

# **Resource Management: INSTITUTIONS AND INSTITUTIONAL DESIGN**

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## **Property Rights to Nature**

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1

## **Institutions governing access to land**

- Why land?
- Why institutions and land?
- Why land tenure (and not property rights to land)?

- History matters
- Culture matters

What are property rights?

- In everyday discourse
- In legal deliberations
- In social science

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# Property Rights I

## Three perspectives

- **Everyday experiences**
  - “Property as a thing” The owner relates to the thing
- **Legal conceptions**
  - “Property as relations among people” Owners in relations to non-owners
- **Social science approach(es)**
  - “Property as legitimate power” Considerations of distributional justice.

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## Property Rights: the everyday perspective

A owns P, or  
P is the property of A,  
means that A has

- Expectations about usage
- Expectations about societal regulations

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## Property Rights: the everyday perspective

### USAGE

1. A has exclusive access to P
2. Other persons have access to P only if granted permission by A
3. A has the right to transfer to others rights under 1) and 2)

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## Property Rights: the everyday perspective

### SOCIETAL REGULATIONS

4. Those interfering with A's rights under 1, 2, or 3, or gets access to P without permission are liable to punishment
5. Those causing damage to P are liable to pay damages to A
6. If the usage of P hurts others than A, A is liable

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## Property Rights in Law:

Property rights as

- Rights against other people (Rights to expect others to act in certain ways)
- Liberties (Rights to act without the consent of other people)

References:

- Hohfeld, W.N. 1913&1917 in Yale Law Journal
- Commons, John R 1932 "Legal Foundation of Capitalism"

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## Rights: The "Hohfeldian" conception

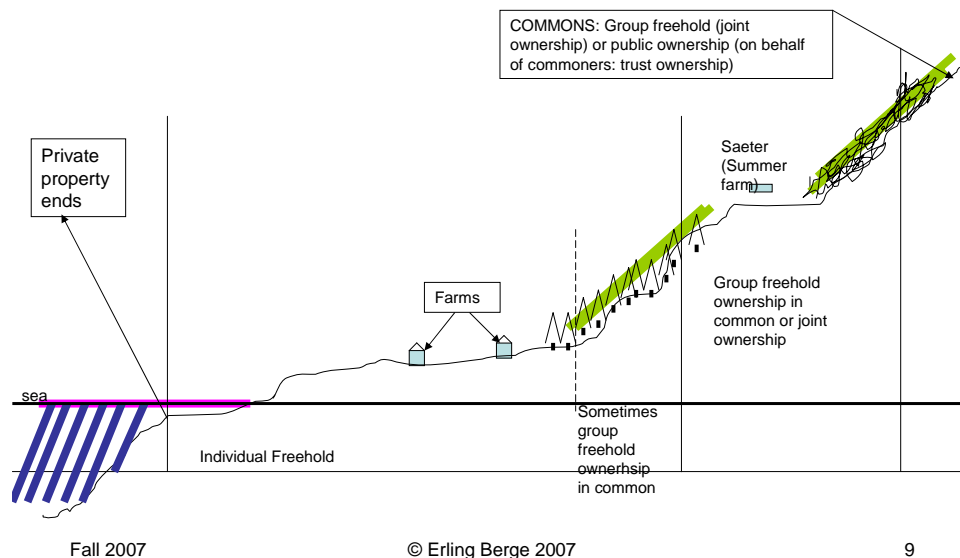
Defining the relation (jural correlates)		its limit (jural opposite)
OWNER	NON-OWNER	
claim-rights	duties	exposure
liberty	exposure	duties
powers	liability	disability
immunity	disability	liability

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## NORWAY: from sea to mountain



## The goods of the commons

**Basic resource classes** according to Norwegian law

1. Ground and remainder
2. Pasture, timber, fuel wood,
3. Timber
4. Hunting of small game (except beaver)
5. Hunting of big game
6. Anadrome fish (salmon, trout)
7. Fresh water fish except anadrome species
8. Salt water fish except anadrome species

## Appropriator units of commons resources

According to law

1. Legal persons (citizen, firm) in State commons, Salt water fisheries
2. Cadastral units (farm, fishing vessel, herding unit) found in Bygd/ State commons, Salt water fisheries, Reindeer herding, Forest commons
3. Registered persons (individuals according to registered residence) in Bygd/ State commons, reindeer herding

