# Choosing Property rights for Coastal Zones

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The title of this article is deliberately chosen to stimulate to alternative thinking about the development of the coastal zone. Much of this development is depending on the quality of governance of coastal resources. And many of the principles for such governance are rooted in the prevailing institutions in a particular society. These are the "formal constraints (rules, laws, constitutions), informal constraints (norms of behaviour, conventions and self-imposed codes of conduct) and their enforcement characteristics (North 1990). Institutions also include coastal property rights, as well as legal frameworks and less formal collective action. In many ways coastal management has a character of collective action that takes place with relation to legal rules, rules in use and acknowledged property rights (Brown & al 2002).

When it comes to the nature of property rights, we tend to think that property rights in the coastal zone is something that is handed down to us from ancient times, like deep-frozen relations that are almost like empirical facts which cannot be changed.
The fact is that property rights, like other social institutions, change all the time. In the coastal zone they are the outcome of different struggles of interests, of political power plays, of slow constitutional processes and occasionally it even happens that they are modified from lessons learnt within one generation. As changeable institutions, they can in principle be scrapped, designed afresh or redesigned.
Thus there should be a scope for "Choosing the right property rights" for the usage of a particular coastal zone. The potential and the obstacles to such purposive institutional choices are the theme of this article.

## Some useful theory

The best way to open up the mind is to have a look at theory. What does theory have to say about the advantages and disadvantages of different kinds of property rights?
If we divide the "goods" we humans enjoy on our coasts in different categories, we often hear of "public goods", "common goods" and "private goods". These are characteristics of their property rights nature, a thing or a resource can either be public – for all, it can be common - for a defined group, or it can be private – exclusive for an individual or a corporation.
But at the same time we tend to think of different natural resources, especially in the coastal zone, as naturally of a private or of a common or of a public character: a coastal scenery is naturally believed to be a public good, an ice-cream enjoyed on the beach is thought of a private good.
But theory says that this is not necessarily so; no resource is "naturally" a public good, a common good or a private good. This was already observed by the famous French sociologist Durkheim as early as 1890 (Durkheim 1950). In our days a wide open beach can be made private if it is about to be destroyed by hordes of sun-seekers - and ice-cream can be made public if there is a power cut and it is about to melt.

The basic characteristic of a public good is that it is **costly to exclude** potential benefactors from enjoying the good. This means that there can be both economic, organisational and social costs connected to the regulation of the use of a public good. To alter the non-exclusiveness of a public property resource without transforming it to common or private property usually involves prohibitive transaction costs in the form of policing and education campaigns.

On the other hand, the basic characteristic of a typical private good is the principle of **subtractability.** A unit harvested of such a good is subtracted from the stock or flow of goods and is not available to others. The transaction costs in the governance of private goods are generally low as the owner has exclusive rights (*dominium*) to enjoy the good; others who want to enjoy it will have to become thieves or trespassers - or they can buy a ticket. Or as the case is in many areas of the world, the excluded ones can be tolerated by the owner, or promised a general amnesty against owner's prosecution by the state. The latter is the case with the so-called "everyone's right" (*Allemannsrett*) to pick seashells, wild berries, mushrooms and roots in Scandinavian countries.

Thirdly, there are the Common Property Right regimes – on the existence of which the International Association for the Study of Common Property (IASCP) has gathered enormous empirical evidence during the last decade. These are combinations of exactly these public goods characteristics and the private goods characteristics mentioned above: Resources which are common to some – although not to all – share the problem of costly exclusion with the public goods at the same time as they tend to have the subtractability problems of the private goods (Ostrom 1994). If such finite resources lack institutions that effectively regulate access and sustainable harvest, we find that overuse, depletion, extinction and erosion frequently become the fate of the Common Property resources. Such fates are often termed "Tragedies of the Commons" and are rapidly used by economists to promote private ownership of coastal resources like fish (quotas), shellfish (location licences) and kelp (harvesting licences).

Still, the accumulated institutional knowledge based on the Common Property regimes of the world is very valuable for all kinds of planning and governing for coastal sustainable development in the new century. To the extent that coastal management is collective action, users who learn to see the collective consequences of their own actions can acquire new forms of collective rationality. So what we have learned from fisheries, forestry, pasture husbandry, irrigation and other locally managed resources, can be made applicable also to correspondingly complex issues in the coastal zone.
We should note that already Aristotle noted that "what is common to most people receives the least attention". The modern institutional theories of Common Property regimes thus carry the potential for us, 2300 years later, to give our crucial coastal commons the attention they deserve.

## The opening up of institutional possibilities

One of the main challenges in European coastal areas is to integrate into one coherent strategy the need for conservation of crucial coastal resources with the need for sustainable development for coastal communities. In many cases the sustainable use by humans of coastal resources (e.g coastal heather-moors and eiderduck nesting places) is the only way of conserving them. In this perspecive, property rights seem so far the best linkage we have between the bio-physical world and the social world, the human impact on coastal ecosystem

is to a large extent determined by this linkage. More specifically, this link consist of different bundles of rights and duties for members of communities, not toward natural things as such, but towards other community members and citizens of larger entities with respect to particular coastal resource.

If we open up these bundles of rights and duties, often called *de jure* (socially accepted) property rights, we find that "ownership" means a number of different things. Even the simplest "romanistic" notion of "owning a thing" can be deconstructed in different property rights elements:

- The rights and duties related to access to a resource
- The rights and duties related to harvesting from a resource
- The rights and duties related to partaking in the management of the use and maintenance of a resource
- The rights and duties related to decisions to include or exclude others from access to, harvest from or participate in the management of a resource
- The rights and duties related to decisions to alienate the resource.

