THE NECESSITY OF TRANSFERRING MANAGEMENT TO WATER USERS ASSOCIATION IN WATER RESOURCES DEVELOPMENT PROJECTS WITH PUBLIC PARTICIPATION APPROACH

NECESSITE DE TRANSFERT DE GESTION AUX ASSOCIATIONS DES USAGERS D'EAU DANS LES PROJETS DU DEVELOPPEMENT DES RESSOURCES EN EAU AVEC LA PARTICIPATION PUBLIQUE

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ABSTRACT

The countries in arid and semi arid areas suffer from fresh water shortage and they need to have specific strategies in order to use the limited available fresh water judiciously and efficiently. Based on studies and experiences on the ways for optimum use of water resources, it can be said that peoples' awakening and participation are the keys in this endeavour. Farmers' participation is needed not only for their financial commitment but also to ensure their involvement at all stages of planning, implementation and operation of the network. Water Users' Associations (WUAs) are one of the forms of popular organizations, with plenty of features for role playing in a relatively smaller, and hence, manageable scales of water resources development and management, particularly in the agriculture sector. The role of WUAs is very important because they can create real value of water and protect its quality. Involvement of WUAs in decision-making processes is essential to prevent conflicts and social barriers. No government agency can effectively take up their role.

Key words: *water resources, participation, water users associations, irrigation management transfer, sustainable development.*

RESUME

Les pays des régions arides et semi arides sont affrontés par la pénurie d'eau et ils exigent

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les stratégies spécifiques pour utiliser l'eau douce disponible en quantité limitée de manière judicieuse et efficiente. Compte tenu des études et des expérimentations menées sur les moyens d'utiliser de manière optimum les ressources en eau, il est constaté que la sensibilisation du peuple et sa participation sont les facteurs importants dans cet effort.

Il est nécessaire qu'il y ait une participation des fermiers non seulement pour leur engagement financier, mais aussi pour assurer leur participation à tous les niveaux de planification, de mise en oeuvre et d'exploitation du réseau. Les Associations des usagers d'eau (WUA) sont l'une des formes d'organisations populaires qui joue un rôle important dans le secteur agricole - du développement et de la gestion des ressources en eau. Elles epuvent créer la valeur réelle de l'eau et protéger sa qualité. Il est essentiel d'impliquer les WUA dans le processus de prise de décision pour empêcher les conflits et les barrières sociales. Aucune agence gouvernementale ne peut jouer ce rôle de manière efficace.

Mots clés: *resources en eau, participation, associations des usagers d'eau, transfert de la gestion d'irrigation, développement durable.*

1. INTRODUCTION

Today, the most important topics that researchers are focusing on are the water-related issues, which are the most critical for human survival.

Based on studies of the traditional and the modern ways for optimum use of water resources, one feels inclined to argue for the traditional ways where participation of farmers in the construction, maintenance and operation of irrigation and drainage network was in-built (Jorablo et al, 1385). Such a tradition gradually waned in the wake of government's taking over the responsibility of creating and managing the water resources. Besides, soaring costs of operation and maintenance of irrigation and drainage networks and the inadequacy of water pricing to meet these costs, further distanced the farmers – the major stake holders – from water management in their farms for which the government departments were ill-equipped. Other studies show that low water supply and poor drainage network performance have been the major reasons for poor management, operation and maintenance of these networks. Evidence has shown that building, formation, continuation and consolidation of rural communities and agriculture will fail if the stake-holders are side-tracked when it comes to planning for the development process. (Amini, 1385). Allocation of a larger quantity of the limited available fresh water resources, particularly to the agriculture sector, was imperative in view of this sector's important role in increasing and sustaining agricultural production for the growing population. At the same time, proper utilization of this resource remained questionable under the government umbrella. It was necessary for the stakeholders of water, especially in the developing countries; to understand the capabilities of the WUAs in managing water in the agriculture sector (Yercan, 2002).

Looking to the undesirable impacts of full government control over the water resources management, such as poor operation and maintenance of the developed resources, there was a re-thinking on this issue and the government considered it wise and beneficial to transfer water resource management to the farmers (Morales and Tavakoli, 1387). Success and effectiveness depends on WUAs' dedicated involvement, based on their study.

Planning, design and management of water resources systems for achieving the goals of sustainable development requires participation of all concerned. This requires planning of appropriate and implementable strategies and participatory management and transfer power to local communities (Fekri Arshad, 1384).

2. DEFINED CONCEPTS

Participation: Participation in physical, mental and emotional forms by individuals and groups in an activity (Etaati, 1380).

Water Users' Association: Groups of people having stake in water (Heidarian, 1386).

Participatory management: Participation by the stake holders in irrigation management at all levels including planning, design, construction, operation and maintenance, investment, decision making and manipulation of rules and is evaluation (Vermillon, 2003). It also means participation of the right people at the right time (Okly, 1370). It also means the involvement of water users in all stages and all levels of water management (Najafi, 1378).

