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# IRRIGATION LEGISLATION AND PARTICIPATORY MANAGEMENT

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### **Historical Perspective**

The Colonial Era. When the colonial government recognized its responsibility for irrigation development in the country, its approach evinced a sense of mod-crate cautiousness with a mix of paternalism, humanitarianism, and self-interest. Colonial authorities were already aware of the adverse impact created by the Colebrooke-Cameron reforms of 1832 by which the ancient institutions of compulsory labour (rajakariya) and hereditary teadmanship were abolished. Irrigation was one of the principal sectors affected by the reforms. The implementation of irrigation programnics therefore had to be undertaken with great care. The strategy was initially to resuscitate the ancient customs, traditions, and practices in the paddy sector. For this purpose the Paddy Lands Irrigation Ordinance No. 9 of 1856 was enacted for a limited period of 5 years. The justification for the proposed course of action is clearly stated in the preamble to the Ordinance as follows:

The non-observance of many ancient and highly beneficial customs connected with the irrigation and cultivation of paddy lands as well as the difficulties, delays, and expenses atlending the settlement of differ-

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ences and disputes among the cultivators relating to water rights, in the ordinary course of law, are found to he productive of great injury to the general body of proprietors of such lands and it is expedient to provide a remedy for these evils.

Restricting the validity of the Ordinance to 5 years presupposed that the careful monitoring of the implementation process would necessitate revisions and modifications. This illustrates an early perception by the colonial authorities of what is today called "a learning process."

Ordinance of 1856 entrusted the Government's responsibility for irrigation development to the Government Agent (GA) who was the administrative head of the Province. The **GA** was expected to perform his functions with the advice of the proprietors of the irrigated lands. In that role, the **GA** was deemed to function as a benevolent judge, implementor, and facilitator,

The same ordinance provides for the revival of the Village Council for conflict resolution in the course of implementing the law. The GA was required to preside in both meetings, the proprietors' meeting to obtain advice, and the Village Council meeting to resolve conflicts.

The implementation of irrigation programmes was constrained by the lack of funds from the central government. Government had no desire to increase its financial hurden by recruiting village level functionaries. Therefore it was clear that reciprocal contributions by the beneficiaries should be the guiding principle to mobilize local resources in support of the programme.

The 1856 Ordinance was revised by the Ordinance No, 21 of 1867. In addition to the Village Council it provided for the selection of one or more headman by the proprietors to ensure the maintenance of rights and the prevention of any act militating against ancient customs and causing damage. However, the headman selected by the proprietors was made accountable to the GA. The same Ordinance demonstrated a remarkable degree of flexibility and understanding hy allowing the proprietors to decide whether the operation and enforcement of the provisions in the Ordinance should he carried out with the aid of the Headman, the Village Council, or both.

After the enactment of the first Ordinance in 1856 there were a score of amendments and revisions over the next 125 years. Since the Irrigation Ordinance was expected to spell out the basis of organisation for irrigated agriculture, it throws some light on policies and perceptions that existed during the respective periods.

During the first two quarters of implementing the Irrigation Ordinance, a desire to monitor the implementation of its legil provisions was quite evident.

Regional differences in irrigation practices were also recognized. The basic institutional framework enunciated that proprietors in an irrigation area should be allowed to decide for themselves the most desirable course of action, subject to certain limits of approval which do not seem to have impeded participation by farmers. An important feature in the monitoring process was that the colonial authorities relied on empirical evidence to support changes.

With the establishment of the Irrigation Department (ID) in 1900, some of the functions handled locally by the GA were transferred to the Director of Irrigation. Leonard Wolf, who held the post of AGA in Hambantota at the time, recorded his resentment in a diary (Wolf 1959). In his opinion framing cultivation rules was better done by the GA as an administrative function. However, after some time the status quo was restored.

Changes in policy perspective relating to irrigation development began to emerge in 1930s with an emphasis on the restoration of major irrigation works that lay abandoned in the dry zone parts of the country. With the eradication of malaria, prospects for the colonization of the dry zone and its irrigation development appeared to be brighter. By this time the ID had also collected adequate data on rainfall, streamflow observations, flood records, etc., and developed an expertise to handle major construction work. So the stage was set for a major transformation in irrigation development.

