ISSN: 2393-8900 Impact Factor : 1.9152(UIF) Volume - 4 | Issue - 3 | November - 2017

Historicity researcH Journal

# HISTORICAL IMPORTANCE OF IRRIGATIONAL PROJECTS UNDER THE NIZAM PERIOD (1911-1948)

**Dr. Amaragani Hari Shankar**
**Faculty (Part Time), Department Of History, Osmania University, Hyderabad, Telangana.**

## ABSTRACT

Geographically, Telangana or the granite region is a land of rice and tanks. Historically, Telangana region in the Nizam's dominion physically can be located on the extensive plateau bounded by the River Krishna and Tungabhadra Rivers on south and River Godavari in the north roughly with their tributaries the Penganga, Manjira, Sabari, Maneru and the Musi. The weather in Nizam's state was mostly tropical in nature. To moderate the Nizam's administration undertook construction of many world class dams and projects which today became historical monuments. Based on the availability of water resources the then incumbent rulers i.e. the Nizam's of Hyderabad adopted the water efficient methods to increase the agricultural productivity. The present research work strives to present how traditionally and in modern times man made efforts to survive against facing all odds like floods and famines in historically especially in Telangana Region in the period of Mir Osman Ali Khan (1911-1948).

**KEYWORDS :** Geographically , tropical in nature.

## INTRODUCTION

Geographically, Telangana or the granite region is a land of rice and tanks. Historically, Telangana region in the Nizam's dominion physically can be located on the extensive plateau bounded by the River Krishna and Tungabhadra Rivers on south and River Godavari in the north roughly with their tributaries the Penganga, Manjira, Sabari, Maneru and the Musi. The weather in Nizam's state was mostly tropical in nature.To moderate the Nizam's administration undertook construction of many world class dams and projects which today became historical monuments. The 1908 administrative reports of Nizams government state that the large number of tanks and Kuntas (ponds) breached in each subsequent year between 1906 and 1909. In the year 1906 (216 tanks), 1907 (1575 tanks) and 1909 (266 tanks)[1] respectively were found to be breached. For stabilizing the tank water and theirbreaches only in 1905 many projects were undertaken as a part of years principal irrigation works by the state administration. Some of the major and important projects were Nizamsagar, Osmansagar, Dindi, Wyra and Paleru etc.

The importance of irrigation, agriculture and exploitation of forest and mineral resources grew during the reign of VI Nizams, Mir Mahabub Ali Khan and they were realized only to proposer

during the reign of the VII or the last Nizam, Mir Osman Ali Khan (1911-1948).Based on the availability of water resources the then incumbent rulers i.e. the Nizam's of Hyderabad adopted the water efficient methods to increase the agricultural productivity.The present research work strives to present how traditionally and in modern times man made efforts to survive against facing all odds like floods and famines in historically especially in Telangana Region in the period of Mir Osman Ali Khan (1911-1948).

## NIZAMSAGAR PROJECT:

Nizamsagar Project is a reservoir constructed across the Manjira River, a tributary of river Godavari. Early it was known as Manjira reservoir project. The Nizamsagar project which is the largest productive work ever undertaken in the state of Hyderabad by then. Under the guidance of British engineer C. Paul the Nizam's government made extensive survey operations to see feasibility and to makeestimations for construction of reservoir on Manjira River.[2] And for making this study, the government sanctioned an amount of Rs.69, 300 in 1919 (1329 Fasli). The above amount was used not only to conduct survey operations but also to work on tests like sinking of large test or trail pits to ascertain as accurately as possible the nature of the soil on the proposed line of the dam on which it going to be erected, to search sites for erecting storage reservoir across river. At last site at Achampet near Yellareddy was chosen. This dam later came to be known as Nizamsagar project. The engineers considered this site superior because not only was the level of the rock much higher but it was of superior quality and quite suitable for the seating of the dam. The detailed surveys for the construction of the reservoir were completed by the end of 1920 besides the detailed alignment of the irrigation canal for a length of 45 miles on the right bank and preliminary investigation for a further length of 40 miles as far as Jagityala in Karimnagar district. The drainage area at the site of the dam when surveyed was estimated to about 8376 sq. miles. The capacity of proposed reservoir with a dam about 110 feet high and capable of irrigating about3,50,000 acres. The estimates reveal that when tank will be filled then the water sheet will cover an area of 48 sq. miles. It was also estimated that the gross command under the 95 miles length of canal shall be about one million acres and half of this was thought to be brought under irrigation. This construction of a masonry dam was meant for a combined Hyderabadro-Electric Irrigation scheme.