Importance and necessity of public participation and transfer of water resources management plans

Globally, irrigation management reform began in 1960 to address the problem of drop in the efficiency of modern irrigation networks established at a high cost (World Bank, 2002). The relevance of Participatory Irrigation Management (PIM) and privatizing irrigation were widely discussed. Study results confirmed that the presence and participation of farmers in the networks, usually lead to optimal utilization of these systems due to a feeling of 'ownership' of the facilities and the resulting motivation to reduce costs and improve efficiency of the management of the irrigation systems.

From the nineteen eighties onwards, due to the growing worldwide water shortage and increasing conflicts among water users, participatory irrigation management through WUAs was given attention (Hydronyf, 2004). Considerable experiences gained in this regard have been documented. They all corroborate that, especially in the rural areas non-participation by the stake-holders (farmers in the case of agriculture) in the decision making process related to water resource development and management resulted in failures to protect the valuable natural resource (Hayati, 1387). Farmers being the main role player in water management and agricultural production, taking them into confidence will always be fruitful (World Bank, 2006).

Optimal use of water resources is one of the important programs for economic and social development of communities and countries. Experts believe that the collaborative process with a chance to create the platform for organizations such as cooperatives, WUAs, etc., to take off is available in the agricultural sector. They will be able to play the pivotal role in realizing sustainable development, reducing government responsibilities, providing post delivery volume of irrigation water and increase efficiency and enhance the real value of water by treating it as an important economic commodity.

Transfer of water management responsibility from the government sector's control to the

stake-holders (WUAs, private water companies, et.) does not necessarily mean complete withdrawal state's involvement or privatization of the entire irrigation networks (Najafi, 1378), but to promote a partnership approach to increase productivity of soil and water resources and sustainable development of agriculture. Therefore, government assistance through the organizational promotion opportunities for the empowerment of farmers in planning and management of irrigation systems, the institutionalization of organizations of farmers and water users organizations, as social capital, and to provide ongoing support to them remains as important as before (Heidarian, 1384). In fact, irrigation management transfer means transferring authority and responsibility for operation management of irrigation systems from government agencies to WUAs and other responsible organizations in a thoughtful manner. This may include transferring all or part of the duties of management or the relevant authority to the new agencies (Peter, 2003).

The necessity of transferring the management of water resources projects can be listed as follows:

- Expansion of technology and applying intellectual and financial power by local people.
- Potential use of popular organizations and groups.
- Increased responsibility and role in the management transition process, with their participation in decision-making process, implementation and operation.
- Elimination of redundant policies (which many times are bottlenecks) and increased supervisory role of public sector.
- Economic exploitation of the agriculture due to improved irrigation water management.
- Increasing production efficiency resulting from improved management.
- Raising the level of utilization of scientific capacity through participation in training courses.
- Accelerate better administration of the projects.

Advantages of irrigation management transfer and participatory management

Many governments, particularly in the third world countries including Iran have found that the main factor confronting the water crisis in the agricultural sector is their inability to manage a comprehensive network of irrigation and ignoring operation in the field of water management. Government policies developed by ignoring the views and aspirations of the stake-holders in water resources fail to deliver the desired results. It is important to create and strengthen grass root organizations on water management to reduce government's involvement so that sustainable development of water resources is achieved. The possible positive achievements due to transfer government's responsibilities of water management to the people and participatory management of water resources can be summarized as follows:

- Reduction of public sector responsibilities in the management of irrigation networks.
- Sustainable irrigation with local management practices at a reduced time and cost of operation.
- Reduce costs of ongoing involvement in the management of irrigation networks.
- Optimize water use through reduction of water losses.

- Diversion of subsidies for new water resource development, which the private sector cannot do.
- Reduction of violations, aggression and unauthorized removal of Networks.
- Transfer of duties and tasks to the farmers and the private sector from the public sector.
- Constructive interaction between governmental and farmers and reducing fraud and corruption.
- Institutional strengthening and cultural participation and spirit of cooperation among farmers.
- Creating employment and providing favourable growth opportunities.
- Increased commitment to farmers that cause higher investment return than is the past.
- Facilitate work sharing.
- Decentralization of powers, and respect for consumers.

3. CHALLENGES AND PROBLEMS IN IRRIGATION MANAGEMENT TRANSFER PROGRAMS

Today, water and other natural resources, which are the agents of growth and prosperity, are better managed in most of the developed and also in some of the developing countries, which are still lucky to enjoy the benefits of abundance of these resources. Increased consumption and reduced water supplies and the other management challenges, in the countries of the arid and semi-arid regions have made water resources planning there doubly important.

Azizi Khalkheli et al (2008) in a study titled "Farmers Participation in Irrigation Management of Irrigation Networks in Doroudzan, Iran, found unequal distribution of water among farmers, lack or absence of farers' participation in managing the water and other important natural resources, and high wages, as the issues of discontent.

