NEW PLAN TO FORM WATER USER GROUP TO MANAGE IRRIGATION AND DRAINAGE IN ASPAS PLAIN, FARS PROVINCE

NOUVEAU PLAN POUR L'ETABLISSEMENT DES GROUES D'USAGERS D'EAU POUR LA GESTION D'IRRIGATION ET DE DRAINAGE DANS LA PLAINE D'ASPAS DE LA PROVINCE DE FARS

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ABSTRACT

It is important to enable the local communities to cooperate in maintaining and utilizing the hydraulic installations. Though there have been some efforts towards this, but examination of some international projects that did not fit well to the local socio-economic conditions revealed that they had only eight percent success in terms of fulfilling their objectives and those projects, which lacked community participation from the first step had no success at all.

The emphasis in this article is that the management is successful to protect water and soil sources when the water user groups are present in all steps of the programming and its execution until the end. It is necessary to have a well-defined framework and new regulations without referring to the government in order to form promising water beneficiary organizations comprising members keen to participate voluntarily. Such a frame work can be constituted when the field problems are studied well by the water use groups. It is obligatory to pay attention to all farmers' concerns and problems in order to have their cooperation because they are the final beneficiaries of irrigation and drainage and mal-functioning of the system will affect them first.

This article discusses the proper plan of formation of water user groups to protect and maintain the irrigation and drainage systems in Aspas plain, North of Fars province in Iran.

Key words: *Forming water user groups, New plan frame work, Irrigation and drainage, Farmers' cooperation, Fars province, Iran.*

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RESUME

Il est important de permettre aux communautés locales de collaborer dans la maintenance et l'utilisation des installations hydrauliques. Quelques mesures ont été prises dans cette matière. Après l'examen de certains projets internationaux qui n'ont pas abouti au succès dans les conditions socio-économiques, il a été constaté que le taux de succès était de 8% seulement en ce qui concerne la réalisation des objectifs, et les projets sans participation des communautés locales dès la première étape, n'avaient connu aucun succès.

Le rapport met l'accent sur le fait que pour la protection des sources d'eau et de terre, la présence des groupes d'usagers d'eau est exigée depuis le début jusqu'à la fin de la programmation. Il est nécessaire d'avoir un cadre bien défini et des nouveaux règlements sans se référant au gouvernement pour former des organisations bénéficiaires de l'eau comprenant les membres qui désirent y participer volontairement. Un tel cadre de travail peut être constitué quand les problèmes sur le terrain sont bien étudiés par les groupes d'usagers d'eau. Il est nécessaire de porter une attention aux préoccupations de tous les agriculteurs afin d'avoir leur coopération, car ils sont les bénéficiaires finaux de l'irrigation et de drainage, et ils seront affectés par aucun mauvais fonctionnement du système.

Ce rapport discute le plan approprié de l'établissement des groupes d'usagers d'eau pour protéger et entretenir les systèmes d'irrigation et de drainage dans la plaine d'Aspas au nord de la province de Fars en Iran.

Mots clés: *Etablissement des groupes d'usagers d'eau, Nouveau cadre du plan de travail, irrigation et drainage, collaboration des agriculteurs, province de Fars, Iran.*

1. INTRODUCTION

In the recent decades the government has invested heavily in developing and managing the state water industry. The people (villagers) especially in agricultural sector were kept marginalized and so the programs related to water use in the agriculture sector executed by government have been mostly unsuccessful. By virtue of the Note 76 of the regulations in 2nd program, paragraph 'A' Article 106 in 3rd program and paragraph 'I', Article 17 in 4th program, the legislature approved that the farmers should cooperate in providing fiscal sources of water industry. This movement with special attention to popular organizations is the vanguard in recognizing the farmers' role in investing in and managing the water industry. This research article proposes to address the question: "To What type of water user groups should the water management industry be transferred?" and find the answer.

2. RESEARCH METHODS

The study region is in the Northwest of Fars province and comprises thirteen districts. This region is a part of Aspas plain – Sedeh, irrigated by Bakhtegan lake located between 52^0 $12'$ to 52^0 $54'$ East longitude and 30^0 $15'$ to 30^0 $16'$ North latitude. The Ojan River originating in south-east mountain of Aspas plain irrigates most of agricultural regions there and upon joining the Balangan spring to form the Gavgodar River, goes out of the plain. The plain is in

about 330 km and 170 km distance from Shiraz (The center of Fars province) and Doroodzan dam roads, respectively.

The goals of this research are:

- Planning to form water use group.
- Enabling the group to strengthen beneficiaries' cooperation and self-esteem in order to attend to make decisions, program and execute the programs.

Research execution process:

Step 1: Preparation to execute the research.

Step 2: Examining and familiarizing with regional conditions.

Step 3: Planning and enabling to form the system.

Step 4: Organizing the systems formation.

Step 5: Enabling to transfer the network services to the systems.

Step 6: Establishing and stabilization.