It also afforded protection against scourge of famine, the value of which cannot be estimated in the prevailing aridity of the region.[3]At last it was constructed in between 1923-31 by the then ruler of erstwhile Hyderabad state, Mir Osman Ali Khan. Though it was estimated with the budget of 2.35 crores but completed with cost of Rs.4 Cros and 26 lakhs that began functioning from 1934. This was the biggest irrigation project executed in the state. The reservoir is a masonry dam with 112 feet high thrown across the Manjira. This river drains at this point 8376 sq. miles of area and has an average annual yield of 112,000 million cubic feet. The water spread of the lake covers an area of 56 sq. miles and the quantity of water that will be stored is 29,000 million cubic feet. The flood disposal works are capable of dealing with 525,000 cubic feet of water per second. It is a reservoir constructed between Achampet and Banjapallevillages of Nizamabad district of erstwhile Andhra Pradesh.

## OSMANSAGAR:

It was constructed during the reign of The Last Nizam's of Hyderabad, Mir Osman Ali Khan, hence it acquired name Osmansagar. Popularly known as Gandipet, is an artificial lake located in the vicinity of Hyderabad and was constructed in the early decade of 20th.C. The lake spreads in

around 46 km², and the reservoir is around29 km².Osmansagar was created by damming the Musi River in 1920, in order to provide an additional source of drinking water for Hyderabad and to protect the city from floods after the Great Musi Flood of 1908. A princely guest house called SagarMahal, overlooking the lake and now a heritage building, was built as a summer resort of the last Nizam's. Its location on the banks of the lake offers wonderful views. Tourism Department currently operates a resort in the building. When it was proposed the storage capacity of the reservoir was 4000 to 6000 million cubic feet.[4]If we go into the background, according to the administrative reports of 1909 of H.E.H. the Nizam's of Hyderabad, the floods of 1908 that caused considerable damage to the city. The damage done to property was very great. An area of 1032 acres was devastated on both banks of the Musi, and it will be sometime before the city ceases to show signs of destruction wrought by the flood. To relieve the distressed, a grant of five lakhs of rupees was made from the state funds and subscriptions to the amount of Rs.10,70,740 were received. Food and money were distributed for sometime after the flood, loans on easy terms were granted for the construction of houses. Mokshagundam Vishveswaraiah the then C.I.E. to prevent the recurrence of the flood in Hyderabad city recommended to go for construction of two dams one is Osman sagar and other is, Himayatsagar.[5]

## DINDI PROJECT:

This project came into being due to the plans made as a part of famine relief measures by irrigation branch of Public Works Department in Co-ordination with Revenue Department of Nizam's Government. In 1939 for first time work on Dindi project, Kalwakurthytaluq of Mahbubnagar district began and was carried with sanctioned and estimated budget of Rs. 35.30 lakhs. The project was undertaken with the estimated spent was of Rs. 14,03,617 in 1939 and the amount given in 1940. This project involved in the harnessing of the river Dindi near Gundlapally village in Kalwakurthy where it has a drainage area of 1514 sq. miles. The dam consists of three sections, two earthen embankments on the flanks and a central spillway in the river bed, besides two by washes 1900 feet in length on the right flank. Ogee Dam is another masonry work began in 1940, its foundations were excavated to the full depth. The dam was raised to the height of 20 feet. A canal was taken off from this bund which is to be 18 miles long and irrigates lands mostly in Devarkonda taluq of Mahboobnagar district by then. The total command area under this project was around 45,000 acres approximately.

