

STAKEHOLDER PARTICIPATION IN WATERSHED MANAGEMENT : A STUDY OF LOCAL WATERSHED GROUPS IN THE EMÅ RIVER CATCHMENT, SWEDEN

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ABSTRACT

The EU Water Framework Directive, that will have far-going consequences for water management routines in 27 countries throughout Europe, strongly emphasises the need for public and stakeholder participation in water management. The aim of this paper is to investigate the potential of participatory processes as an important ingredient in future water management in Sweden. The example used is the possible role that farmers' WaterCourse Groups, WCGs, may play in taking an increased responsibility for reducing nutrient losses from cultivated land. Agricultural sources of nutrients constitute an important part of the total flow of nutrients to lakes and seas in Sweden and the Baltic region. The present role of these groups is studied from an institutional perspective, specifically focusing on the *space of action* that these groups operate within. The reasoning is also relevant also for other types of stakeholder groups within a watershed.

Keywords: EU Water Framework Directive, Stakeholder participation, Watershed management

INTRODUCTION

That stakeholder participation improves, and even might be a pre-requisite for, sustainable management of watersheds, is by now a well recognised fact in most overseas development efforts and natural resource management related research in developing countries.¹ How the concepts of stakeholder involvement and local collective action for management of common pool resources, could be interpreted in a European context has not been explored in depth, though. The EU Water Directive, that will have far-going consequences for water management routines in 27 countries throughout Europe,² strongly emphasises the need for public and stakeholder participation in water management.³ This paper aims to investigate and explore the potential of participatory and local democratic processes as an important ingredient in future water management in Sweden.

The eutrophication of the Baltic Sea, is considered a major environmental problem in Sweden. In order to handle the problem, the Swedish government has established an Environmental Quality Objective; *no eutrophication*, towards which the nation should strive.⁴ Translated into nutrient transport figures, this means that Swedish N loads to surface water and seas should be reduced with 40 per cent in 40 years. As the agricultural sector contribute with a large part of the antropogenic total nutrient leakage, entrepreneurs within this sector will have to continue their work towards further reductions. In order to achieve the *no eutrophication*-objective efficient legal, economic and informative incentives should be developed and synchronised with existing legislative framework of the Swedish environmental law complex, and the EU Directive.⁵

Thus, a new institutional landscape for water management is emerging in Sweden, resulting in a potential decentralisation of certain management responsibilities from authorities to groups of water users. This puts the ability of local communities to create institutional structures able to deal with these new responsibilities in focus. The example dealt with in this paper is the possible role of so called WaterCourse Groups, WCGs,⁶ in taking an increased responsibility for reaching the national goal of a substantial reduction in nutrient losses from cultivated land.

Traditionally, a regulatory approach has been the dominating strategy concerning these issues. Strict and detailed regulations on what agricultural entrepreneurs can and cannot do regarding management of their land, industrial fertilisers and stable manure has not been able to deliver the expected results, though.⁷ It is time to investigate whether stakeholder participation and local collective action could take us somewhat further on the way towards “
and sustainable watershed management.

¹ Johnson et al, 2001, Swallow et al, 2001.

² 15 Member State countries and 12 pre-accession countries.

³ Kallis and Butler, 2001. Other main ingredients are the increased importance of ecological criteria and hydrological boundaries in water management.

⁴ SOU 2000:52. *No eutrophication* is one of 15 Environmental Quality Objectives to be reached within 40 years.

⁵ Directive 2000/60/EC.

⁶ Rosengren, 1997.

⁷ See SOU:1997:99:13 for an account of OECD's criticism of Swedish detail regulation and individual permits. See also Hallgren, 1997:19.

METHODS

Research questions are related to the institutional landscape in which the formation process of local entities of collective action within the civil society takes place. Focus is put on the potentials and necessary circumstances for these groups to become involved in decision-making and implementation in water resource management issues of relevance to them.

The paper is based on a qualitative material collected within the River Emå catchment, Figure 1. Within the catchment, the *River Emå Project*, initiated in 1995, is working towards the overarching goal to create an economically and environmentally sustainable society in the Emå region. Moreover, the project aims at building some necessary components of a *Regional Watershed Authority*. One part of the project is the formation of WCGs, and in 2001, 16 local farmers' groups had been formed within the Emå catchment, Figure 1.