In the meantime local demand and pressure to improve existing irrigation works, largely village works, continued. Provincial administrators were confident about the programmes under implementation. In the ID however, officials were reluctant to assign technical officers to 'what they called the excessive involvement with village works. It was argued that from a food production standpoint the village works were worthless as compared to the major irrigation schemes.

With the emergence of major construction as the principal area of work by the ID, the role of the GA in provincial development grew even more important. The Government looked to the GA to coordinate and manage the resettlement of people selected under irrigation schemes opened up in the dry zone. The Land Development Ordinance under which land 'edistribution programme was set in motion, conferred a special place for the GA to implement the colonization programmes. This was in addition to the functional roles already assigned to the GA under the Irrigation Ordinance.

The setting up of the District Agricultural Committee in the mid-thirties facilitated the GA's work as the principal coordinator of the irrigation programme in the province. This Committee, consisting only of officials, was incorporated into the Irrigation Ordinance No. \$2 of 1946 to provide a legal backing to the decisions of the Committee.

A significant outcome of this change in perspectives in irrigation development was the enhancement of the decision making power of the bureaucracy by a gradual process of imposing limits on participation by the farmer community. It is not clear however whether the new direction was the result of problems arising out of new dimensions in organisational management applicable to major systems. The protected tenurial system prescrited in the Land Development Ordinance, under which the newly reclaimed lands in the colonization schemes were distributed, required continuous supervision by officials. This may have had an impact on the irrigation management aspects too.

In the 1930s the emphasis was on resettling as many settlers as possible to achieve targets set by the policy makers. System design, especially in the tertiary levels, and the institutional framework for farmer participation, both of which evolved in the village works, were superimposed on the major system. The cultivation meeting is one such element, found to be ineffective in major irrigation systems with large number of farmers. However Irrigation Ordinance No. 45 of 1917, section 18, provides for the proprietors to "appoint a committee of such members as they may determine to frame rules on their behalf, subject to confirmation at a subsequent meeting." The extent to which such a Committee was effective is not clear. It has been allowed to remain in the Irrigation Ordinance for about 50 years.

**Post-Independence** Era. In the period following the granting of Independence in 1948, four key issues, farmer participation, irrigation headman, conflict resolution, and maintenance, were dealt with by introducing amendments to the Irrigation Ordinance.

Unlike in the earlier era, a noticeable tendency emerged to introduce conceptual changes in conformity with the official perceptions. Such changes were drawn more from abstract notions of a centralized system of administration than from an empirical process of monitoring and evaluations. During more recent years, constitutional guarantees figure more prominently and seem to restrict the application of legal provisions embodied in the Irrigation Ordinance.

# Farmer Participation in Irrigation Management

The Irrigation Ordinance No. 9 of 1856 envisaged farmer participation at a public meeting of proprietors summoned by the **GA**. This was the embryonic form of the present cultivation (kanna) meeting. As the area under irrigation facilities expanded and the **GA** was unable to hold as many meetings as required,

Irrigation Ordinance No. 16 of 1906 proviced for the setting up of a District Committee of not more than 12 nor less than 3 persons to advise the GA on drawing up rules regarding cultivation practices.

In addition to the ahove District Advisory Committee, powers were given to the whole body of proprietors under Section I of the Irrigation Ordinance No. 45 of 1917. The body of proprietors was to meet under the chairmanship of the GA to make rules on matters pertaining to the management aspects specific to each scheme which included the enforcerent of ancient customs, irrigation headman, mobilizing farmer contribution, and system maintenance.

Furthermore, proprietors were empowered to meet under the GA and decide on the variations to irrigation rates, and to validate any irregularity, correct any informality, decide on matters referred to the proprietors by the Governor, and decide on hethma cultivaton. A more significant feature in these provisions was that the proprietors were allowed to "appoint a committee of such number as they may determine, to frame rules on their behalf, subject to confirmation at a subsequent meeting."

With the enactment of the Paddy Lands Act of 1958, amendments to the Irrigation Ordinance became necessary. In ntroducing the amendments in Parliament, the Minister noted:

Government Agents under the Irrigation Ordinance were more or less independent authorities.... We find that there should be more control of the functions of Government Agents and closer coordination among them on the paddy cultivation side.... On the cultivation side the Commissioner of Agrarian Services is proposed to be brought in, and under his general direction and control the GA will work (Hansard 1968).

