

The Role of Cooperatives in Agricultural and Environmental Sciences

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Abstract

Importance of cooperative is because the cooperatives are organizations and public institutions that having the same properties and characteristics of single economic and trade, social and ideological values and can also be collective efforts and expression group members forming cooperatives to achieve common goals and development. In Iran, there are special circumstances and problems currently that are required for collaboration and participation of all people and individuals in matters that are related to their own, this can be remedial solutions for many problems and obstacles. Spirit of cooperation can be tough against people on the scene and will keep them in matters related to give their objectivity. Mutual cooperation and collaboration can be as much unity fields provide the people why has been the country's constitution alongside the cooperative sector in both public and private sector attention. Because of development of cooperation causes expand the country's growth and economic, social and culture development. Considering the importance of cooperation and the formation of cooperatives in the fields of scientific, in this paper has been reviewed on basic concepts that related to cooperation and cooperatives companies then, specifically has been discussed on cooperation in the field of agriculture and environmental sciences.

Key words: Cooperatives, Cooperatives companies, Agriculture, Environment.

Introduction

Historians believe that formation of the first cooperative societies were in thousands years before Christ. The first cooperative societies were among the farmers and fishermen and there were also communities of people living necessities jointly produced and were available to those people, but in any case the cooperative societies have been organized and machinery alone different categories of people, whether in cities or villages have been working together mutually. Cooperatives traditionally includes the set of collaboration and assistance of a group of people or a community to have easy and therefore problems are common and current draw without adherence to the law and regulations and the regulation of the oldest written days to present, especially in rural and urban communities has been ongoing in all aspects of human societies. Traditional cooperatives don't special form, don't belong to any one, know no boundaries and a creature of society and its community's tool. In old Iran, a number of propertied people, and benevolent for public welfare have attempted to create a series of constructive measures such as building roads, build bridges, caravan homes, mosques, water and places such as warehouses and buildings. In such cases the ordinary people have been working together and if you have no capital, were thrown works his arms. Iran began formal cooperation was on 1924. But in terms of form and register formal cooperative activities can be initiated in 1314 in cooperative activities. Because this year by the government's first attempt was formed cooperatives and the first cooperative company was in the rural area Garmsar Davarabad. Formed the basis of the above companies was in business law in 1932 that some discussion of the matter was brought to cooperatives. According to Article 2, the act defines cooperatives are: Cooperative is a company of natural and legal persons to eliminate the common needs and improving economic and social members through self-help and mutual aid.

Cooperatives are divided in terms of duties to two groups: service and manufacturing. Service cooperatives often are companies that provide services in various areas of pay and cooperatives are manufacturing companies that supplied produce are working. Central core manufacturing companies are workers and industrialists. Service companies are provided different services in areas such as agriculture, environmental and.... So, because of importance of topic, in this paper have been reviewed cooperatives environmental and agricultural cooperatives companies in terms of formation, development and necessary of development in the future.

Content fact that the Iranian society today, the government can't alone solve the environmental and agriculture problems. So, the government requires a certain institutional framework and cooperative company educational person are the main factor of this framework.

Necessary environmental cooperatives formed in Iran

Human in the contemporary world has experienced the sensitive moments. Nowadays, development social, economic, industrial, agriculture has been caused destroy of environment.

However to avoid the absolute destruction of the environment, decision makers and thinkers in all aspects of national and global or local level must be particularly important fact. Development process must be sustainable. But since the heavy task of environmental protection is a comprehensive full responsibility for its protection sometimes is out of state partnerships require groups of people. Cooperatives are one of the obvious and popular choices of contributions and activities. The cooperative environmental company can be help for protection the environment and human environment.

These cooperatives can be activated in teaching, consulting, research, waste recycling and waste organizing, monitoring standards, environmental services, ecotourism and nature, production and reproduction of wildlife, environmental improvement and environmental engineering. In addition to the formation of environmental cooperatives create graduates employment will be play an important role in the development and improvement of natural areas and public participation increased their knowledge about environmental issues. Environmental cooperatives companies can be established in the form of the following companies.