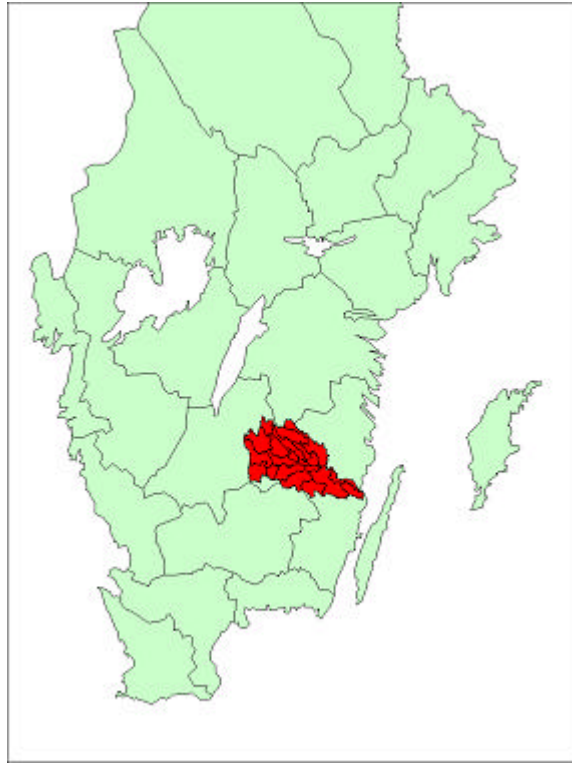


Figure 1: The River Emå Catchment, Sweden.

Three main sources of information have been used; literature on stakeholder participation and watershed management in Sweden, semi-structured interviews with key informants within and outside the River Emå catchment, and participant observation of meetings with farmers' groups in various phases of the formation process.

RESULTS AND DISCUSSIONS

The formation of WCGs is taking place within a complicated and since long developed intrinsic net of formal authorities, economic and legal incentives, sector interest organisations and NGOs combined with local social, religious and cultural relations. Local institutions are surrounded by higher level of institutions, which plays an important role in defining the possibilities and likeliness for new local institutions to emerge.

Two main sets of legislation and policies form the institutional background for the emerging WCGs; the EU Directive and the *no eutrophication*-goal of the Swedish Government. Combined with environmental legislation relevant for agricultural enterprises and the possibilities for obtaining subsidies for various environmentally friendly changes in production methods, these institutional structures form the institutional landscape at the international and national levels. The institutional set-up at river basin level immediately affects both the River Emå Project and its WCGs. The main landmarks in this institutional net are the County Administrative Boards and the municipalities (responsible for enforcing national and international legislation), the Swedish Federation of Farmers, and the River Emå Water Board. See Figure 2.