## WYRA RESERVOIR:

Wyra Reservoir is located next to the town with same name in Khammam district. This Wyra Reservoir was dug in 1929. It costed Rs. 34.83 lakhs in its construction and is a masonry dam with earth baning of 5207 feet long and 88 feet high with flood gates. It provides drinking water to large number of villages and is meant to irrigate hundreds of hectares of land. It is also well known for its good fishing and the green hills around it. Wyra Reservoir is a medium irrigation project that covers 9,308 hectares for irrigation. This man made tank was enlarged to protect the crops in nearby fields from drought like situation. With the masonry works of irrigation and Public Works Department in co-ordination with agriculture, revenue and famine relief departments the water holding capacity was increased.

The idea of constructing a storage reservoir across the Wyra stream, a tributary of Maneru River was mooted in the year 1899 itself. The suggestions were made by British official and engineer by profession De Closets[6]. He proposed the dam on Wyra stream near its junction with

BangadiVagu means of an earthen bank and to excavate channels there from to utilize the water for irrigation. The project was resuscitated in the famine of 1919 because careful investigation proved that the soil of the site proposed was not found quite good for a purely earthen dam and it was considered advisable that the dam should be constructed of masonry backed with available earth. The object of the dam was to supply and to utilize the water means of channels along the two banks for irrigating the large area of lands commanded. The capacity of the dam was then expected was 2646 mcftat full level and was meant to irrigate 16,000 acres. The site selected for the dam is about some hundred feet above the junction of Pandadivagu with the Wyra in the limits of Gundrajmadugu village in Khammam district where it has the advantage of a narrow gorge formed by a gradually rising ridge on the right flank and of a number of hillocks with a saddle beyond at the left flank. Silting formed a legitimate ground of objection in the execution of this project. Fresh irrigation was meant to attract a large population from already crowded neighboring areas. This became a means and way to increase production and revenue of the state under Nizam's Government.

## PALERU RESERVOIR:

The history of this project now in Khammam district erstwhile in Warangal district goes back to 1920 according to administrative reports of irrigation branch of Nizam's state. Occurrence of famines at regular intervals made the then revenue department to put proposal for erection of bunds and anicut across river Paleruthat feed nearby tanks for irrigation through channels and to provide relief to drought ridden labour of this region. The object of the project is to utilize the greater portion of available supply from the catchment area at the site of the proposed dam for the irrigation of lands on both banks of the river by means of two supply channels[7].This reservoir was constructed on the tributary of River Krishna is also in the district of Khammam. It is constructed as an earthen bund with maximum height of 68 feet above the foundation and capable of holding 2,726 million cubic feet at its full capacity. The earthen dam with 8,300 ft in length has a masonry corewall in the river gorge along the axis line of the dam. This reservoir came into use since 1929 and the bund is located in the limits of Naikanguda village ofKhammam district. It is said that there was an old ruined anicut near Zakkaipally across the Paleru River near Kodada town[8].

Under Nizam's of Hyderabad this reservoir was created to cater the irrigation needs of the region. Due to sporadic occurrence of drought like conditions the thengovernment planned to protect the farmers from starvation. Even then owing to failure of monsoon rains in these parts the depth of water in the reservoir suffered for want of inflow that is required for irrigation in its command area. The preliminary investigations for this project were made in 1920 itself. The average annual rainfall of the country in which the reservoir was 28 ½ inches by 1920. These regions peasants were accustomed to wet cultivation and keen on the extension of irrigation to soil being to a great extent loamy. On the whole, crops to an extent saved mostly due to creation of this reservoir in this region. This project was sanctioned with an estimated budget of Rs. 22.25 lacks and expected to yield a return of 8.26% on the capital outlay. The work was commenced in 1922 under the supervision and control of engineer in charge of Wyra project.

By 1927, this tank cum reservoir had storage capacity of 110 mcft that is useful to irrigate large area of land[9]. Total expenditure or cost of reservoir incurred by the time of completion was Rs. 12, 46,457 and the cost of water stored above sill of sluice per mcft by then was Rs. 533/- by then.Though no new works were carried out during 1935 but the annual maintenance grant of Rs. 21,000 was sanctioned in 1939 for its upkeep and canal system under it. Way back by 1936 itself

nearly 14,592 acres of cultivable land was served with field channel. In the year (1935) due to late monsoon there was no increase in the depth of water in the reservoir and the catchment area got intercepted and the progress of irrigation was not satisfactory by then but later periods were promising due to surplus rainfall in the region.