In fact, central control over the management of irrigation systems was progressively increasing with the Government taking more and more interest in major irrigation systems. The 1968 amendment to the Irrigation Ordinance justified such increased control because the Gsvernment transformed major irrigation systems to food production centers. The exercise enjoyed only a short lived success. In a way, the new advances in agricultural technology also resulted in some alienation of farmers from the decision-making process due to the short-sighted policies adopted in implementing the food production programme (Silva 1985).

A significant change in the composition of the cultivation meeting was effected by the Paddy Lands Act of 1958 which sought to introduce far-reaching tenancy reforms in the paddy sector. Tenurial arrangements of most lands in the government-initiated major irrigation systems are governed by the Land Development Ordinance. Therefore they are subject to a strict tenancy reform. Rut an

amendment to the Irrigation Ordinance was introduced in 1968 to bring it in line with the Paddy Lands Act. The Irrigation Headman was removed and the Committee appointed by the proprietors was abrogated and both were replaced by the Cultivation Committee, which was the grass-root organisation envisaged by the Paddy Lands Act.

The tenancy reforms and the success in food production, the latter achieved through the lateral spread of Green Revolution technology, opened up new horizons for institutional development in the agricultural sector. For want of dynamism in the irrigation sector to diversify its attention from design and construction work, this opportunity was not seized upon. Reforms initiated by the agricultural sector were allowed to fill the gap, irrespective of their relevance and applicability to the irrigation sector.

The experience gained during the last 5 years has shown that institutional reforms and structural changes promoted by one sector without reference to the other sector sometimes result in a negative and adverse impact at the field level. The lack of integration between the agriculture and irrigation sectors in policy formulation has been a major contributory factor to this situation. With the creation of new specialized agencies such as the Agrarian Services Department in 1958 and many others thereafter, the diagnosis of field level problems affecting farmers was marred by individual professional biases and divided loyalties. Even more important is the fact that farmer organisations came to be treated as a terminal facility available to the bureaucy with which to operate their programmes. This is one of the main reasons which constrained the continuance of these organisations at the field level.

The past experiences, have made us doubt the relevance of the cultivation meeting as a suitable forum for farmers. Under the INMAS programme, the three-tier organisation ranging vertically from bottom-level field channel organisation to the Distributory Channel Organisation (Sub-Committee level) to the Project Committee reinforces the decision-making process of farmers. In the absence of any other forum for all farmers to meet at least once during a season, it is desirable to retain the cultivation meeting as a mechanism through which recommendations made by farmer representatives and officials at the Project Committee level could be adopted for implementation in the entire project. Similarly, the cultivation meeting can provide an opportunity to farmers to articulate their views more openly and even represent riinority viewpoints.

In this respect, it becomes necessary to redefine the status of the Agrarian Services Committee (ASC) provided for under the Agrarian Services Act in relation to the three-tier organisation emerging in major irrigation systems.

ASCs are the successors to the Agricultural Productivity Committees which were set up earlier above the Cultivation Committee with certain new

functions. In the recent experimental programmes in farmer organisation in Minipe and Gal Oya, water users were promoted to erect a new institutional structure which is based on water as the key input. In effect the three-tier structure is an outcome of that effort. As a result, the role of the ASC is now confined to that of courdinating the supply of input services and related matters. Accordingly, the Cultivation Committee, as the representative body of farmers incorporated in the Irrigation Ordinance, has to be replaced by the three-tier project organisational framework.

## **Irrigation Headman**

Irrigation Ordinance of 1867, for the first time, provide the selection of one or more headman to carry out matters agreed upon by the proprietors. The headman was selected by the farmers but worked under the control and direction of the GA.

The Paddy Lands Act of 1958 removed the Irrigation Headman and replaced him with the Cultivation Committee. The Cultivation Committee was a creation of the tenancy reforms. The extent to which the removal of the Irrigation Headman is relevant to the Act's principal objectives can be explained only in the context of the overall socio-political principal within which the new Government of 1956 was brought into power, The removal of the Headman from the Irrigation Ordinance was completed by the 1968 amendment.

After a period of 20 years, the Irrigation Headman (*Vel Vidane*) was expected to reappear through the Agrarian Services Act in the form of a representative elected by the farmers in a tract. But the functions assigned to him under the Agrarian Services Act do not necessarily justify the attempt to make a Vel Vidane out of the tract representative.