- 1- Cooperative education and Illumination Company of public opinion.
- 2- Cooperative company of consultation.
- 3- Cooperative company of research.
- 4- Cooperatives company waste and recycling waste.
- 5- Cooperative company of monitoring environmental standards.
- 6- Cooperative company of nature and ecotourism services.
- 7- Cooperative company of production and proliferation of dedicated wildlife and grazed.
- 8- Cooperative company of creation green space and environmental improvement.

Proposals aimed at expanding cooperative sector in environmental activities

Cooperatives are active as autonomous popular organizations in different sectors of production and distribution, agriculture and industry, preparing materials and resources, food and etc in the country and fully sensible of these activities relate to environmental factors. According to the mission of the Ministry of Cooperatives and popular participation of the institution and according to available statistics on cooperatives and unions covered by this movement is progressive and effective. So, below suggestion for development of environment cooperative companies are represented.

- 1- Develop cooperative gardening, tree planting; pasture significant, forestry, watershed management and breeding plants and agriculture (in the form of production cooperatives) in cooperation with the Ministry of Agricultural Jihad Ministry.
- 2- Create service cooperatives to improve cooperation with the environmental employment and the retirement organizations can use their expertise to create green space and environmental projects of national coordination with municipalities and other environment-related projects.
- 3- Tribal cooperatives cooperation for environmental cleanup and training on how to help tribes protect the environment and the tribes.
- 4- Prevent the establishment of industries and workshops, and insufficient focus in cities are causing environmental pollution and prevent environmental pollution caused by activities for cooperatives.
- 5- Cooperation of school and student cooperatives in the formation of cooperatives and multi-purpose services and collecting waste paper for recycling old books in their publications in coordination with the Ministry of Education, Ministry of Culture and Higher Education, Ministry of Health and Medical Education, Islamic Azad University and other higher education institutions.
- 6- Create cooperatives in order to prevent the planting of plants resistant to the development of desert regions in some province of Iran such as; Yazd, Semnan, Kerman, Khorasan, and Isfahan.
- 7- Formation of waste collection and recycling Cooperatives Company.
- 8- Promote the culture of environmental protection in all cooperatives.
- 9- Development landscape services, soil and water services cooperatives companies.
- 10- Planning for further utilization of the fleet of transport cooperatives within urban and urban.
- 11- Finally, standardization of products and production of cooperatives companies of environmental.

The role and necessity of forming agricultural cooperatives sector with emphasis on utilization of irrigation and drainage networks

Iran has an important background in system operation and association and consumer participation in agricultural water utilization of water resources. So that perhaps in this country as far from the days of inhibition and surface and groundwater resources extraction had spread and now works as the control remained the times we are, the operation of water supply system also with the same accuracy and elegance from the beginning has been formed. In other words, management of water supply management had gone with demand (consumption).

Formations of water consumers were in the form of Boneh, Haraseh, KotehIn addition to water management, as the strongest social system of production lead, the collective effect of other activities.

With further review in this case, we find the low-water areas of the country in which the organization is far more coherent and stronger and have rules and regulations for a more comprehensive water management.

Traditional association of water consumers to end life villeinage system still order and applying the traditional criteria, management was responsible for water use in early 1961 with the system being dismantled villeinage and disruption of traditional village leaders pouring organization, association of traditional supply water and gradually lost its place in most parts of the country have halted their activities were only a few areas, they remain works. Vacant position was caused problems in the organization of production and management of agricultural water use. In 1991 agriculture and water sector, the participation of water users in the operation and maintenance of irrigation networks in its agenda and established companies that exploit irrigation networks, which seeks agreement between the ministries of Energy and Agriculture Organization Program and the budget, was done, with the aim of attracting the participation of water users in the company. But this action also was not very effective and virtually farmers in participatory management were not responsible for the operation. So that even with appropriate administrative structures, there is strong law enforcement in helping to achieve organizational goals.

Second Development Plan with the approval of the Legal Note Clause 76 of this Law, including the participation of farmers in the issue of constructing irrigation networks and paragraph (t.) Note 19 regarding the same law that led agricultural water use optimization procedures approved optimal water use in agriculture was the government, is trying to organize farmers provides the legal field. Summary creating agricultural water users associations were discussed in two different forms:

A - Water consumers association with the aim of participating in irrigation projects and exploiting them.

B - Water consumers association with the aim of participating in such operation and maintenance network that already has been created by the government.

