

# Participatory Water Resources Management and the Government's Role

V.A. Dukhovny, V.I. Sokolov, H. Manthrilake, N. Mirzaev

An extremely important component of putting the IWRM principles into practice is the broad involvement of public organizations and other stakeholders (local authorities, municipal water users etc.) in the management process. Water resources management issues need to be considered in the context of interactions between civil society and the State.

The participatory approach has to create an environment of *transparency and openness*, where the likelihood of decisions not meeting the public interests is reduced. The higher the level of public participation the less favorable conditions for corruption and ignoring of public interests. This is an instrument for preventing local or sectoral egoism in water use. This is the platform for making equitable and well-thought-out decisions regarding water allocation, taking into account nature preservation requirements and economic growth under conditions of increasing water scarcity.

Based on the principle that water is not only a private good but also a public one may arrive at the conclusion that public participation is the most important component of water management.

Public participation also is the most critical factor to control any kind of “*hydro-egoism*”<sup>1</sup>. The previous administrative system of water management threatened water users with “administrative hydro-egoism,” under which the management of administrative and territorial bodies used the water supply systems, first of all, for their own sake, and, at the same time; there were conditions for corruption, arbitrary rule, and infringement of interests of others. A transition to water management based on hydrological principles cannot, in itself, provide genuine IWRM because there are prerequisites for “*professional hydro-egoism*,” since due to lack of public control, water management organizations themselves plan water allocation, establish water use limits, adjust these water use limits, and finally audit their own activity. Therefore, public participation is the guarantee of fairness, parity, and consideration of all stakeholders' interests in the process of water management. A role of public participation is enhanced by means of *establishing public bodies such as the Unions of Canal Water Users, Basin Water Committees (Council) etc. in parallel with existing water management organizations*.

They are public representative bodies that govern water management activity within the appropriate irrigation system. Broad representation implies the participation of all stakeholders in the water management process, namely: representatives of water agencies, representatives of water users from different economic sectors (irrigated farming, municipal water supply, industry, fishery etc.), and representatives of local governments, conservancies, and non-governmental organizations. A Union, Committee, or Council should co-ordinate the activity of legal entities and individual persons related to water management and use this within an irrigation system or the command area of a single irrigation canal. A major objective of their activity (together with their executive bodies and under broad participation of all stakeholders) is to put integrated water resources management principles into practice

No matter how employees of existing water management organizations (WMOs) operate, there is an issue related to establishing public organizations of a new type that enable us to provide greater involvement of water users in water management as a matter of ensuring fairness and using the potential of collective intellect; and, in the future, these can become genuine governing bodies bearing complete responsibility

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<sup>1</sup> A term “hydroegoism” is widespread in publications and is treated as a dominance of group and corporative interests in the process of water allocation and use over the national interests.

regarding water management. Our experience shows that the management of WUAs and the Canal Water Users Committees do not participate enough in the processes of water resources planning, allocation, and management, as well as in decision making related to maintaining and rehabilitating of water infrastructure and seeking funding sources. At the same time, the practice and methods tested at pilot irrigation systems are gains for the future. We need to prevent the conversion of these bodies into ones with only advisory functions or into “an adjunct” of WMOs.

The system of public participation in water resources management should be built up in such a way that representatives of water users and other stakeholders could really participate not only in monitoring of water agencies’ activity but also in planning and implementation of water-related works at the expense of their own financing or other funding sources. Public participation has to provide “transparency” of water agencies’ activity and to prevent transforming of former administrative bureaucratic systems into a new professional and sectoral bureaucracy with its “hydro-egoism.” Water Councils of basins and sub-basins have to be composed of representatives of concerned regions (districts), principal water users, and water-conservation bodies. The Water Committees of irrigation systems or canals should be composed of representatives of water management organizations, WUAs, and other water user associations. Finally, WUAs themselves should establish such a system of partnership with the State and private sector, which could be a driving force for transforming activity related to water sector development into national action.