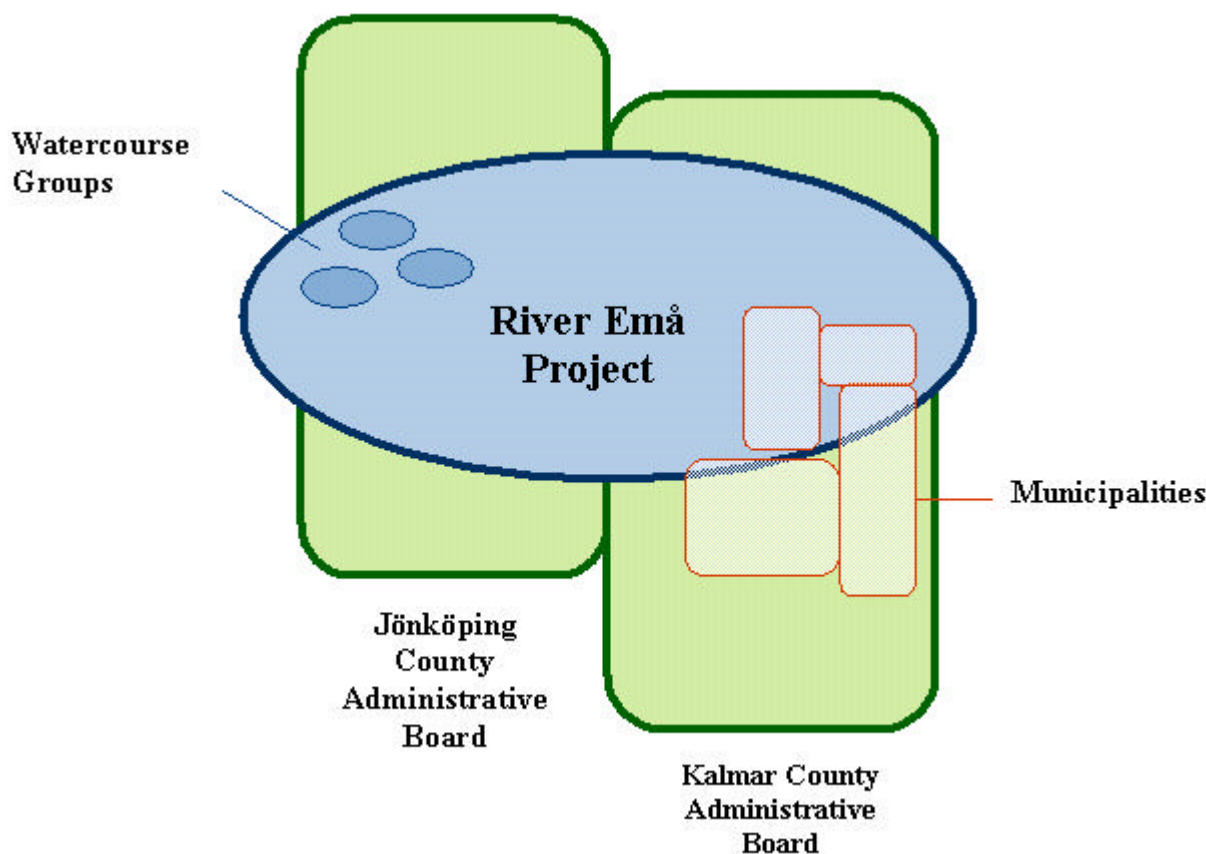


Figure 2. Regional institutional landscape surrounding local WaterCourse Groups.

Institutional theory proposes that institutional change is slow and incremental and most of the time follows a path much decided by already existing institutional frameworks.⁸ The implementation of the EU Directive will build on already existing administrative organisations and routines for water management. Swedish municipal authorities and County Administrative Boards have well defined responsibilities and methods. They are well adapted to the traditional Swedish detail regulation and top-down approach to environmental management. Undoubtedly, the inherent inertia of the institutional system will create serious obstacles for the implementation of a directive with increased public participation, more target steering and less detail regulations as the leading themes. This holds true also for the possibilities of letting the EU Directive's watershed perspective integrate the present fragmented division of responsibilities and jurisdictions between municipalities and County Administrative Boards.

With the concept of *path dependency* in mind, it is not surprising to find that a general sense of the non-implementation of the EU Directive is prevailing among the informants. Most of them foresee no big difference with regard to the influence of a watershed perspective-thinking in the management of water. All informants expressed strong doubts concerning the public participation part of the Directive, some with great disappointment, and others, mainly working at regional and national authorities, with noticeable relief.⁹ This seemed to be a dominating view among regional and national civil servants. Other informants, mainly representing the agricultural sector regretted that no increased space was likely to develop for responsibilities for groups in civil society as proposed by the EU Directive.

From the point of the Federation of Swedish Farmers, the County Administrative Boards and Swedish Environmental Protection Agency, and to some extent also the River Emå Project, the major goal of WCGs is given; to reduce antropogen contributions of nutrient to rivers, lakes and seas. The nutrient-loss-reduction goal is more or less imposed on most WCGs even before they have been formed, and only a limited freedom exists to formulate goals for the group. This creates very weak incentives for farmers to join WCGs.

What possibilities do WCGs have to actually change the course of things within their jurisdiction? Or put in other words, what jurisdiction do they actually encompass if they succeed in overcoming the logic of collective action? This question is so important that it can actually halt any formation of collective action at the local level, either because it is illegal,¹⁰ or because everyone knows that it will not have any practical possibilities to achieve anything once formed. On the other hand, if external institutions explicitly communicate that they permit local initiatives to decide in important issues, the

⁸ See for example North, 1990 and Kemper, 1995, who use the concept *path dependency*.

⁹ "River basin management must be based on a very strict regulation from above, otherwise it will never work."

¹⁰ Ostrom, 1990:90.

chance of collective action to emerge will be greater. But without any *space of action* for WCGs, there is simply no meaning of forming local associations, except for recreative purposes.

In Sweden, a strict regulatory approach has limited the space of action for local initiatives. Many informants referred to what they perceived as a lack of such a space for the WCGs. Strict and detailed regulations on what agricultural entrepreneurs can and cannot do regarding management of their land, industrial fertilisers and stable manure is often seen as unnecessary and very irritating by farmers, and has not been able to deliver the expected results in nutrient losses control. Thus, a strategy of stakeholder participation that puts larger freedom, combined with larger responsibilities, on individual farmers and WCGs, is necessary if we expect local initiatives to emerge and grow strong enough to solve any problems at the local level. This can be difficult in an institutional landscape that has been functioning otherwise for many years. In a future Water District, still another administrative level will be added to the institutional landscape. This will definitely have a bearing on the space of action for WCGs (and other entities within the civil society) to act within. Which signals do authorities send to agricultural entrepreneurs? What kind of space of action will be defined for these groups?