Recent experiences in Gal Oya and e sewhere have shown that farmers themselves are not clear about the functior s expected of the tract representative, especially in the major irrigation systems. The new group of farmer representatives thrown up by a process of facilitation in Gal Oya was found to be more acceptable to farmers. But it is not possible to remove the existing representative formally appointed under the Agrarian Services Act. It is now accepted that where such conflicts occur, the approach should be more conciliatory and endeavours should be made to evolve interlocking arrangements so that community respurises would settle the differences in favour of the most feasible organisational arrangement.

In the three-tier organisational framework envisaged for major projects, the need to demarcate the area of authority ir. terms of hydrological buundaries,

especially for the field channel organisation and the D-channel organisation (DCO), is now accepted. The DCO will remain the formal organisation which will federate representatives from field-channe organisations. It is therefore necessary to ensure that the Vel Vidane should come from this organisation as a representative of farmers to carry out matters concerned with water allocation, distribution, and maintenance so that he would be able to function in his original role more effectively. It is also necessary to ensure that the appointment, remuneration, and dismissal of the Vel Vidane should be left entirely in the hands of farmers in the DCO with no accountability to any position in the bureaucracy. The Irrigation Ordinance should therefore be suitably amended to bring back the Vel Vidane in the above manner. As far as matters dealing with input coordination are concerned, the DCO may be requested to appoint another person as its representative to deal with such matters, leaving the Vel Vidane to deal only with matters concerning water.

### **Conflict Resolution**

The system of Village Councils (VCs) reintroduced through the first Irrigation Ordinance was directed towards compromise and not punitive action. This conciliatory approach ideally suited the purpose of conflict resolution in irrigation matters. Dispensation of justice in a VC, vihich was presided over by the GA, was facilitated by the creation of the Irrigation Headman, Farmers were given the option to decide whether they should enlist the services of the VC, the Headman or both. This feature is important because it recognizes the urgency and diversity of issues and circumstances under which rapid interventions had to be provided to sustain the integrity of the physical system and the efficiency of the institutional mechanism.

The character of the VC was changed by the enactment of the Village Communities Ordinance No. 26 of 1871 which dealt with matters of a broad nature more relevant to local administration. It was largely a creation of the officials with little unofficial support. The powers of the VC to deal with the violation of irrigation rules was handed over to the newly created Village Tribunals and later to the Rural Courts. Understardably, this was an attempt to introduce a British perception of the principles of justice to village affairs.

Today, all laws are subject to two important constitutional guarantees which ensure the rule of law and the fundamental rights of the individual. Judicial reforms have also resulted in impeding enforcement measures. At the same time it would be difficult at this juncture to bring back an arrangement by which representatives of farmers could be enabled to sit on judgement of matters which were originally included under the VCs. However the more feasible method appears to be to promote farmer organisations to bring social pressure

on errant farmers as an extension of an conciliatory approach. As a last resort, action could be taken to fall back on legal procedures.

It is desirable to formulate legal procedures with regard to the need for rapid interventions and summary justice hy officers who tend to take a more practical view of the problems encountered in the management of irrigation systems. This would mean that a court specially designated as a Water Court be set up to hold its sessions in the locality of irrigation systems on a regular visiting system. Court proceedings could be conducted without lawyers with the provision of appeal to a higher court.

Persons who preside over Water Courts will have to be senior officials in the Districts or someone selected from among the senior citizens who displays a proven capability to deal with these conflicts in an objective manner. It should be possible for these officers to be trained and appointed by the Judicial Service Commission.

Experience in Kimbulwana Oya in Kurunegala District indicates that social pressure can be effectively mobilized in bringing about a compromise. It is therefore necessary to ensure that conflict resolution be made an important function assigned to farmer organisations so that official interventions to initiate legal enforcement would be treated as a deterrent and as a last resort action.

