

**IMPACT OF GLOBALISATION ON WATER MANAGEMENT AND
IRRIGATION-CONCEPT OF JALAYAGNAM IN A.P**



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ABSTRACT

It is essential to have a water management mission that unfurls over vision for the next two decades. India gets approximately 4000 billion cubic meters (bcm) of water every year from all natural resources. Out of this 700bcm are lost in evaporation and another 700 bcm are lost during the flow on ground. Also, the large part of water namely 1500 bcm flows into the sea due to floods and the remaining available water is lonely 1100 bcm. Out of this ground water recharge accounts for 430 bcm per year and the present utilized surface water is 370 bcm. The balance-unutilized water, which can be harnessed, in 300 bcm. They have an innovative water management scheme for irrigation and providing potable water for all the village citizens. Due to shortage of rainfall in the local farmers, were suffering due to scarcity of water not only for agriculture but also for drinking purposes. The National Environment Policy (NEP) 2004 has placed on record the problems of overuse and skewed distribution of river water. It is correctly identified that these problems have been perpetuated due to policy and regulatory regimes, tariff policies for irrigation and domestic use.

Still, there are many challenges, which Indian Agriculture is facing in the era of globalization and water has emerged as the most crucial factor in sustaining the agricultural sector in the coming years. India accounts for 16 percent of the world's human population and nearly 30 per cent of the cattle with only 2.4 per cent of the land area and 4 per cent of water resources. Even if the full irrigation potential is exploited about 50 per cent of the country's cultivated area will remain unirrigated particularly with the current level of

irrigation efficiency. Therefore the present government had started a multi-dimensional approach to channel the excess or surplus water, which flows into the sea, should be diverted towards the areas where drought conditions prevailed under the concept of JALAYAGNAM. Thus, the present study attempts to focus on the better use water management and the participatory role of the government towards the optimal use of water for agriculture, in particular, Andhra Pradesh.

INTRODUCTION

The 1st Green Revolution in India is acclaimed as a fine example of social and technical sustainability of agriculture. The agricultural outputs multiplied with support technologies such as irrigation water, hybrid seeds, and chemical fertilizers for boosting yields. Socially, the phenomenon enhanced the incomes, lifestyle and comforts of the beneficiaries. Resultantly, even politically this form of development came to be accepted as a 'sustainable'. All in all, in the post-independence era, this became the mantra for rural development and development of agriculture throughout the country. The first issue is planned, development, implementation and management of water resources with a view to providing water for drinking, farm irrigation as well as other farm and/or non-farm activities.

For a quarter-century the globalization of the economy and society, characterized by its champions as a "natural" and "inevitable" phenomenon, has been presented as a narrative grounded in four alleged principles. First, the principle of the market, according to which society is but a nexus of transactions between, individuals in evermore globalize markets. Then there is the principle of free enterprise, which holds that the private sector is the most adept at organizing and optimizing these transactions. On World Water day, the United Nations has launched the second International Decade for Action "Water for

Life" (2005-2015). The goal of the first decade (1981-19910 was a assure access to potable water to all inhabitants of the planet by 2000. As we know, this goal was not achieved. This failure was due primarily to the fact that the leaders of the rich and powerful countries did not implement the measures that they themselves considered essential, particularly allocating 0.7 per cent of GDP per year for aid to underdeveloped countries.

In the 1970s, Dr. K.L. Rao, prepared proposals for the National Water Grid. His proposals better known as the Ganga Kaveri Link consisted of 2640 km link from Ganga near Patna to transfer the Ganga waters during high flow to the south. Accordingly, National Water Development Agency was set up in July 1982 by the Government of India. This Agency is charged with the detailed planning of the link proposals and preparing the feasibility reports of the various components. Development Issues have again gained a profound focus both in policy and programmes. So has been the priority on rural drinking water supply, water quality and sanitation. The World Summit on Sustainable Development held in Johannesburg (2002) set a target of having, but the year 2015, the proportion of people without access to safe drinking water and basic sanitation.

Water as commons because it is the ecological basis of al life and because its

sustainability and equitable allocation depend on the cooperation between members of a community. Although water has been managed as a commons throughout human history, across diverse cultures, and although most communities manage water resources as common property or have access to water as a commonly shared public good even today, privatization of water resources is gaining momentum. Under conditions of scarcity, sustainable systems of water management evolved from the ideas of water as commons passed on from generation to generation. Labor in conservation and community building became the primary investment in water resources. As Anupam Mishra of the Gandhi Peace Foundation observes.