Public participation is especially important in the process of developing principles and methods of water distribution within the former on-farm irrigation network. It became obvious that engineering tools alone are insufficient, especially now when the number of water users has considerably increased. The process of water management becomes extremely labor-intensive when a WUA consists of one thousand water users or even of a hundred water users. No WUA could efficiently manage water resources without grouping water users or without the teamwork of farmers in command areas of on-farm irrigation canals. In the Fergana Valley, more than several tens of water management sites were established on each on-farm canal within the pilot WUAs. This is evidence of the complexity of equitable and stable water distribution at this level of irrigation system under implementation of the planned irrigation schedule.

Water distribution along main irrigation canals is also very complicated, because during the period of administrative subordination to local authorities, the number of off-takes that were not designed has increased many times (both gravity and pumping off-takes). The South Fergana Canal is a typical example; according to design documents, only 112 off-takes had to be constructed but at present, there are 260 off-takes including 100 off-takes with a carrying capacity less than 100 l/sec.

Under these conditions, along with planning water use according to the “bottom-up” principle, taking into consideration the requirements of water applications on fields and operational modes of on-farm canals (applying computers and optimization models) it is necessary to implement a number of measures to involve water users in the process of planning and management including water distribution. It should be done on the basis of thought-out operational regulations and schedule for irrigation canals within WUAs taking into account a land use pattern and characteristics of water supply at a higher level of the irrigation network. At the same time, taking into consideration ten-days planning of flow rates in irrigation canals by a superior water management body, it is advisable to apply water rotation among groups of water users that divert water from one canal. However, specially trained professionals in water management together with sociologists have to identify each WUA and each irrigation canal within an association’s area. This includes procedure of water distribution, its cycles in the growing season, and grouping of water users for each water supply shift, implementation of intra-group monitoring, as well as an order and sequence of water distribution between and within groups.

All this engineering-management activity should be accompanied by social mobilization of water users that form these groups and relevant inter-grouped units on one irrigation canal, in order to organize the system of rational water supply and to see the potential for its adjustment.

As known, the institutional aspects of IWRM include: (i) transition from the principle of water resources management within administrative boundaries to management within hydro-geographical units; and (ii)

public participation. In the process of introducing the principle of water resources management within hydro-geographical units, there are no problems because it was objectively beneficial to water management organizations. As for public participation, the situation is quite different. As a rule, public participation is beneficial to employees of water management organizations but not to some water officials. Recognizing by word of mouth the leading role of water users presented by the Canal Water Users Council (CWUC) the opponents of such an approach will try to transform the CWUC into an obedient “pocket” body. Therefore, disallowing the legal registration of the CWUC as an independent, non-governmental and non-commercial body of water users and in opening its bank account just contributes to the dependency of CWUC on the Canal Administration. In this context, the rejection of legal registration is beneficial to water officials rather than water users.

At the level of WUAs (the former on-farm level), some problems can be solved only with public participation. Under the prevalent practice, a primary water user (a large farm - former collective farms, and nowadays co-operative farms) supply water to secondary water users (private farms) at their own discretion, and as a rule, after satisfying their own needs. Relations between primary and secondary water users are not specified even by a contract. Therefore, large co-operative farms infringe upon the rights of private farms. Primary water users do not incur any liability for failed water supply to private farmers that should be provided according to planned schedules and volumes. Private farms often do not have offtakes equipped with water meters, and water is supplied to them without actual water accounting (“by eye”).

The status of private farms (secondary water users) is changing under establishment and operation of the WUA. A water users association itself enters into contractual relations with water management organizations (district water authorities or irrigation system administration), and supplies water equally to all water users (members of WUAs) independently of their location along an irrigation canal (at its beginning or in a tail section). One of the major functions of WUA is distribution of available water resources among its members in an equitable manner, and in that way, to provide *sustainability of their water supply*.