Yercan (2003) studied the difficulties in participatory management of irrigation projects in Turkey, and reported that farmers prefer water management control to be transferred to them from the state.

Johnson et al (2002) studied the problems of structural reform of irrigation management systems in several countries including Brazil, Mexico, Colombia, Nepal, Philippines, Spain and China. They expressed that fundamental reform of irrigation depends on two factors: active participation of farmers and reform of irrigation institutions and concluded that the problems of irrigation management can not be simplified with the creation of water users association, without the necessary reforms in relevant institutions to resolve conflicts.

The problems and obstacles in irrigation management transfer can be summarized as follows:

- Lack of legal framework and national guidelines for the transfer of irrigation management and models of participatory irrigation management.
- Recent entry of the private sector and lack of transparency in the country's water industry.
- Lack of integration and cohesion among different organizations and activities.

- Lack of studies on economic and social participation of people by the consulting engineers.
- Low risk farmers and dearth of financial vigor
- Low awareness of farmers towards water projects and lack of necessary education.
- Complexity and lack of water utilization facilities in the system.
- Lack of clear legal position of farmers different activity spheres.
- Uncertain status of operation and maintenance plans.
- Lack of compliance with the criteria for projects and the aspirations of the people.
- Poor transport facility, inconsistencies in management, lack of attention to cultural and social issues of farmers, weakness in the structure of the farmers union, lack of supportive legislation and support for small organizations' trustee agencies, other restrictions and obstacles in the path of farmers participation and transfer of irrigation management in water resources development plans.

4. APPROPRIATE SOLUTIONS AND STRATEGIES IN PROMOTING PARTICIPATORY IRRIGATION MANAGEMENT TRANSFER PROGRAM

- Sharing the experience of people's participation in various projects; identifying the barriers and bottlenecks, analyzing and explaining the strategies to the stake-holders to arrive at an optimal plan and its few alternatives can help reaching the goals.
- Forming cooperatives to attract water users and their participation in operational strategy formulation and encouraging them to cooperate with the government in the process, will achieve sustainable development.
- Considering concepts like social capital, human, moral and intellectual development, as well as relying on the principle of justice and democracy in cooperative companies, establishing and supporting water users associations can be appropriate and effective strategy to achieve sustainable development.
- To improve and enhance the role of water users' associations, it is necessary to consider the constructive factors, which include the country's laws and policies and agricultural water agencies, farmers income, the ability of water users' associations' organizational discipline, policies, local habits and customs, and environmental problems (Bagadion, 2002).

Is essential that the following strategic goals of participatory irrigation management are is considered:

- Develop a collaborative approach so that operational cooperation at all stages of formation of water users association, including decision making, implementation, operation and maintenance of installations are included.
- Support services to organizations until it has become self-reliant.

- Develop training programs and maintenance operation.
- Support consulting organizations and arrange for requisite finances.
- The use of potentials and talents and experiences of private sector projects in all stages.
- Promote and develop social programs.
- Incentive policies for organizations toddlers.
- Coordination and collaboration among related organizations.

5. CONCLUSIONS

- To face the challenge of the global water crisis, the need for planning and maintaining survival and efficient use of water resources development programs is imperative. Creation of modern irrigation and drainage networks in partnership with the stake-holders is important.
- It is necessary to empower the farmers through Capacity-building for increasing sustainable benefits from irrigation projects with a high efficiency of water use. Frequent exchange and sharing of knowledge with the experts, experienced field functionaries, progressive farmers and other relevant individuals and organizations will be immensely useful.
- A collaborative project will be successful when its goals and modalities to reach the goals are made clear to the project collaborators and the beneficiaries of the project.
- Interactions among Farmers' association not only ensures increased learning through the exchange of information among them, it also empowers farmers to enhance their performance and improve productivity.
- Water Users' Associations, comprising grass roots workers are democratic organizations, which are appropriate for trustful mutual collaboration and cooperation ensuring economic growth, prosperity and equity in sharing benefits. Farmers' participation in irrigation projects from the beginning in the processes involved in studies on management plans and actions as well as performance monitoring of the irrigation net work result in gaining operational knowledge and cost saving.
- Establishment and launching of the action programmes of the WUAs should be simultaneous to achieve their desired goals towards water resource management faster. Years of inaction once the WUAs are formed give rise to suspicion, loss of interest and ultimate failure of these organizations.
- Irrigation management transfer is slow and time consuming and requires long-term planning. This is because the priorities and concepts behind governmental programmes of water resource development and management and the concepts behind the goals of the public bodies such as the WUAs, the cooperatives, etc. are different. Therefore capacity building of individuals by providing appropriate training regarding the management and maintenance of irrigation systems should be most important and priority items of activities for these organizations to help manage these areas.

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