Step 1: Preparation to execute the research:

i. Forming the operational team (Cooperation and technical team).
ii. Holding session with the employer to know the general plan.
iii. Familiarizing with completed or under-construction dams and channels.
iv. Holding Committee meetings in presence of Hassanabad governor, employer's representative, Hassanabad agricultural Jehad representative, the villages governors and members of Islamic councils related to the plan and the members of cooperation team.

Step 2: Examining and familiarizing with regional conditions:

A. Gathering information from different sources:

- Existing deeds, previous studies, site of ministry of interior, guide plan, reports.
- Articles of association of different systems.
- Information from governors of villages, councils, etc., through questionnaires.
- Information from governmental organizations and companies.

B. The order of priorities concerning villages:

On the actual situation of the plan limits and in order to establish the water use group according to some specifications such as the numbers of the water use groups, their literacy level, the conditions of the systems, village governor and council, conditions of the wells, the situation of the deteriorated dam and channel, cooperative activities and the limiting factors such as tribal differences and the problems concerning the channel and networks have been examined to define the priority of the villages and these were ranked.

Table 1. The points of different factors for cooperation acceptance parameters

Co-operative activities	Channel	Deterio-rated dam	Conditions of well	Council	Village governor	System	Literacy percent	Nos. of water user groups	Points
Useful for agricultural affairs							80*-85	0-50	3
Useful vastly	Established	Established		Active presence	Active presence	Active presence	75*-80	50*-100	2
Useful limitedly	Under establish-ment	Under establish-ment	Illegal absence	Presence	Presence	Presence	70-75	100*-150	1
Inactive	Not established	Not established		Absence	Absence	Absence		More than 150	0

Table 2. The order of the priorities concerning the limited villages in the study in order to prepare the necessities for water use group

Trade union & related affairs societies	Employers' trade unions	Cooperative companies	Agricultural stock companies	Comparison dimensions
Judicial-defending members' rights in trade union	Judicial-defending members' rights	Economic , meeting members' needs	economic-production integration	Goals of establishment
Non - profit	Non - profit	Profit - making	Profit - making	Governmental or non-governmental
Work licence holders subject to trade union law	Employers of a special industry or profession	Persons with the same goal & interested in the same economic activity	People interested in integrated production	Membership conditions
Entrance fee + membership fee & aids voluntarily	Entrance fee + membership fee & aids voluntarily	Entrance fee + membership fee & aids voluntarily	Governmental & members' shares (Land & water)	Source providing capital
Ministry of commerce when agricultural affairs trade union system established (Ministry of agricultural Jehad)	Ministry of labour	Ministry of cooperation	Ministry of agricultural Jehad	Under supervision

Trade union + members	Trade union + members	Members	Members	Legal representativeness
Obligatory	Optional	Optional	Optional	Entrance & Exit
Now impossible unless when agricultural affairs trade union system established	Possible	Possible	Not appropriate only for water use group	Possible to establish water use group
When agricultural affairs trade union system established : 1 - Economic contracts conclusion is forbidden to manage water	1 – water use group should not be employer 2 – Economic contracts conclusion is forbidden	1- Limited deciding range of members 2 – Impossible membership in similar systems. 3 – Paying tax by virtue of the work. 4 – Weakness in cooperative laws concerning offenders	1 – Vast activity (Land, water, production, etc. management) 2 – Limited deciding range of members	Limiting factors as water use group

Step 3: Planning and enabling to form the water use group.

- Holding sessions for the beneficiaries.
- Meeting with the managing committee to find how to solve the beneficiaries' problems.
- Appointing and introducing the beneficiaries' representatives.
- Visiting parts of the networks in presence of beneficiary representatives and consultants.

Step 4: Organizing the systems formation:

1 – The sessions began in order to explain necessary things for the beneficiaries in consideration of the defined priorities in the villages. The goals of the water beneficiaries systems and its necessity were explained in the workshops where the beneficiaries could put up their problems.

Many of the problems related to the absence or incomplete channels in some villages, technical problems and problems concerning loan reimbursement, the influence of illegal dug wells on Ojan River water reduction, drought, etc. These could prevent the beneficiaries' cooperation; so some additional sessions were held to examine the mechanisms to solve the problems.

At the end of the descriptive sessions the beneficiaries were requested to appoint and introduce their representatives. Most of the villages introduced their representatives in the descriptive sessions and some others announced that they would appoint their representatives among themselves and present their list through Village Islamic Council to the cooperation team in the next 1 – 2 weeks.

Meanwhile, the cooperation team examined the representatives' responsibility acceptance and changed some of them because of shirking and doubtful members and introduced other more competent and dutiful representatives.

The implementation of the new system is at the initial stages. The consultative team has been trying to execute the new system with adequate regulations in order to solve the farmers' and beneficiaries' problems in the region. The present study has not completed yet and we hope to come out with the final results in the near future.

