

Patterns of social interaction and organisation in irrigated agriculture : the case of the Chao Phraya Delta

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Abstract

This report is concerned with the organisational exigencies of irrigated agriculture in the Chao Phraya Delta. The necessity to share a scarce resource at several successive levels of a network encompassing almost 2 million ha requires significant collective arrangements on which will heavily depend the reliability, the efficiency and the equity of water distribution.

Because of its specific features of a market-oriented frontier society, the Delta is often considered to have given rise to a distinct social fabric and many weaknesses, such as the limited impact of village based group activities, are ascribed to a lack of social capital. A brief review of the sociological and anthropological debate about the structure of the Thai rural society showed that if there is little overall consensus on the degree and definition of its 'looseness', a few general features can nevertheless be emphasised. The absence of corporate families or corporate groups stands in contrast with a web of interpersonal dyadic relationships which include horizontal relationships (typically within the kindred or for arrangements such as labour exchange) and vertical relationships (typically patron-client relationships with more powerful individuals).

'Natural communities' are rarely mobilised as a group. They can be construed as *denser points*, or denser zones, of the web made of superimposed interpersonal networks. This social structuring of space is also overlaid with the boundaries of the administrative villages and with those of the hydraulic network. There is no direct correspondence between all these different spatial units, which is problematic for the design of collective action. However, because of the power of the *phuyayban* and *kamnan* in conflict solving and in mediating between the village and the upper tiers of the administration, the administrative village is also becoming an entity to which farmers identify themselves.

Four case studies are presented, in order to explore the current arrangements for water management at the local level and to analyse the past failure of the Water User Groups. Despite a social setting little favourable to collective action, these studies show that there is a multiplicity of local arrangements aimed at sharing water in given circumstances. These arrangements neatly fit the general pattern of flexible, voluntary and short-term arrangements commonly found in Thai rural society. They are sometimes complex (10 farmers pumping at the same time at the head of the lateral and a second time at the plot level) but rather reliable and effective; they are also clearly dependent on the degree of uncertainty of the water supply and on the existence of some accepted local leadership.

In contrast with the flexible and endogenous nature of these arrangements, a situation of generalised free-riding, fostered by the dissemination of mobile individual pump sets, was

observed. The most striking feature was probably the wide acceptance, even by those who were harmed by it, of a situation in which locational advantages are perceived as so many normal inequalities of life. The first reaction of farmers in front of such situations is to find an individual adaptation to it (the '*thamjay* option'), which includes tapping secondary water sources (tube wells, farm pond, pumping from drains, etc). Conflicts are also probably reduced by the fact that such disadvantaged farmers may not rely only on rice and that if this is the case they may find occupational alternatives. This, coupled with a culture of conflict avoidance, strongly contributes to smoothen potential conflicts, although counter-examples are obviously not rare. Disagreements exist in most ditches but they were never found to lead to serious conflict and are always reported by farmers with the comment that they know how to handle such situations.

However prone to accept inequalities and to adapt to them, farmers have also shown that certain circumstances may drive them to refuse what is usually accepted. The 1998 and 1999 dry seasons, in a post-economic crisis context where agriculture had to support a growing number of family members and where the price of rice was attractive, witnessed several interventions from farmers worried to see canal head-enders engaging in triple cropping without having grown themselves a second crop. Many of these concerns were channelled through politician and resulted in several rotational arrangements sanctioned by all the agencies and administrative levels concerned, and enforced by RID and the local police. These arrangements were also short live but showed both the difficulty and the possibility to implement such large scale agreements. They also clearly evidenced how local water management is critically contingent upon higher levels of the distribution network and, therefore, the uselessness of organising farmers locally without ensuring their participation in the control of these upper levels. However, it is believed that if a role in water management and allocation is given to them, villagers are likely to mobilise the social capital needed (despite the evolution of the rural economy toward a complex mix of pluri-activity which reinforces the heterogeneity of villagers' interest and strategies).

The analysis of the WUG's failure has provided several clues on the constraints faced by farmers organisations. 1) there was a lack of congruence between hydraulic units and both the administrative and social networks, making social organisation more difficult; 2) the propensity to individual action and to conflict avoidance worked against the design of collective solutions; 3) local leadership is of paramount importance and is not always found; 4) social cohesion is weakened by the changes within the wider agrarian system; more villagers have predominantly non-agricultural strategies and have farming as a secondary activity, with less time to commit to collective action and less interest in water issues; 5) maintenance, which necessity is often a powerful 'glue' which unites irrigators, is now increasingly done by service contracting and paid by local public budgets (a trend to be strengthened by the decentralisation and the emergence of Tambon Administration Organisations); 6) additional roles such as providing the services of a cooperative did not prove to be a strengthening factor; many farmers with enough cash capacity prefer to buy input directly to local shops; 7) emphasis on organisation at the tertiary (ditch) level was misplaced as the inflow into the ditch remained uncertain; in addition the necessity to

collectively plan and carry out agricultural and water management operations at the farm level was drastically curtailed by several factors (more independence and flexibility gained with on-farm development, the spread of individual pumps and the shift from transplanting to direct seeding); 8) the lack of real empowerment and control over common resources have reinforced economic individualistic behaviours to the detriment of collective ones. In other words, farmers were asked to organise but without any control on both allocation and management of water, *neither locally nor at the upper levels*. In particular, as the inflow in the lateral canal remained (in the dry season) very uncertain, there was no way to design enduring collective arrangements. WUOs had not been initiated by farmers and they soon discovered that being or not being a member was insignificant, and that having or not having a group was of little importance; 9) last, it is clear that the rhetoric of empowerment and farmers participation is not understood by officials as it is by donors or consultants. Popular participation is still widely viewed as mass mobilisation to cooperate with the activities prescribed by the state.

The case studies on existing WUOs showed that farmers' support to the groups hinged on the belief that they received some beneficial treatment from being identified by RID as a WUO. It was also shown that the importance of accessing water in the dry season and the interest of politicians to build electoral clienteles motivated their interventions and their attempt to appear as 'patrons' of WUOs. This was observed in one case of a triangular relationships between RID, a WUO and a local MP.

The most important convergence point of the parallel analysis of Report I (*Dry-season water allocation and management in the Chao Phraya Delta*) and Report II (this report), is the understanding of the interplay between the technical, social, institutional and legal aspects of the water sector. The scenarios sketched out in the two reports emphasise the interdependence of the elements of a possible reform and, in particular, stress that it would be hazardous to attempt organising farmers in 'building blocks' before ensuring a technical and institutional capacity to define and enforce scheduling. This refers to a better control of large and complex diverging hydraulic networks but also to identifying users and defining rights, which demand a high level of legal and administrative control, and political commitment. There is no sound evidence at the moment that the administration and the politicians as a whole have fully endorsed the necessity of a sweeping reform and accepted its consequences on the redefinition of roles of the state and the citizenry. The main difficulty faced by the reform lies in the necessity to operationalise in parallel several measures (technical, administrative, legal, cultural) on which depends the overall success. This serves to caution against overenthusiastic short-term agendas in which the means and time frames to effect the different segments of the reform may not fit the constraints of the real world.