In the first case consumers has more incentive for the organization. But farmers in the second case from the beginning have no responsibility in the operation and maintenance of irrigation networks have no responsibility, had less interested in being composed in the operating partnership therefore attracted consumers agreed irrigation water available in the network operation organizations to create work that is subtle to be step by step and be done with sufficient opportunity to spend.

International experiences of farmers' participation in irrigation management networks

Management operation and maintenance of irrigation and drainage networks is nowadays as important water and agricultural issues, especially in developing countries management irrigation network is not only a problem for governments but also international organizations has become lenders of capital to do the following investments and ensure a profit or achieving the

goals of development are expected. In most developing countries, management and development of water resources exploitation and domination traditionally ruled by the central government has been. In this regard, the general belief is that only government can do heavy investments for the construction and operation of large facilities, water supply and irrigation networks, which of course, given the vital role that water plays in these countries, interference Government control in this area seems justified.

However, the financial crisis in early 1980 began developing world, much of the weakness of the arguments indicated. In fact, the process of destroying most existing irrigation systems and infrastructure failure, institutional failure and the inability of many years in charge of public water supplies in times of these countries, especially in managing the operation and maintenance display. This failure include lack of motivation and lack of staff organizations responsible accountable, high level of political interference and lack of sufficient concern about the gun needs to be consumed. As a result, consumers don't received equally necessary motivation for participation in investment and maintenance costs or even pay for services.

Hierarchical system of central controls something quite normal and common in the development and management of large and medium irrigation projects. In many developing countries, government has been design and plan without consultation with people using the system.

Weakness in this type of approach maintenance problems of these systems has appeared in the long time. In most cases, irrigation agencies have focused on developing new systems, lack of attention to keeping cost systems available. After construction of the system, many organizations have not any role to implement in their operation and maintenance. Organizations that are imposed water pricing and duties to provide maintenance and operation costs, in the collection are faced with the problem, because the farmers do not interest to pay money towards the poor service. As a result, government subsidies to pay for maintenance and operation will often tilt their way to build new systems.

For this reason and other reasons, consider the role of farmers is considered in irrigation management as a way to stabilize and improve the irrigation system. An approach for increasing the participation of consumers that can improve information, created a sense of ownership and appropriate incentives to farmers give to ensure system stability. These concepts in much of the government-run system do not exist. Farmers believe that because the initial design of irrigation systems in the state who asked their opinion is also don't have responsible for keeping their. Experience show when the knowledge and experience of farmers have been applied in planning, implementation and management of an irrigation system, operation of system become well. Moreover, if farmers have a share in the ownership system, they will show more willingness to participate in the maintenance and care of system. This problem has been caused in many developing countries that have an important role in agricultural production economics in recent decade's extensive efforts to build and legal organizations to manage their irrigation installations. Experiences of different countries in establishing water users association and

participation shows that in some countries such as; the Republic of Korea, this process started years away and is formed. After that number of associations' irrigation increased and land put under the control groups, consumer organizations, and traditional water was transferred to the forums. In Mexico, water users associations law was passed in 1991 and the first legal water users group was formed in 1992. In this Act and other laws that were adopted in 1994, how to create water users associations and their participation in the operation and maintenance network, the share of different sectors and water supply facilities, water pricing and the role and responsibilities of relevant government agencies in relationship was predicted.

In Spain any group that related to water, they are recognized. The country's first water law was passed in 1866 that 25 articles were about irrigation and related forums. The new water law was adopted in the country between 1985 and 1999, the issue remains Forum irrigation has been considered. Spain forums in addition to new rules that the legal position in terms of a legal organizations possess as a public entity also known to communicate with their government is defined. In this country, for the formation and support of farmers, after the transfer of management to operation and maintenance organizations, about three to five years, irrigation and drainage operations were free and water users were known during this period how to work with machines and mechanisms.

In India in 1997 the law of formation the irrigation association were passed by the central federal government. In this law were determined situation of membership and their activations. In this country, the government repairs all irrigation networks and structure, after were delivered irrigation systems to association. Other encouraging measures in this country, direct financial assistance to government organizations and governments to ensure water supply by causing de motivation host association.

