Explotion of Resources Management in Iran

Marzieh Samimi¹ and Amir Samimi²

¹Department of Agriculture Engineering, Arsenjan Branch, Islamic Azad University, Arsenjan, Iran

²Department of Chemical Engineering, Mahshahr Branch, Islamic Azad University, Mahshahr, Iran

Copyright © 2012 ISSR Journals. This is an open access article distributed under the *Creative Commons Attribution License*, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT: The management of the car the water exposes to some serious crisis and problems such as inadequacy of water, The lack of access to the clean and health water, The quality of controlling the water sources, The disruption in the management of water sources, decreasing the financial source, The lack of Knowledge in the decision makers, and The security of the society being exposes to the danger considering the happened problems and crisis, different methods of managing the water sources such as The management based on the supply of water, the integral management of water sources and effective ways has grown up by passing of time. For the present time, safe guarding the water sources is one of the aims of the regimes of water sources management in agriculture, as one of the biggest consumers of water sources, The management of water sources is performed in two parts of supply and demand and according to the available limitations, special attention is paid to the of consumer's request.

KEYWORDS: Water, Sources, Management, Agriculture.

1 INTRODUCTION

At present time, water is a scare element. The any metric distribution of precipitation in different areas leads to dry and semidry areas in different areas although. These areas enjoy from potential abilities but they face many limiter factors. We should consider the way closed if we want to become succeed, we should have an exact program and these areas can testify the cultural, social and economic dehiscence by a prefect management. Today water isn't considered as an abundant affluence. But the governments and the scientists have found that the water sources should be exploited at the most with the least wasting and losses. The management of water sources is a part of program for improving the countries and each country according to the available sources of water perform a special strategy and program to have an optimize exploitation from the water sources. Since farming has a direct relation with water and environment, it is affected intensively by the water stresses. Generally the dry areas that suffer from the drought in comparison with the rainy areas have different agricultural condition.

The Condition of Water Sources in the Earth: The salt water of oceans comprises 97% percent of the water in the earth, and the remained water which is about % 30 percent. 2/3 of it has been accumulated in the poplars and in mountainous regions. So, The sweet running water comprises one percent of earth and the underground water comprises 98 percent of it in western and industrial countries, every person needs to at least 2000 square meter to enjoy from a desired standard. If every body's per capita is between 1000 to 2000 meter square that country is under the stress of water. But if the per capita is less than 500 meter annually, so the mentioned country will be face with the droughty. At present time. The available sources of water can annually provide 700 meter square of water for everybody. Although there is enough water for 3 times of earth population but inequality between population distribution and precipitation has caused the shortage of water in

some regions. Today, about 26 countries in the world are considered the droughty countries and as a result of them. The rate of population growth is high. 9 out of 26 countries are in Middle East. Africa includes the most number of dry countries. The dry districts include about 1/3 of earth surface and 15 percent of population. 3/4 of day regions are located in Asia, Africa and Australia.

2 THE SITUATION OF WATER SOURCES IN IRAN

At present time, 88.5 billiard meter square of whole revived water sources is used in agriculture, industry and drinking and about 83 billiard meter square is used in agriculture, 4.5 billiard sq is used for health and drinking and the rest of it is used in other parts. Iran by average 252 mile meter precipitation per year is considered as one of the dry regions in the world. The available crisis and problems about water sources: Today, the world for providing the required water has many problems the environment and the ecosystems which are based on the sweet water sources have faced with crisis and problem which are due to numerous droughts and irregular uses from the water sources. The problems in water systems

- 1) Unequal distribution of water sources
- 2) Population growth
- 3) Water stresses
- 4) The wide rareness in water sources
- 5) Controlling the water quality
- 6) Flood and drought

3 THE MANAGEMENT OF WATER SOURCE

According to the above mentioned problems. The optimum use from the water source is one of the main programs of countries. Programming for the optimum use from the water sources needs to its special principles:

*solutions and the procedures of water sources management

Management Based on Water Supply: The governments considering population growth from 2-3 billiards during 1900 to 1960 years and the abundant of water sources emphasized on using from water sources for meeting the water needs. In fact, this approach emphasizes on water supply in a reaction to the demands.

Integrated Management of Water Sources: In this method, the economic, social and environmental dimensions should be considered. The purpose of this method is the maintenance of source stability and ecosystems through an integrated management.

Efficient Solutions: In this method, there are 3 aims.

- 1. The main tenancy of efficiency of ecosystems of sweet water sources
- 2. The management based on ecosystem
- 3. Considering the methods of allocating water in future

One important subject in managing the water sources is using the methods of integral management of water sources. The integral management of water sources includes the following cases:

- 1. Water quality
- 2. Water quantity
- 3. Underground water
- 4. Super facial water

The politics in this method is based on 3 principles:

1. Water 2. Programming 3. Environment

Today an important subject in water management is maintaining the stability of these sources. The stable water sources systems are managed for archiving to perfect aims of society in future and present time. These systems are designed in a manner that can react against different changes.