### **Maintenance Work**

Proper maintenance of irrigation schemes by farmers was one of the principal considerations which motivated the colonial Government to revive ancient customs relating to paddy cultivation. Rut it always remained a vexed question. At the beginning, any improvement or repai- to an irrigation system was subject to a recovery of the Government cost in 10 equal installments from beneficiaries and the imposition of an irrigation rate in perpetuity. The willingness of farmers to pay the irrigation rate was therefore made an important consideration in the administration procedure evolved for the purpose. The Irrigation Ordinance of 1935 relates the irrigation rate to both construction and maintenance. The method of recovery was administered initially by preparing a scheme for the operation and maintenance of the irrigation system. This scheme provided for the imposition of an irrigation rate, and for deciding on responsibilities between the Government and beneficiaries for maintenance, labour contribution, variation of rates, and conditions applicable to irrigation rates. It also provided for an exemption from rates in instances where beneficiaries agreed to undertake maintenance work on their own.

Subsequent amendments to the Irrigation Ordinance show that the choice of the farmers to contribute by irrigate rates has been restricted by imposing the will of the bureaucracy. Apparently this resulted from a low collection rate because farmers were unable to honour the collective agreement with the Government. In fact the Director of Irrigation in the Administration Report for 1927 expresses his disappointment and reservations regarding the collection of irrigation rates.

More recently, irrigation rates or water taxes have been a politically sensitive area of irrigation policy. A major revision of this policy was adopted in 1984 to enable the farmers to contribute towards thr: cost of operation and maintenance in the major irrigation schemes.

An important feature of this new policy is to ensure that contributions made by farmers will not he credited to a central fund nor allowed to finance any work outside the scheme. In effect, the new scheme attaches more importance to promote and mobilize farmer participation for maintenance than to the actual recovery of money in economic terms. Ir order to take this new scheme to its logical conclusion, farmer organisations are requested to identify maintenance items and to set priorities to prepare a maintenance programme for implementation in each year under the supervision of the ID. In the final analysis, the result would be to make the bureaucracy accountable to the farmer organisations and to the Project Committee for collection and disbursement of the O&M charges.

The subject of cost recovery cannot he easily cast in legal terms to suit implementation. As such, present experiences on the new policy will have to he monitored carefully to determine the best course of action. It is therefore necessary to set up broad guidelines in law for implementation with the maximum amount of flexibility for future adjustments.

### Conclusion

In a social democracy, constitutional rights and guarantees are overwhelmingly important in safeguarding the rights of the individual. But these principles that help sustain an agricultural democracy do not necessarily apply with equal force to an irrigation democracy where a collective right to share a common resource is the primary concern. In conflicts associated with the equitable distribution of a common resource such as water, rapid interventions and decisions are of prime importance to safeguard the integrity of the system and the mechanisms which ensure equitable distribution.

To achieve these ends, it is necessary that irrigation legislation develop the maximum level of flexibility to accommodate such rapid interventions and

decisions. Flexibility should be the hall-mark of irrigation legislation. These features have been recognized in many of the past Irrigation Ordinances. When attention was focussed increasingly on major irrigation systems which have different dimensions and magnitude to their problems, poor understanding of the complexities of such issues compelled the authorities to take recourse to a path of least resistance by centralizing most activities in the hands of a bureaucracy and adopting highly uniform and rigid systems.

It is also true that no matter what policies and programmes are adopted, irrigation systems will have to keep moving, often due to the farmers who change and modify plans and schedules to suit their needs and perceptions. Even when wrong policies are adopted, the negative impact of such measures come to light long after the short-term gains have been achieved. Implementors of irrigation improvement plans get misled by these successes and repeat the same mistakes. Irrigation systems are often besieged by such short term policies. Even when such programmes are monitored closely, the 'true nature of their essential components has to be understood against a broad scenario of policies and programmes which link the past with the present.

Irrigation legislation by itself cannot bring about farmer participation. It can only spell out the broad framework for iuch participation and, to a limited degree, safeguard and facilitate the viability of the organisations in sustaining farmer participation.

Time has come to provide amendments to the current Irrigation Ordinance. Amendments Act No. 23 of 1973 was adopted to rectify certain legal impediments concerning repairs to damaged irrigation structures and jurisdiction of courts to try irrigation offenses. With the enactment of the Agricultural Productivity Law in 1973, the need to revise the Irrigation Ordinance to suit the. new institutional order was highlighted over and over again but no action was taken. On looking hack, this inaction cannot be regretted, although it may have happened for different reasons. It is contended that valuable information culled from field experiences can provide the basic framework and the perspectives for a revision of the Irrigation Ordinance in the near future.