3. THE ADVANTAGES OF ACTIVE PRESENCE OF THE FARMERS IN IDN MANAGEMENT

- If the real status of the farmers is recognized in network management and they have the rights enough to manage, undoubtedly they have very stronger motives than the governmental experts.
- It is clear that the farmers make their living totally or mainly by proper water distribution system so they are sure that it is necessary to improve and promote the irrigation management; they hesitate in this regard when the system is under government control. Their direct involvement gives them a sense of ownership of the system and so they are keen to manage it properly.
- It should be noted that there are many occasions to contact with governmental organization staff in the farmers' systems formation process and how to interact positively with them and follow the affairs effectively are examined several times and they become more familiar with the ways of developing the sources to make livelihood, gaining income and benefit on account of credits from different sources.
- The farmers learn the skills to program and organize such as executive operations to repair the installations, issuing the costs and accounting deeds and budgeting. These ensure a stable and effective presence of them in the networks management.
- When the government plays no executive role, the users know better to stabilize and assess the operation system and benefit from the results. They adopt policies that are acceptable to all and have better results in operations.
- Many executive operations to construct, operationalize and maintain the network are done at lesser expense by the farmers. The local management is less expensive because of lesser local costs including less wages and not obligatory limited work hours, less workshops costs including the places, tools and maintenance and elimination of bureaucratic costs and avoidance of unnecessary formalities of the government controlled systems.
- Experience has shown that too many experts in the executive bodies and teaching farm management to the farmers have not been effective.
- Considering discontinuous presence of the researchers at site, a holistic examination is usually difficult and sometimes impossible. In this regard the necessary data are linked more easily and properly by the presence of the farmers at the site. Also the data concerning socio-economic problems and agricultural environment are gathered more exactly and less expensively by the farmers or their cooperatives.

- The regional water associations finance the IDN management by the water rate (fee). Considering that costs have become more than the revenue generated through water fees, the IDN maintenance and restoration budget proves inadequate and this worsen the IDN functioning. Both managers and farmers know this problem well, but considering lack of a clear mechanism to solve the problem and methodology to increase the farmers' role in irrigation management and some other administrative-social considerations the problem has not been examined seriously.
- When the irrigation management is transferred to the consumers the government organizations would have more time do execute their main duties to harmonize the system details better. In many cases the companies benefiting from irrigation networks do not have the ability and occasion to attend to all the necessities related to irrigation networks. The lack of necessary specialties in the regions is gradually appearing in state irrigation and drainage networks.

4. THE RESULTS OF BETTER FARMERS' COOPERATION IN IRRIGATION MANAGEMENT

Varying results are seen upon examination by FAO of 45 irrigation networks in 43 countries. The differences are because of the variety of executive programs and processes in different parts of the world. The beneficiary organizations have received all related powers in about 70 percent and in the rest 30 percent, they have limited powers to use and maintain the facilities. About 50 percent of these programs have created cooperatives to develop livelihood and 25 percent of them have paid limited attention to this. Generally the examinations have led to positive effects and results.

The noteworthy results in the study in two years are:

- The farmers are dissatisfied in 50 percent of the examined networks because of unclear roles, responsibilities and powers.
- Governmental exploitation and maintenance costs have decreased in 60 percent of the cases, but increased in 40 percent of them for the farmers.

So it can be said that when the farmers enter the management field, they do benefit but also encounter with some challenges and problems in relation to enabling new state and regional organizations. The problems preventing the goals achievement are mainly as follows:

- Lack of a clear definition and principles of enabling terms and conditions.
- Lack of enabling culture and attitude.
- Official structures and hierarchy in state executive organizations.
- Lack of firm decision and national willpower in state management.
- Managers fearful of losing power.
- Executive staff and other targeted groups without necessary skills.
- Low protection of enabling programs.
- Lack of necessary regulations and law.
- Early displacement of the managers and management styles.

- Continuous changes in executive organizational structures.
- Lack of allocation of credits related to the enabling programs.

5. POINTS TO BE OBSERVED IN ORDER TO SUCCEED IN PLANNING NEW SYSTEM

- ✓ The farmers' requests are more important than the experts' views.
- ✓ Strengthening the ownership concept in the water use group.
- ✓ Making the activities affiliated with the system profitable.
- ✓ Government agents' patience.
- ✓ Strengthening instructive and development programs in different fields of the system.
- ✓ Knowing all factors influencing the system success and paying attention to them (New methods to plant crop, storage and harvest, convertible industries and marketing).
- ✓ All beneficiaries and everybody with executive role participate in all activities.
- ✓ Enabling, creating capacity, assessing and stabilizing the water beneficiaries system.
- ✓ Accounting, finance and systems management.
- ✓ Ways to resolve the differences.
- ✓ Defining the way and program the timetable to transfer the network management (Gradual transfer of network management).
- ✓ Stabilizing and assessing cooperative water beneficiaries systems (Input, process, output, effect and outcome).
- ✓ Protection and complete logistics concerning the water use group after their appearance.

Note :

The fourth, fifth and sixth steps have not been explained because the project has not completed yet and this article was meant to give an overview concerning new water use groups and final results would be presented in following articles.

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