

## Water Crisis in The Country Bringing Tsunami to Indian Economy



### Economics

**KEYWORDS :** Agrarian, Economy, cultivation, scarce, adequate, hindering

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### ABSTRACT

*India has been an agrarian economy which depends extensively on adequate water supply for its cultivation. But today this essential requirement of water supply is getting scarce and country is still dependent on monsoons which are both irregular and inadequate. Due to this scarcity our economy is getting trapped in the vicious circle of economic problems and thus hindering the economic growth and development of the country.*

### Introduction

Food, shelter and clothing are the three basic necessities of life. But one more very essential requirement for the sustainance of every human life is water. Dehydration i.e. lack of water can kill a person faster than starvation i.e. lack of food. Our earth is unique among various other known celestial bodies as it has water which covers nearly three-fourth of its surface and constitutes 60-70% of the living world. Water regenerates and is redistributed through evaporation, making it seem endlessly renewable. But in reality, only 1% of the world's water is useful for human beings, as about 97% constitutes sea water and 2% is frozen in glaciers and polar ice-caps. Thus, that 1% of the world's water supply is precious which is extremely essential for our survival. 50 years ago, the common perception was that water was an infinite resource. At that time, there was fewer than half the current number of people on the planet. People were not as wealthy as today, consumed few calories and therefore, less water was needed to produce their food. But, today the competition for water resources is much more intense. This is because now the population is increasing at a high speed and so is their consumption of food and water. Water resources are sources of water that are useful or potentially useful. Water is useful for various purposes including agriculture, industry, household and different environmental activities. Among all these purposes, water is used in abundance by the farmers of our country for cultivating crops and feeding evergrowing population of our country. It is estimated that 70% of worldwide water is used for irrigation. It takes around 2000-3000 litres of water to produce enough food to satisfy one person's daily dietary need. Therefore, water is considered not only the lifeline of every human being but has become the lifeline of our Indian economy as well.

At the time of independence, India was an agrarian economy as nearly one-fourth of the national income used to come from agriculture sector and more than 50% or half of the working population was engaged in agriculture or were dependent on it for livelihood. Agriculture sector was playing a significant role in accelerating the rate of economic development. But our Indian agriculture was considered to be backward when compared with any other developed nations of the world due to several reasons which are as follows:

- Over crowding in agriculture
- Illiteracy and orthodox nature of farmers
- Lack of irrigation facilities
- Small size of holdings
- Defective land tenure system
- Defects in agricultural marketing
- Lack of high yielding variety of seeds(HYVS)
- Lack of credit facilities
- Lack of scientific agricultural practices
- Backward and outdated technology

Over the years, the position of agriculture has improved a little with the adoption of New Agricultural Strategy and introduction of Green Revolution which brought in multiple cropping, use of

fertilizers and HYVS, mechanization and irrigation facilities. The economic contribution of agriculture to India's GDP is steadily declining with the country's broad-based economic growth. Still agriculture is demographically the broadest economic sector and plays a significant role in the overall socio-economic fabric of India in the following manner:

- Contribution to National Income
- Contribution to employment
- Supply of food
- Development of industries
- Increase in domestic trade
- Increase in foreign trade
- Capital formation
- International cooperation
- Economic growth and development

The condition of agricultural sector has though improved over the years, but still the condition is far from satisfactory and one of the main reasons is the lack of proper water supply to the fields or proper irrigation facilities.

Water in the agricultural fields is the same as the blood flowing in the human body. No crop can be produced without the adequate supply of water. But today, even after 66 years of independence our country is still struggling hard with the problem of water scarcity and thus ultimately affecting our economy adversely. For the bulk of agriculture we are still dependent on monsoons which are irregular, uncertain with regards to time and amount and in some areas it is also unevenly distributed. Indian agriculture is still considered to be gamble in monsoons. In India, nearly 64% of cultivated land is dependent on monsoons. Certain states or areas are flooded with water while others may even face the situation of severe drought. The main problem today is the lack of irrigation facilities in India. Irrigation in India refers to the supply of water from Indian rivers, tanks, wells, canals and various other artificial projects for the purpose of cultivation and agricultural practices. This problem in the field of agriculture is becoming a source of various other problems in our economy.