Everyone agrees that the world is facing a severe water crisis. Water abundant regions have become water scarce, and water scarce regions face water famines. There are, however, two conflicting paradigms for explaining the water crisis. One is the market paradigm and the other is the ecological paradigm. The market paradigm sees water scarcity as a crisis resulting from absence of water trade. If water could be moved and distributed freely through free markets, it would be transferred to the regions of scarcity and that higher prices would lead to conservation. Water harvesting and water recycling should become mandatory for all the states. To improve water table, we need to build check dams; develop water sheds, desilt ponds and rivers, clear the inlets and outlets

to the ponds and water bodies and recharge the wells. They have also undertaken mini and micro watershed irrigation schemes to improve the ground water level in drought prone areas to preserve the local rain water for irrigation.

SOURCES OF WATER

Due to availability of water, both sources a) Surface flow of water through river b) Ground level water sources various proposals and discussion were made on concept of inter basin transfer of water under the chairmanship of Dr. K.L. Rao, former union ministry of irrigation and power and set up an organization called national water development agency in 1982. In case of Andhra Pradesh the first category of water resources is mainly depends upon two rivers a) Godavari river b) Krishna river. The Belt of Godavari is considered to be one of the important source for irrigation, which support of up to 54 per cent and another river Krishna which contributes 30 per cent both the rivers are supporting the water sources up to 3800 TMC the quota of sharing water with other states 2746 TMC but the state has capacity to use 63 per cent of water source only that total capacity for consumption around 90 per cent from the both sources used for agriculture during the 9th plan the irrigation land capacity has raising upto 1126.6 lakh hectare, 44.4 per cent towards major and medium projects.

CLASSIFICATION OF PROJECTS IN A.P.

As per the Govt. norms the projects were classified as follows on the basis of distribution water for agriculture

Type of Project	Distribution of water for Agriculture (000 hect)
Small Project	Up to 2000
Medium Project	Upto 2000 & 10000 above
Major Project	10000 & above

Source: Ministry of Irrigation, CE of Panchayat raj GOI of A.P.

The geographical area of Andhra Pradesh is to an extent of 274.4 lakh hectares and the cropping area is around 125.2 lakh hectares. The area under irrigation is 49.9 lakh hectares and net area under irrigation is about 35.8 lakh hectares. The difference between three projects at National level has been observed during 1st plan 10 percent, 8th plan 14 percent, and 10th plan 17 per cent respectively. Moreover the difference between major projects would be 7.6 per cent as against 17 per cent. In case of minor irrigation the difference will be 7.6. Percent against 14 per cent at the National level. The current status of irrigation projects during the 10th plan, 14 projects are under construction. The farmers are unable to utilize the source of water due to certain problems related to construction work in progress, its extension of areas, and water management through canals.

Capacity of Ground Water levels-Its expenditure:-The small scale projects are providing irrigation facilities are basically relied upon the availability of ground water i.e., 1074 tm and presently 458 tmc is used for agriculture and nearly 58 per cent of water resource was utilized in drought areas. There were 0.8 million well existed in 1975 as against 2.2 millions in 2001 and the irrigated area in 1975 was about 1 million hectares raised to 2.6. million hectares in 2001. The Rayalaseema region has primarily 70 per cent relied upon the ground water for agriculture. The check dam system was very well in practice towards the supply of water for agriculture. The Coastal belt has 2/3 net ground water per annum, Telengana has possessed 26 per cent and Rayalaseema with 7 per cent on the other hand the gross sources of ground water without check dams were existed in Telengana and consumption of water around 27 per cent,

Coastal Andhra 12.7 per cent and Rayalaseema with 17 percent. 90 per cent of the ground water utilized for agriculture in Rayalaseema was 72 per cent, Andhra 57 per cent.

CONCEPT OF JALAYAGNAM IN A.P.

The Prime objective of the state government attitude on the most convincing attitude has proposed to construct three types of projects to utilize and divert excess wastage water flows from Godavari basin meant for the Drought area during 2004. As a result the massive efforts are to be made for the construction of required projects, check dams among the three categories by investing huge amount for the apt mumble water management which ensure sustainable economic development. So far the Government has undertaken 54 irrigation projects, in which 37 are major, 17 medium projects, estimating an expenditure of 72,540 cores since 10th five year plan, a separate department is set up to supervise the work as known engineering procurement Contraction. The Funds are to be accumulated from the World Bank, Japan Bank for Interesting Cooperation, NABARD and Govt. of India under the scheme of Accelerator Irrigation Benefit Programme (AIBP). In addition to, the A.P. The Water Resource Development Corporation will too, monitoring the project construction work in the state.

