POLICY - A THEME FOR ICID TO APPROACH

INTRODUCTION

1. In our ICID work, we have amply discussed technical problems such as network design, or the rehabilitation of irrigation projects. More recently, we have also discussed the environment, water saving methods and the reuse of brackish water. More recently, we have looked into the institutional and social aspects, involvement of irrigators in management, users' associations, management transfer and the role of women. All these testify to a significant development in our activities.

2. However, we are well aware that any success or failure in our irrigation projects is dependent on this unique conditions: real and sustainable income to farmers from irrigation, a contribution to alleviation of rural poverty. But we do not keep this fact in mind when carrying out our activities in ICID, probably because of our assessment that farmer's income is too political a subject to be dealt with by irrigation professionals like us. So, it is thought that the matter should be left to the administrators dealing with public aid to investment, who control the agricultural price policies, regulate food grain markets, money markets, exchange rates, interest rates, customs duties and wage rates.

3. Some of us may think that the overall privatization policy and the laws of the market will settle the problems, and that techniques alone should be our main concern. Some others may think that a powerful State may plan investments and ensure sustainable income to farmers. One thing is certain: each one of us in our own country is involved in the public decision-making process regarding irrigation investment and agricultural price support policies. On both sides, irrigation may be costly to the public purse, and subject to heavy criticism in the present situation of public sector deficits.

4. Nowadays, we rely heavily on irrigation to eradicate poverty in rural areas and meet growing food needs or simply ensure food security.

* Vice President Hon., International Commission on Irrigation and Drainage (ICID)
5. These two challenges - reducing public deficits and improving food security - must lead ICID to move on to the Policy area on economic, institutional and financial issues, and coordinate worldwide experience not for the purpose of standing in for our governments, but to participate in the public decision-making process as responsible citizens, and understand better the actual reasons for the success and failure of our projects. So far we have been conducting technical feasibility studies: let us now face our economic and social responsibilities.

**ECONOMIC QUESTIONS RAISED BY THOSE INVOLVED IN IRRIGATION**

6. Every one of us approaches the policy issues in a different perspective according to one's position in the "Institutional triangle" formed by the Government (G), the Irrigation Project Management Agency (A), and the Farmer as user of Water (U).

7. Below are some of the economic concerns of each side:

   - **WATER USER**
     - How can I increase my income and on a long-term basis?
     - At what price am I selling my products, and what support may I get from the Government?
     - Shall I have the water rights needed for agricultural production, and what price should I pay for water supply (or how can I continue to have a free supply)?
     - What level of service and flexibility do I need?

   - **IRRIGATION PROJECT MANAGEMENT AGENCY**
     - How can we balance our budget while improving the level of service and durably assuring our public responsibility?
     - What recovery and water rates system should be adopted, and up to what level can water prices be increased without losing the client?
     - How can public funding for investment or even for every day operations be obtained?
     - How should an irrigation project adapt to changes in irrigated farming? How far can crop rotation be liberalized and how can this be organized?
• GOVERNMENT

• How can food supply be guaranteed to people particularly in urban areas at a fair price, while reducing grants or imports?
• How can water be preserved for other priorities, and how can the environment be safeguarded while promoting a sustainable agriculture?
• How can efficiency be increased in the use of water, which is a rare and increasingly valuable resource?
• How can national interests be protected in sharing water with neighbouring states?
• How much water should be allocated to agriculture in the context of rising socio-economic demands for water in non-agricultural sectors?

8. Questions raised by the various sectors involved in irrigation sometimes reveal opposing economic interests. Often, the relationship between the three sides appears to be opaque or ambiguous. The very fact of raising issues or desiring that economic questions are raised, may lead to major institutional changes. By clarifying institutional relations, one is bound to announce the value of water, the value of public support to investment or operation and the true total cost of irrigated agricultural produce. There exists a direct link between institutional and sociological matters and economic or financial ones.

INSTITUTIONAL AND SOCIOLOGICAL THEMES

9. These themes have already been dealt with by ICID particularly under Question 45 of the Hague Congress. The conclusions and recommendations under Question 45 have strengthened and given inspiration to the "OMM" Group:

• Defining the role of management agencies as concerns specificity, financial autonomy with respect of Government and contract approach to clients.

• Accounting methods and cost recovery.

Similarly, the Working Group "Performance" has dealt with the first recommendation under Question 45 regarding selection and definition of performance indicators.

10. Discussion on Question 46 this week show that we should pursue our work in those institutional and sociological activities with focus on the following:

• How can privatization - or rather management transfer operations - be successfully carried out? What are the hurdles to that policy (reluctance...
on the part of officials to delegate part of their power, inadequate training to irrigators, inadequate legal structures to set up responsible associations, inadequate knowledge about the actual sociological links and the role of women ...)? What is the acceptable shape of reforms to be adopted (based on experiments carried out at present)?

- Approaching new delegated management methods in public services, rarely applied in irrigation, such as “concession”, sharing experiences in setting up river basin agencies to finance water resource management.

- Addressing social issues in the context of the International decade for Poverty Alleviation such as the role of women in farm management, where families are dependent on irrigation, and the migration of people to irrigated areas.

- Promoting ICID’s approach to training and capacity building, particularly the extension service relevant to irrigation management, and financing it (such as drawing from investment costs) support for information exchange at an international level and research/development links developed last year by the first Theme Leader Dr. Sanmuganathan.

11. Carrying institutional relations accounts to progressing towards cost transparency and building realistic economic arguments. It also means improved economic efficiency of our projects.