4 THE MANAGEMENT OF WATER SOURCES IN AGRICULTURE

Since agriculture has a biological nature and is very dependent on the environment. So, it is one of the biggest consumers of water in most of the countries, in Iran 93.5 of water sources id used in agriculture. Today, the management of water sources in agriculture is done in two parts. The first part includes the management of water supply and the second part includes the management of water demand. The restriction of water sources has caused that move attention be padded to water sources management. The supply management includes some operations such as transferring water through the channels, the use of underground water in irrigation, the international use of underground of channel water. We can increase the water efficacy as the following four methods:

- 1. Decreasing some part of water sources which have been evaporated and the use of saved water in other parts.
- 2. We can produce the most products by performing the better methods of irrigation and performing the correct operation of farming by the same amount of water which is used in farming.
- 3. We should use from the unused water which is pouring into sea.
- 4. We should use from water in places with high efficacy

5 THE METHODS OF OPTIMUM FROM FARMING WATER

- 1. The admission and performing the integrated programming water sources and ground.
- 2. The important of providing water and providing water and irrigation system for efficient use from the available water.
- 3. The admission of leaving water policy which causes the optimum use meant from this source.
- 4. Valuing water as economic social and environmental goods.
- 5. Some actions for increasing the available water sources such as the reuse of waste water and drainers. The following methods are for increasing the water efficacy
- 1. The technical solution it includes land leaving, making use of rainy irrigation methods in irrigation in a manner that it prevents from wasting the running water.
- 2. The managerial solution: It includes the correct programming for irrigation, and irrigation when the plant from the view point of production needs to water. Perform agriculture operation for saving water in soil, better protection from the channels and irrigation equipments.
- Organizational solution such as nongovernmental organizations for popular participation decreasing the water subsidy and pricing, providing suitable and efficient market of water with in the frame work of law.

6 CONCLUSION

As the statistics and figures show our country is a dry country. The optimum management and the correct management of water in our country, we need to a great revolution if the current situation continues, we will lose against some events like the recent year's drought. Today, in water sources management especially in agriculture, the environmental, economic and social dimension, are considered. The integral management and systematic management have obtained a high place in programming the leader of countries for providing the stability. The world tries to have an optimum use from water sources. Increasing the level of knowledge and the active participation of users in water policy making using from new technologies and applying the methods for decreasing. The dryness is the foundations of managing the demand section in agriculture, the views and the thoughts should be released from the traditional attitude toward water sources. We shouldn't consider it as abundant sources we need to methods which need to the least amount of water.

REFERENCES

- [1] K., Heydari, N., and S. Ashrafi "Management of agricultural water consumption, drought, and supply of water for future demand in Iran," *Proceedings of 7th International Conference on Sustainable Development and Management of Drylands in 21 century*, 2003.
- [2] United Nations, "The Demand for water: Procedures and methodologies for projecting water demands in the context of regional national planning," *Nat. Resource, Water Ser. 3, United Nations Publications*, New York.
- [3] World Energy Council (WEC), "Energy Efficiency Policies around the World: Review and Evaluation Executive Summary," a Report by the Word Energy Council, London, United Kingdom, 2008.
- [4] Interlined M.A., et al., "Integrated Evaluation of Energy Conservation," *National Report for the Netherlands, Energy Research Center of the Netherlands*, 1999.
- [5] Anderson J., "The environmental benefits of water recycling and reuse," Water Science and Technology, 2006.
- [6] Metcalf & Eddy, "Water Reuse, Issues, Technology and Application," McGraw-Hill, 2007.
- [7] United Nations, "The Demand for water: Procedures and methodologies for projecting water demands in the context of regional national planning," *Nat. Resources, Water Ser. 3, United Nations Publications*, New York, 2007.
- [8] Herbert son, P.W. and E.L. Tate, "Tools for water use and demand management in South Africa," World Meteorological Organization, Technical Reports in Hydrology and Water Resources, 2007.
- [9] Samimi, Marzieh, "The best exploitation from water Sources with a tension to fifth development program," *Iranian Congress*, 2011.
- [10] Samimi, Amir, Zarinabadi, Soroush, and Samimi, Marzieh, "Detrimental Effects of Pollutions on Living Environment," Australian Journal of Basic and Applied Sciences, 2011.

Marzieh Samimi

(03/05/1989, Abadeh City, Fars Province, Iran)

Studied M.SC Agricultural Engineering, the Member of IAENG, Member of Young Research, and Have 2 Articles in the International Journal in France and More than 12 Articles in the National Journal, Conference in Iran.

Email: marziehsamimi68@gmail.com



Amir Samimi

(16/05/1983, Isfahan City, Isfahan Province, Iran)

Studied M.SC Chemical Engineering, Master at Islamic Azad University, The Member of IAENG, Have 2 Years Experience in Oil Refinery Company, Member of Young Research, and Have 17 Articles in the International Journal, Conference (U.S.A, France, Italy, Indonesia, India, Australia, Europe Chemical Engineering Conference) and More than 45 Articles in the National Journal, Conference in Iran.