In the real world we find these 5 basic property rights elements combined in all possible ways. The weakest form of "ownership" is to have only access right, e.g. to a public beach. While the strongest form of ownership is a bundle of all 5 property rights elements - only a "full owner" can make the decision to alienate his property and become "landless". In between these extremes there are multiple forms of property rights institutions where community members have imposed restrictions on themselves in various ways. The most familiar of these "middle range" ownership forms is the "Commons" which consists of 4 of the 5 basic property rights elements - all but the right to alienate the resource.

For the integrated management of coastal zone development (ICZM), these different forms of owning opens up a whole palette of institutional possibilities. Through the purposive design of "rules-in-use", "laws and by-laws", "incentive systems", sanction systems and participatory management systems, sustainable coastal development can be achieved through a multitude of transaction cost efficient measures (Goodin 1996).

However, this "theoretical freedom" of institutional design is thwarted by the restrictions of the real world of political power and organised interests. Here we find that the choice of efficient bundles of property rights for sustainable coastal development is heavily restricted. Most things or resources already have property rights attached to them, and these are in many instances difficult to change without lengthy procedures in the court system.

Especially individual – or private property - rights are difficult to change, these are often used as collateral for investments or carry inheritance expectations. The right to private property is in most countries codified as a fundamental liberal right and to directly take private property rights away from someone usually implies litigation, expropriation and compensation. While the loss of the weakest property right - the mere access right - involves no compensation – in Scandinavian language: "all mens' right is no mans right!". On the other hand a relatively strong property right like Common Property rights have been relatively easy for nation states to erode and usurp, like in the case of Scandinavian Mountain and Coastal *Allmend* (Taranger 1892*)*. Here property rights to area-based resources have through the last 3 centuries evolved from Common Property Regimes – often locally controlled in a sustainable way – into some form of public property – with easy access and poor state management – to

finally become privatised – wholly or in a fragmented way. Thus the state is an important agent in turning what is common into something private. And often it seems that from the private property form there has for a long time been no scope for transformation to alternative forms without expropriation and compensation. Only lately has the idea of combining area planning methods with land courts been contemplated as a more efficient way of opening up the scope for institutional redesign without cumbersome litigation (Sandberg 2001).

Thus there is now a scope for renewed interest in the origin and dynamics of property rights formation, especially in the coastal zone where the influence of both harvesting, production and leisure technologies – and their corresponding power relations is particularly strong. In a rational world, where also ecological rationality should apply, present property rights are just frozen images of past power relationships.

Some of the most recent examples of visible dynamics of new property rights formation on European Coasts, are the current shifts in marine production technology in the North Atlantic. Despite persistent attempts to transform the property rights of the wild fish-resources here into more private forms (Individual Vessel Quotas - IVQ, Individual Transferable Quotas ITQ etc.), the overfishing and depletion of both coastal waters and the oceans have continued. Thus there is a gradual transfer of production capacity from insecure harvesting to more predictable farming in the marine environment.
The production technique is in many respects institutionally determined; the licences are in most countries specified in enclosure volumes or acreage (closed pens, shell-collectors), thus these became preferred to the more cumbersome open solutions of sea-ranching or enhancement of wild stocks of salmonides. And in turn the development of appropriate technology for farming within this institutional framework drives the further evolution of property rights; thus individual licensing for specific localities generate private property rights in the coastal zone. When then for instance the Norwegian state in addition demands 5 mill NOK for a salmon farming licence for a particular locality, we are very close to this becoming privatised sea-areas in the coastal commons.

In addition, the domestication of a formerly wild specie tend to drive out the wild specie. Thus the formidable success of North Atlantic Salmon farming has had an effect on Wild Atlantic Salmon (through lice, diseases, escapees and confusing the homing and mating instincts of wild salmon). The wild salmon is now in most North Atlantic Rivers a tragedy, thus an important coastal and riverine common property resource is in jeopardy. Aquaculturalists now command increasing areas of the coasts and fjords of Norway, Scotland, Ireland and Canada, and they are able through heavy lobbying to prevent the state from introducing adequate protective measures for the Wild Salmon.
Thus their "contracting for Property rights" pays off and the content of their resulting property rights will in the future reflect the chosen technology and the power relationship of the salmon farmers versus the state.

## Ecosystem resilience and Common Property regimes

However, more than the mountains and the forests, the coast is a living and extremely complex ecosystem. Its reproduction, cultivation, recipient and leisure properties depend on the continuation of vital ecosystem processes (Holling 1996). So far the separate coastal resources have been treated separately in different state sectors: the fish, the sand, the kelp, the salt, the beach etc.

But with the advance of the cultivation of the sea, we realise that both the wild organisms – and the cultivated organisms - they all depend on a healthy ecosystem. The continued flow of vital ecosystem services is thus crucial both for the enjoyment of the public and the profitability of both the leisure and the aquatic businesses.

Therefore an institutionally fragmented ecosystem will quickly loose its resilience and both the ecosystem value and the market value of private coastal property rights will deteriorate. In order to prevent this it is necessary that all stakeholders that hold some rights, whatever their strength. - and feel some duties towards the totality of the coastal ecosystem - come together and agree on certain ecosystem objectives.

According to the "Ecosystem Management Approach", these will have to be binding at the lowest possible level of governance and will have to include human activity (e.g. cultivating and leisure activities) in their resilience strategy (UNEP/CBD/COP/4/1998).
But this comes very close to looking at the Ecosystem as the crucial Common Property resource – and to start to develop new theory for Coastal Ecosystem Property Regimes. That is the real challenge for the new century!

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