### Scarcity leading to atocity

Recently, we all must have seen the newspapers with the headlines of "Delayed monsoons"; "Many states of the country are on the verge of facing droughts"; "Prices of tomatoes touching sky"; "Onions getting vanished from the food items" and many more such news items. This is not the case of this particular year, almost every year the situation by and large remains the same. Our country is facing severe water scarcity as there is lack of proper irrigation facilities and at the same time the monsoons in our country are not at all dependable. Despite the huge investments and subsidies, irrigation performance indicators are falling short of expectations. Around 60% of the water diverted or pumped for irrigation is wasted and many a times the excess water seeps back into the ground causing waterlogging and salinity. Moreover, stagnant water and poor irrigation drainage

escalate the incidence of water related diseases, resulting in human suffering and increased health costs. This scarcity of water has led to a chain or series of problems in our economy which are as follows:

### 1. Backwardness of agriculture-

Due to shortage of water resources or lack of irrigation facilities and excessive dependence on monsoons which are mostly irregular and inadequate has deteriorated the condition of our Indian agriculture. Even after 66 years of Independence are eyes still gaze towards the sky during the monsoons expecting the rain to quench the thirst of our agricultural fields. This makes our agriculture backward when compared with other nations of the world.

### 2. Low agricultural production and productivity-

Once the agriculture is termed backward, it starts showing its adverse effects on the level of production as well as productivity. When there's not sufficient water resources for the cultivation of crops, then even the most advanced technologies of the world cannot do anything in increasing the level of production. Water is the pre-requisite for harvesting the crops and absence or lack of it leads to low agricultural production as well as productivity.

### 3. Reduced supply of goods-

This is a vicious circle in which once the economy enters, it keeps on gaining momentum. Low agricultural production means reduction in the level of agricultural output and this decline affects the economy as the supply of goods in relation to its demand by the people in the economy gets reduced. Decrease in the level of production affects the economy in two ways:

- a) Shortage of food grains: The direct impact of the low production due to lack of adequate water resources is the shortage of food grains in the economy. Our country has faced the situation of severe droughts many times and thus faces the food crisis situation in the country and therefore has to import food grains from other countries and reducing our foreign exchange reserves.
- b) Shortage of raw materials: Agriculture provides various products as raw materials to different industries or in other words, certain industries are dependent on the agricultural sector for their raw materials. Low production in agriculture thus affects the industrial sector indirectly and even they have to face the shortage of raw materials.

### 4. Inflation-

Due to the shortage of agricultural products in the market and the continuous increase in the demand because of evergrowing population, the supply lags behind the demand. As per the law of demand, when the demand is greater than supply, the price tends to rise and such continuous rise of prices over the period of time gives rise to inflation in the economy. This has become the major concern of our Indian economy as prices of various necessity goods are rising every day and creating a problem for the economy.

### 5. Economic crisis-

Once the inflation sets in the economy, the country faces several other economic problems and very soon the economy gets trapped in the situation of economic crisis. Different problems faced by the economy are as follows:

- a) Fall in the level of National income
- b) Unemployment
- c) Reduced foreign trade
- d) Adverse effect on balance of payment

### 6. Low level of Economic growth-

Various economic problems mentioned above acts as a hindrance for economic growth and thus lead to low level of economic growth and development in the economy.

### Suggestions

To save the country from this water scarcity leading to economic atrocity, certain measures have to be adopted by the government as well as by the citizens of our country who in the real sense faces the economic repercussions of this problem. Following measures are suggested:

- Government will have to look into the matter very carefully and formulate different policies. The responsibility does not end with the formulation of policies but continues till its effective implementation.
- Government should initiate different irrigational projects in various parts of the country on a large scale.
- Also, a provision should be made so that water from the areas which are overflooded with water can be moved to the areas facing shortage of it.
- To avoid a global water crisis, farmers will have to strive hard to increase productivity to meet growing demands for food, while industries and people in cities find ways to use water more efficiently.

### Conclusion

Thus water which is the lifeline of our Indian agriculture should be consumed in such a manner that it is made available to every farmer of our country in adequate quantity and in regular intervals so that our agriculture prospers and our economy which is both directly and indirectly dependent on it does not get trapped in this vicious circle of economic problems.

## REFERENCE

- Amarasinghe, U. A., Shah, T., Turrall, H. and Anand, B.K. 2007. India's water future to 2025-2050: Business as usual scenario and deviations. Research Report 123, IWMI. 52pp. | • Govt. of India. 2009. Background note for consultation meeting with Policy makers on review of National Water Policy. Ministry of Water Resources. 50 pp. | • IDSA. 2010. Water Security for India: External dynamics, IDSA Task Force Report. | • "No global water crisis- but may developing countries will face water scarcity" FAO. Org. 12 march, 2003. | • "Water is life- Groundwater drawdown", Academic.evergreen.edu |