

Supply Water for Milk Supply

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On March 22, 2005 world celebrated “World Water Day”. It reminds us to think and act on our issues related to water crisis. The major source of water is through rainfall, which largely depends on condition of environment, preservation of forest and air pollution control. Remember the theory of great scientist Albert Einstein that energy (E) always remains constant. However, it gets converted into other shapes. Accordingly, volume of water on earth is also remain constant and changes its shapes and places.

Milk and vegetables along with food grain are essential commodities for mankind. It is very difficult to think of life without it. Many times we come across situation like strike by transporters who generally move these items from one place to another. This will result in crisis and affects the economy very badly.

INTRODUCTION:

In modern world if you ask anybody a simple question then possibly you may get varieties of answers. The simple question is how much water do you drink per day? People either do not know or never accounted for it; just because it is available free. It is also observed that more than the use of water for its purpose, there is great amount of misuse of it perhaps wastage. However, statistics indicates that a common person on an average drink about 1 to 1.5 liter of water per day.

Instead of water if a person consume equal amount of milk, the requirement of water would be many (thousands) times. It is surprising figure but it is fact. One cow and buffalo use 2060 and 3260 liters water respectively to produce one-liter milk.

There was a conference on water problems of Gujarat held in auditorium of Dudhsagar Dairy – Mehsana in June 2004. Shri Avinash Kishore well known expert from International Water Management Institute made the above statement.

Today Banas Dairy of Palanpur, Dudhsagar Dairy of Mehsana and Sabar Dairy of Himatnagar are major contributors of dairy industry in North Gujarat area.

Water Requirements for Dairies:

There are 3 co-operative dairies in North Gujarat producing on an average 27,50,000 (Twenty Seven lac fifty thousand) liter milk per day and process it. Now one-liter milk may require approximately 2500 to 3000 liter water. Thus to produce the same quantity of milk, it would require 825,00,00,000 (Eight hundred twenty five core) liter water per day.

This directly indicates that to produce the milk and its supply by these 3 dairies itself would need 300 Arab cube meter water per year. In addition there are many other small and medium size dairies in North Gujarat areas. Thus total requirement of water could be about 500 Arab cube meter water per year. But the fact is water level going further down and down in this area making it difficult to acquire water at reasonable rate.

There is direct effect of shortage of water seen by farmers for agricultural purpose and trend is moving towards milk production. The income from agricultural products is totally dependent on rainfall and supply of electricity in rural areas. Whereas source of income from milk production seems to be constant and consistence. It is due to possibility of various alternatives for cattle foods. In the absence of green grass and other eatables, there is a possibility to supply solid alternate cattle food. Farmers may decide to grow these foods locally and change their grain production plan as per the need.

Probable Alternatives:

The rise and fall in prices of cash crop yield high risk to farmers compare to prices of milk and its products. Even from the economics point of view, milk production is better option having low or no risk business proposition.

There are many more reasons for milk production, some of them are stated below:

1. It provides constant source of income against any agricultural production.
2. It generates self-employment opportunity for those educated youth who do not have land for farming.
3. Dairy industries do business of milk and milk products but finally the basic need for milk production is still water supply.
4. We send milk up to Delhi and Kolkata. In fact by way of milk supply we are exporting water to these cities. The availability of water and its supply in Eastern India is huge. Many times there are flood situations and heavy rainfall but plan to preservation of water is missing.
5. In South Gujarat and Middle Gujarat the rainfall is adequate. Hence, farmers of these belts to be encouraged producing more grass by issuing advance contracts for purchase of grass. It is a good method to bring water to North Gujarat area. The same idea can be extended to Saurashtra area for their milk production.

Water requirement for world:

As per United Nations and World Bank survey, the requirement for drinking water will be 56% more by year 2025. In next 25 years nearly 50 countries will find crisis of water and about 35% of world population will get affected.

Only 0.5% of total water stock is a pure water to drink. Rest of the water is in sea (salty) or cold areas (ice) or under ground. The main source to obtain pure drinking water is through rainfall. The world is getting 40 thousand to 45 thousand cubic kilo meter water by rainfall. However, today more than billion people finding difficult to get drinking water.

There are about 5 million people who are getting diseases due to below quality of drinking water and thereby losing their lives. The situation of water supply is different for various countries. But even in the country it is different from state to state.

In India also the situation is not encouraging. Every year there is an increase of approximately 850 lakh population in the world. Hence, gap between demand and supply of water is increasing rapidly. If water pouch is not available for some period or when you need it, the people find panic situation. The situation in villages is still worst.

We may find a world war for getting water and necessary measures are not taken then we shall be facing serious problems for our survival. Water requirement is to be treated as basic necessity for human and other living animals.

RECOMMENDATIONS:

As stated above milk supply to Delhi and Kolkata results in indirect export of water from North Gujarat. Using the same theory and practices, green grass and other cattle food may be imported from Middle Gujarat and South Gujarat. If monitoring of SCM process for these export / import items is done carefully then only it balances the situation. However, the problems of SCM processes still exist.

I suggest following actions to improve upon milk production SCM on an immediate basis.

- Plan to grow green grass in North Gujarat region itself by obtaining constant supply of water from integrated rivers project.
- Dairy industry people can take lead, initiate and become catalyst to the project.
- To spread the message to mass people in rural areas, the dairy organizations can contribute at greater extent. The Knowledge about animal husbandry and methods of using alternate food etc. may be vastly conveyed to village women. The live demonstration and use of local media helps in this process.
- The state level agricultural ministry and its department shall work in popularizing the concept with the help of FOUR giant fertilizer production units of Gujarat by organizing awareness programs for farmers. It is also good marketing strategy for them in selling their fertilizer and other products. Thus improving even SCM of these products and estimation of demand.

After the freedom of INDIA, there were number of projects initiated to control birth rate. However, only educated, intelligent and middle class families are making use of birth control methods. It is desirable to utilize our manpower to develop our country faster by initiating water supply projects. Natural resources in India are unlimited and there is no shortfall of workers.

Today children below 3 years are crying for milk, milk and milk as mothers rarely wish to feed milk to their newly born babies. If the actions are not initiated to increase cow or buffalo milk, tomorrow our children will cry for even water, water and water.

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