeds make timely supply of water as a prerequisite. On the other side, availability of water, Socio - economic condition and nature of terrain affect the supply side. This variable causes temporal and spatial variation in the phenomena of irrigation.

**Keywords:** Irrigation, Geographical study, Sources, Catchment area, Longitude.

### Study Area:

Hassan District Situated between 12°33' and 13°33' north latitude and 75°38' and 76°39' east longitudes is in the south western part of Karnataka state. The geographical area of district, according to the Govt. of Karnataka Gazetteer is 6,62,602 ha, and the population of the District according to 2001 census, is 10,51,095. The economy of the district is primarily based on Agriculture which is chief Occupation of the people in the districts. Hassan district, has 8 Taluks namely, Aluru, Arakalgudu, Arasikere, Belur, Chnnarayapatna, Hassan, Holenarasipur and Sakaleshwara.

### Objectives:

- 01) To know to irrigation plays on important role is agricultural production
- 02) To Know how the different of agricultural systems that are functioning within a region.

### METHODOLOGY:

The study is based on primary and secondary data.

The Secondary data will be collected from various books, journals, reports and related literature. The primary data will be collected from using Questionnaires and field observation as well as government agencies.

### SOURCES OF IRRIGATION:

As the district comprises of four broad natural regions, a) Canal Irrigation (River Cauvery, Hemavathy, Yagachi), b) Tank irrigation . c) well irrigation, d) Borewell Irrigation & e) Irrigation by other sources.

During 1990-91, out of total irrigated area 63,273 hecets. 22,173 ha, (35.04%) by canals, 25,505 (40.31%) by tanks, 2,481 (3.92%) by wells, 5,816 (9.19%) by borewells 7,298 hectares (11.53 %) by other sources.

Out of the total 76,579 hectares of irrigated area, 20,052 hecets. (26%) irrigated by canals, 16,898 hecets (22%) by tanks, 32732 hecets. (42%) by Borewells, 5,438 hecets. (7.10%) by other sources during

2004-05

**CONCLUSION:**

Out of Geographical area (1990-31) 6,62,602 Sq Kms. The net sown area 3,71,801 (56.11%) which constituted of total Geographical area. Out of the net sown area under irrigation (1990-91) 63,273 ha, canal irrigation is 22, 173ha (35.04%) 25,505 ha (40.31%) by tanks, 2,481 ha (3.92%) by wells, 5,816 ha (9.19%) by Borewells and 7,229 ha (11.53%) by other sources.

Looking the data of 2004-05 the land under irrigation net sown area is increases to 13,306 ha. in that canal irrigationdecreases to 16,898 ha. Mainly because of development of well irrigation and borewell irrigation. Well irrigation & Borewell irrigation are important source of irrigation in the district. It is increases to 1.91% and 42.74%, irrigation by other sources decreases to 11.53% in the District.

**Reference:**

- 1) **Sen Lalit K. (1975):** "Role of irrigation in Integrated area development planning", paper presented at the seminar on the role of irrigation in agricultural development, institute of social and economic change, Bangalore.
- 2) **Katiyar R. C. & Katiyar S.S.K. (1984):** " Role of irrigation in Agriculture land use in Kannuj pargana, Uttar Pradesh" Transactions, Indian council of Geography, Vol. 15, P.P. 8-10.
- 3) **More K.S. and Mustafa F.R. (1984):** "Irrigation requirement and developments in Maharashtra" Transactions, Indian Geographers, Vol. Vol. 6, No.2, P.P. 73-78.
- 4) **More K. S. and Shinde S.D. (1988):** "Irrigation potentials and Development in Maharashtra", The Indian Geographers, Vol. 63, No.1, P.P. 64-64.
- 5) **Qureshi M. H. & Parimala G. (1981):** "Water use and Agricultural Productivity in Tamilnadu". The Geographers, Vol.No.1, P.P. 23-36.
- 6) **Vidyanathan. A. (1987):** "Irrigation & Agricultural Growth" Indian Journal of Agricultural Economics, Vol.42, No.4, P.P.503-527.