## OTHER PROJECTS

Some other projects were also constructed under nizam period i.ePocharam, Shalligowraram, Dhrmsagar project, HimayatSagar Project, Singahabhupalum, Rayanipalli Mahabubnagar extension Project, Akair Reservoir Project, Pendlipakala Project, lower Thungabhadra project. It is essential that Irrigation projects be planned and managed in the context of overall river basin and regional development plans, including both the upland catchment areas and the catchment areas downstream. The expansion and intensification of agriculture made possible by irrigation has the potential for causing, increased erosion, pollution of surface water and groundwater from agricultural biocides, deterioration of water quality, increased nutrient levels in the irrigation and drainage water resulting in algal blooms, proliferation of aquatic weeds and eutrophication in irrigation canals and downstream waterways. Poor water quality below an irrigation project may render the water unfit for other users, harm aquatic species and, because of high nutrient content, result in aquatic weed growth that obstructs waterways and has health, navigation and ecological consequences. Elimination of dry season die-back and the creation of a more humid micro climate may result in an increase of agricultural pests and plant diseases. Large Irrigation projects which impound or divert river water have the potential to cause major environmental disturbances, resulting from changes in the Hydrology and limnology of river basins. Reducing the river flow changes flood plain land use and ecology and can cause salt water intrusion in the river and into the groundwater of adjacent lands. Diversion of water through irrigation further reducesthe water supply for downstream users, including municipalities, industries and agriculture.

## CONCLUSION

The objective of irrigation projects is to increase agricultural production and consequently to improve the economic and social well-being of the rural population. However, changing land use patterns may have other impacts on social and economic structure of the project area. Small plots, communal land use rights, and conflicting traditional and legal land rights all create difficulties when land is converted to irrigate agriculture. The benefits of a dam project are flood control and the provision of a more reliable and higher quality water supply for irrigation, domestic and industrial use. Intensification of agriculture locally through irrigation can reduce pressure on unclear forest lands, intact wildlife habitat and marginal agricultural land. In addition, dams create reservoir fishery and the possibilities for agricultural production on the reservoir draw down area, which more than compensate for losses in these sectors due to the dam construction. However, large dam projects cause irreversible environmental changes over a wide geographic area and thus have the potential for significant impacts. Criticism of such projects has grown in the last decade. Severe critics claim that because benefits from dams are outweighed by their social, environmental and economic costs, the construction of large dams is unjustifiable. In some cases, environmental and social costs can be avoided or reduced to an acceptable level by carefully assessing potential problems and implementing cost effective corrective measures. Irrigation and its management in

pre and post independent era and in the last about impact of water harvesting on agriculture, agro-based industry and health with socio-economic perception.

## REFERENCES


- Reports on the Administration of Revenue Department, His Highness the Nizam's of Hyderabad, 1893 AD. p.23.
- Administration Report of H.E.H. The Nizam's P.W.D irrigation Branch, for the year 1940, Hyderabad-Deccan, Government Central Press, p.18.
- Administration Report of the H.E.H. the Nizam's Public Works Department for the Quinquennium 1922-27, Hyderabad-Deccan, Government Central Press, 1927, p. 26.
- Reports on the Administration of His Highness the Nizam's of Hyderabad, Central press, Hyderabad Deccan 1910-11 A.D, pp.45-47.
- Reports on the Administration of Revenue Department, His Highness the Nizam's of Hyderabad, 1893 A.D, p.12.
- Administration Report of H.E.H. the Nizam's P.W.D irrigation Branch, for the year 1940, Hyderabad-Deccan, Government Central Press, 1920, p.17.
- Administration Report of the H.E.H. the Nizam's Public Works Department forthe Quinquennium 1922-27, Hyderabad-Deccan, Government Central Press, 1927, p. 22.
- Administration Report of H.E.H. the Nizam's P.W.D Irrigation Branch, for the year 1940, Hyderabad-Deccan, Government Central Press, 1920, p.19.
- Administration Report of the H.E.H. the Nizam's Public Works Department for the Quinquennium 1922-27, Hyderabad-Deccan, Government Central Press, 1927, p. 23.