One example of the limited space for WCGs and their members to change management practices is manure disposal. Very definite rules prescribe how many months storing capacity a farm must have for livestock manure. The rules are based on national environmental legislation but are regionally adapted and administrated by the Environmental Administrations/Agricultural Units of the County Administrative Boards (and thus vary in-between counties). In most counties, the control function has been decentralised to the Environmental Boards of the municipalities. Generally, counties with great problems due to nutrient losses prescribe larger/longer storage capacity than counties with smaller problems. The rules concerning storage capacity are connected to the rules on spreading manure on the fields. These are extremely detailed and prescribes exactly between which dates that manure can be spread, how fast it must be worked into the soil, etc. This sometimes means that farmers spread manure at times when it is not optimal, neither from a nutrient loss nor from a crop up-take perspective. On the last day of the permitted period, all remaining manure is spread regardless of weather and soil conditions. These detailed regulations also give farmers a feeling of being unnecessarily controlled, and a mentality of *"trying, or cheating the system"*¹¹ easily develops. In some cases, local WCGs have received exemption from this type of regulations, in exchange for active work and follow-up of these activities within the group. Both the Humlebäcken Project and the Näsrum Project have received an exemption from the rules on manure spreading.¹² Both WCGs are situated in Skåne. In these cases the effect has been more active knowledge searching and awareness about ways to optimise manure management and an increased sense of self-management and responsibility by participating farmers.

The possibility for WCGs to fill a growing space of action depend on the capacity of the groups to solve the collective action dilemmas of institution building. In all groups studied within the River Emå catchment, the institution building process is still going on, and the groups did not appear to have reached strength enough to fill a particularly large space. On the other hand, would they have anything to do if they actually achieved that strength?

The crux of the problem is that even though farmers and their WCGs *could* fill a widened space of action, we do not know how large this space should be made for each and every WCG. A certain institutional maturity or stability is needed if an entity of collective action should succeed with the defined goals. But before the space of action can be widened, the WCG must have developed a strong administrative and enforcing capacity able to solve obvious collective choice dilemmas. On the other hand, the incentives to start and proceed with the necessary process of institution building are quite weak *as long as* the space of action is limited and detail regulation and bureaucratic rule prevails.

To be able to fill larger spaces of action in the future, most of the WCGs have a long way to go. The WCGs in Skåne that received collective exemptions from detail regulations, got these because of their comparatively strong institutionalisation and capacity of dealing with free-riding from internally decided rules. Even though the robustness of this capacity could be questioned, it was clearly much stronger than that of any of the WCGs within the River Emå catchment. Clearly the space of action has a strong bearing on what we can expect WCGs to work with, and what they can formulate as their visions. The process of building a WCG should be seen in a long time perspective, and will have a larger chance of succeeding if continuous and regular support is granted. Involving stakeholders in watershed management is not as easy as it may first seem, and local entities of collective action should not be expected to automatically pop up whenever and wherever they are "needed".

CONCLUSIONS

This paper have dealt with the potential roles that stakeholder participation in the form of farmers' groups might play in environmental management within a watershed. Even though the analysis here concerns WCGs, the reasoning is relevant also for other types of stakeholder groups within a watershed.

Short time range and erratic prolongation of the present founding sources for this type of efforts is a fundamental problem for the long-term processes that are needed to build sustainable institutions for watershed management. This contributes to

¹¹ "utmana systemet, lura systemet"

¹² Hallgren, 1997, Hall-Atterback, 2000 and Persson, 1996.

halting and delaying promising local institution building processes, awareness campaigns, educational efforts, and the development of meeting grounds for competing stakeholder groups, i.e. activities that build social capital and need stability and long-term support. Consequences are frustration and energy-drainage among stakeholders.

Finally, on a general level, the expectations on what WCGs will be able to do are far higher than the expectations on what type of decisions could be decentralised to them. Of course, certain institutional maturity or stability is needed to take on certain responsibilities. The main problem is that we do not know how large the space of action should be made for each and every WCG. And until we know, no responsibilities can be decentralised. And before they are, no groups will have the chance to test and prove their institutional strength. In a way, the hen is expected to lay her egg before she has even hatched herself...

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