**ECONOMIC AND FINANCIAL THEMES**

12. These themes are inadequately dealt with in ICID for the overall reasons given above, and also due to lack of facilities to carry out studies and collect data. When an irrigation project is directly under Government management, drowned in the general budget of a Ministry, it is obviously difficult to have a sound judgement on the economic aspect. In this context, it is relevant to refer to the theme of our next Congress at Oxford. Water - more particularly irrigation water - is not an economic good everywhere. The feedback to OMM questionnaires on cost recovery proved insufficient. This may be attributed to the complexity of the subject.

13. Questions to be tackled are micro-economic (farmer, agency and government viewpoints) and macro-economic (considerations on a national, major river basin or international level and that of international banks).

14. Micro-economic issues, the most often addressed, consist in assessing the policy impact on irrigation actors:

1. Approaching new delegated management methods in public services, rarely applied in irrigation, such as “concession”, sharing experiences in setting up river basin agencies to finance water resource management.

2. Addressing social issues in the context of the International decade for Poverty Alleviation such as the role of women in farm management, where families are dependent on irrigation, and the migration of people to irrigated areas.

3. Promoting ICID’s approach to training and capacity building, particularly the extension service relevant to irrigation management, and financing it (such as drawing from investment costs) support for information exchange at an international level and research/development links developed last year by the first Theme Leader Dr. Sanmuganathan.
• Making a serious and honest assessment of additional income that may be generated by irrigation to farmers nowadays under present economic conditions. This would seem to be the minimum. How many economic studies have been undertaken in a whimsical or obliging manner to justify projects already decided upon? How much overestimation of efficiencies, how many theoretical output assessments, improbable and unlikely prices of agricultural products, invisible vegetables? And how many unclear projects! An honest exchange of views on technical aspects of these questions should be our first requirement.

• Approaching the production costs of irrigated crops or other produce, is an interesting factor to be highlighted in explaining our internal price support policy and its sustainability.

• Approaching the actual irrigation water distribution cost is a difficult task which can now be tackled and pursued thanks to the increasing number of autonomous agencies or users' associations in several countries.

All these will help enlighten discussions on the price of water, on the risks of unpaid bills and about the mode of price fixation to balance the project budgets before approaching more complex subjects such as the use of water prices to exhort people to save water, for water quota management or for water markets.

15. Macroeconomics are more difficult for engineers to approach. However, as citizens, they have to participate in the related debates - even though such debates are sometimes tinted with ideologies. It is therefore necessary for engineers to be aware of the concepts being used, the economic policies of the government, and to understand the impact of those policies on the success or failure of our projects. Here are some examples:

• The present capital cost will determine the choice between a high investment at low management cost, and a light equipment which is less durable and costlier in maintenance and operation. But how should medium term tendencies be considered, for example to avoid dependence on inflation to amortise debts as was the case in the past decades?

• The level of public aid to irrigation investments may depend on the will to maintain the town - countryside balance, the will to maintain food autonomy, the political or cultural necessity to avoid high water costs. Are these policies sustainable in the context of public fund shortages?

• As regards the wage price included in the project, should it be near zero in regions with high unemployment? Or should it reflect the necessity to distribute a reasonable income to ensure that a job is well done? This
problem arises in network maintenance cost evaluation as in agricultural work itself, generally when social conditions improve. This question also includes the major problem of irrigation's contribution to reducing unemployment.

• The price of agricultural produce should be analyzed in terms of prevailing market prices, a country's public support funding, medium term price expectations and the impact of the World Trade Organization's new regulations. How can the sustainability be assessed of an internal price support policy justified by self sufficiency and low consumer prices? Will irrigation development, for which ICID itself is a contributor, have a long-term impact on the global food grain market? Does irrigation contribute to food security?

• The value of water in a country changes through the years depending on the alternative uses developed for this resource. The water allocation to an irrigation project can be sustainable only if the relative value of water in other uses (hydro-electricity, public health or drinking water) remains comparable. Acquired "water rights" may not fully counteract the considerations of economic under-use of the water resource, even in the relatively more difficult case of international basin management which is the ICID's main concern under its region wide activities. This reality is not ignored in water legislation currently coming into effect. Activities of the WatSave Team need to be pursued in this context. The water allocation problem should be approached on these terms.

CONCLUSION AND RECOMMENDATIONS

16. We should therefore organize our activities to tackle the Policy area firmly. Several Work Teams and Working Groups (OMM, Performance, Drainage, Environment, WatSave) should deal with those matters. In may view, it is necessary to set up a Working Group on "Economics - Financing of irrigation projects - Institutions" inviting experts from other disciplines in addition to engineers. There could also be, linked with this working group, a special work team on institutional and social setups for the management of agricultural water. Possibilities should be explored to hold workshops jointly with the FAO, the World Bank and international banks, in order to familiarize ourselves with the concepts, and to exchange views on the validity of economic methods used, to listen to and consider the results of the economic analyses. Columns of our publications (News Update, Newsletter, Journal) should also cover articles and information relevant to these aspects.

17. Such an approach to economic policies will definitely lead up to review our technical designs when we understand clearly the magnitude of economic
uncertainty. Because investments in irrigation are made for several decades, we should become inventive by introducing and flexibility in project design and management.

18. This economic approach which aims first of all at ascertaining the future income of the irrigator, will also involve us in activities relevant to the environment and sustainable irrigation. As stated by Mr. Jacques DIOUF, FAO Director General, "It is above all the pressure due to the aggravation of rural poverty that will endanger sustainability, since an increasing number of persons are attempting to tap the diminishing resources for their sustenance". This statement made in the context of Sahel farmers threatened by drought, is also true in the case of farmers living in my region who can go to the extent of draining out a river to ensure their own income.