The State Government had spent huge amounts and Budget allocation towards irrigation made during 2003-04 of Rs.1528 crores, 2004-05 Rs. 3331 crores, 2005-06 Rs. 6524 crores, 2006-07 Rs. 10,041crores, 2007-08 of Rs. 13 002 crores respectively, and in 2008-09 budget the funds were allocated of Rs. 16500 crores. The concept of Jalayagnam is mainly concentrated to construct dams, projects and check dams on

the two important river Godavari and Krishna towards the supply of water for agriculture, it comprises of selection of sites on so called rivers, the district benefited and the extension of the area under irrigation to be brought in three regions in the state's. The Projects proposed to construct on Godavari river are eleven the districts, mainly benefited Karimnagar, Warangal, Medak, Nalgond, Krishna, Vishakapatnam, Vijayanagarm, West and East Godavari districts Nizambad, Guntur, Srikakulam and Prakasam aimed at to provide water for agriculture and irrigation nearly 47 lakhs areas in addition to 5.6 TMC water supplies to NTPC and the supply of water 128 MW electricity generation in Krishna and West Godavari district through K.L Sagar Projects.

Telugu Ganga Projects is also proposed to supply 5TMC drinking water to Tamil Nadu and 1.43lakhs areas of ayachut was developed and after completion it would supply water facility to upto 5 lakh areas. The Gallor Nagar Sujala Savanti proposed to divert water from Krishna River to backward areas of Rayal shima providing upto 226 lakh areas in the districts of Kadapa, Chittoor and Nellore. Besides Hundryneeva Sujala Savanti is meant for diverting water from Krishna to Rayalaseema specially drought area in Ananthapur District. There are 59 Projects are proposed by the state government to provide irrigation facilities to cover major districts in Telengana, Rayalaseema, and some districts in Coastal Andhra where the water supply is scanty. In addition to the above the water facility is proposed to extend and also for diversification through Nagarjuna Sagar Project from Krishna river will much benefited to Nalgond, Krishna, Prakasm, Khamam apart from the drinking

water supply is aimed at through Chevella project on sub river Godavari known as Pranahitha diverting water of 160 TMC capacity and providing water for 12 lakh acra as well as the supply of water to rural areas and also industrial units lin Hyderabad city. It also benefited to the Adilibad, Karimnagar, Nizambad, Nalgond, Medak and Rangareddy. In Telegana area both major and medium scale irrigation projects are in progress along with Rayalaseema and Coastal areas.

ADVANTAGES OF JALAYAGNAM

The concept of Jalayagnam will successfully creates more advantages to the state economy if it is completed within the time.

- ❖ It provides irrigation facilities to 70 lakh hectares in the state.
- ❖ It consolidates an optimum water management facilitates to 22 lakh he cares
- ❖ 1.2 crore people will be benefited by getting drinking water facility.
- ❖ It generates 2115 MW electricity in the state.
- ❖ The proper system which provides irrigation facilities certainly to increase the agricultural productivity.

SUGGESTION

- * The Present study suggests the government to complete the so called projects without much delay and the additional financial burden.
- * The accomplishment of providing irrigation facilities

certainly reduced the regional imbalances.

- * A comprehensive water policy reform and demand management are on the top priority.
- * There is an urgent need for propagating water harvesting and transforming it into a mass movement.
- * The Government should identify the optimal ways of meeting the minimum needs of water for the entire population.
- * The policy makers would review the expensive new water sources which need huge amounts.
- * To enhance availability of ground water and to lessen over exploitation of ground water resources.
- * To improve the ground water quality aquifers and to raise the water in wells, bore wells the of draying up.
- * To improve soil moisture, which saves the water due to rainwater harvesting, which increases the ground water level not only improve the quality of water but also allows drought proofing.

CONCLUSION

The Present water crisis is the result of the narrow policies followed by the government and bureaucrats. No doubt water is going to be a precious commodity which provides sustainable agriculture growth, drinking water and sanitation clear

and enforceable water user rights along with the decentralized delivery rationalization and targeting of water subsidies constitute the most efficient and sustainable solution helps the government to shift from a service provider to that of a facilitator for fulfilling the desire level of services on a sustainable and equitable basis. Thus, the International Decade for action " Water for Life as adopted as its objective the reduction by half of the people without access portable water. Developing countries should introduce the private capital to assume better management of water distribution.

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