In Pakistan for the fields of water management were passed law for establish association water user. For leaders and members were performed education program about quality and quantity of technical cooperation, financial and educational support for the development association.

In addition these countries, countries such as; Argentina, Nepal, Colombia, Philippines, Indonesia, Sri Lanka and Tunisia have reached effective results and experience about organizations and official participation of water users in improving the management of irrigation systems.

As can be seen, in most countries, the first step in establishing water users association or formal recognition of traditional organizations has been the law specified, explicit and specific in this regard.

Experience of establish water user associations and transfer of agricultural water management of irrigation networks in Iran

In Iran to manage operation and maintenance network is a different attitude. On many networks, management and operation irrigation networks still remain with the government. In some networks several operation companies were established for management but management and operation hasn't been transferred to agriculture.

Overall transport management in Iran not based on a clear policy and programs but has been done based on problem solving rather cross and follow foreign patterns and satisfies conditions of facilities attract the World Bank.

So measures related to privatization and the creation of companies operating and what areas of legal studies and studies toward implementation of suitable management transfer has not provided. Although some cross-sectional and limited success in each of these experiences can be seen but the reasons mentioned shortcomings and vacuum approach has been in determining the appropriate approach in planning due to errors in recognition areas prevents proper formation beginning in country management transfer.

Complex issues management operation and maintenance far beyond networks is that a successful experience was regarded as the accepted solution and implement it may be recommended on other networks. However successful and unsuccessful experiences in the country contain lessons that integrated approach in designing courses to suit the complex issues of utilization management and maintenance of irrigation networks will be useful to country.

Study areas and the need of management transfer in Iran

Evaluation management of people in laws and regulations related to utilization management, soil and water resources since 1943 to the third 5-year plan, shows that the fundamental problems of management operation were because of development duties of government, development projects and ignore the role of people. Stereotyped solutions such as operation companies, cooperatives water users were not adjustment with physical and social situation of networks, and has been prevent to formation of complete and accurate transfer of management (in accordance with the principles of partnership oriented management approach).

Administrative rules, regulations and legal fields imposed in connection with the people in utilization management, has not provided suitable in this connection. Below has been described some of these cases:

Supervision of all affairs, control and protection and operation and maintenance of the networks responsible has been exploited companies.

- Irrigation management transfer to farmers doesn't explain clear in law.
- Framework of Agriculture and Power ministry about establish water user cooperative is not clear.
- Studies entitled "Agricultural Water Utilization System" which includes practical strategies for implementing prioritization methods in the form of a comprehensive plan is not available for user.
- The background of local participation is not enough attention. Experience in irrigation management transfer of Qazvin, Behbahan and Tajan show this deficiency.

Conclusions

Investigation demonstrates show the need to form and develop environmental cooperatives and agricultural water users in the world and Iran, according to its duties. Regarding the

environmental cooperatives according to their direct contact with the environment and human population growth and require government assistance in this matter is inevitable. But what is important in this context, creating areas of cultural, educational, social and ect, with government financial support to encourage the development and survival of these companies. About agricultural cooperatives especially cooperatives water users, considering to examples of worldwide in order to attention to strengths and weaknesses of international experience to create, develop and continue of these companies is necessary. Because of importance of cooperatives in terms of water users according to the land surface covered by irrigation and drainage networks in Iran in follow some problems that has been occurred in the world are mentioned. These cases can be a guide for establish successful cooperative in Iran.

- Oppose with establishment water users association what is good or not (Colombia, Morocco, Romania).
- Lack of financial resources or income and expenditure for the activities of irrigation management transfer (Ecuador, Andrapradsh in India, and Indonesia).
- Shortage or lack of market support for technical services from the private sector water users associations (Niger, Tanzania, and Argentina).
- Problems of water users associations for registered and establishment as a legal institution (Rajasthan in India, Indonesia)
- Concerns about the unpaid debts of farmers and water users associations (U.S., Armenia and Columbia)
- Organizational problems related to water deficit.
- Problems created by water users associations other than hydraulic cases (Armenia and Indonesia).
- Inadequate public awareness about irrigation management transfer (Hebei in China, Mdyaprash in India).
- Government will process and turtle to run irrigation management transfer (Orissa in India, Sri Lanka, and Indonesia).

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