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RESOURCE REGIMES	Ground and remainder	Pasture, timber, and fuel wood	Fishing and hunting of small game except beaver	Hunting of big game and beaver	Pasture and wood for reindeer herding
Rights of common	No	Yes	Yes	Yes	Yes
Co-ownership	In common	Joint	Joint	Joint	Joint
Unit holding rights	Cadastral unit	Cadastral unit	Registered persons	Registered persons	Reindeer herding unit registered in the local reindeer herding district
Use and quantity regulation	Internal ("Owner decision")	Internal ("needs of the farm")	Internal ("owner decision")	External ("publicly decided quotas")	Internal ("Needs of the industry")
Alienability	Inalienable	Inalienable	Inalienable	Inalienable	Inalienable
Power of local choice	Yes	Yes	Yes	Yes	Yes

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## General observations 1

- Overuse, conflict, and potential destruction of natural resources producing highly valued products is likely to occur where those involved act independently due to lack of communication or incapacity to make credible commitments (model: "Tragedy of the Commons")
- If those who directly benefit can communicate, agree on norms, monitor each other, and sanction non-compliance with agreements, individuals can establish rules to control overuse, conflict, and destruction of natural resources (Self-governance is possible!)

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## General observations 2

- The variety of locally selected norms, rules, and property rights systems used in field settings is immense, but can be characterized by general design principles
- Locally selected systems of norms, rules, and property rights that are not recognized by external authorities may collapse if their legitimacy is challenged, or if large exogenous economic or physical shocks occur

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## General observations 3

- Control of natural resources by state authorities is effective in some settings but is frequently less effective and efficient than control by those directly affected especially related to smaller-scale, natural resource systems
- Efforts to establish marketable property rights to natural resources systems have substantially increased efficiency in some cases and encountered difficulties of implementation in others

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## Some questions to discuss

- What are the attributes of Common Pool Resources?
- What are property rights?
- How do property rights get established, and what are the effects of diverse property rights regimes?
- What social and physical factors affect the formation of property rights?
- Why are local, self-organized property-rights regimes important, but not sufficient, in achieving sustainable natural resource systems?
- Why are property-rights regimes organized at many diverse scales necessary to achieving sustainable natural resource systems?

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## A Classification of Goods

	APPROPRIATORS ARE	
RESOURCE IS	Excludable	Non-excludable
Subtractable	<b>PRIVATE GOODS</b>	<b>COMMON POOL GOODS</b>
Non-subtractable	<b>CLUB GOODS</b>	<b>PUBLIC GOODS</b>

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## A Classification of Property Rights 1

- **Access:** The right to enter a defined physical area and enjoy non-subtractive benefits
- **Withdrawal:** the right to obtain the resource units or “products” of a resource

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## A Classification of Property Rights 2

- **Management:** The right to regulate internal use patterns and transform the resource by making improvements
- **Exclusion:** The right to determine who will have an access right, and how that right may be transferred
- **Alienation:** The right to sell or lease either or both of the above collective-choice rights

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Holders of different **bundles of rights** to manage resources: **Roles** in a production oriented management system

Rights of	Owner	Proprietor	Authorised claimant	Authorised user	Authorised entrant
Access	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Withdrawal	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	
Management	<b>X</b>	<b>X</b>	<b>X</b>		
Exclusion	<b>X</b>	<b>X</b>			
Alienation	<b>X</b>				

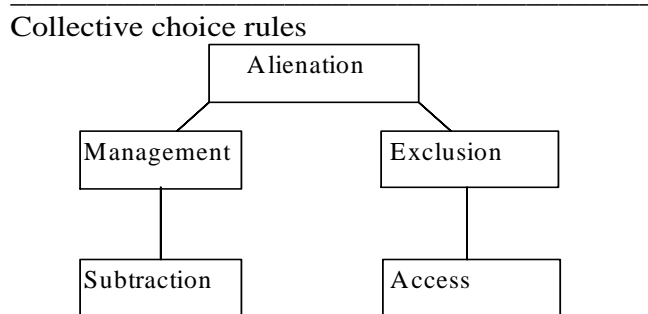
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## The standard conception of ordinary private property (OPP) rights

### A hierarchy of management rights



### Operational choice rules

Source: Schlager & Ostrom 1992

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## Trust management roles

Bundles of rights associated with positions in a consumption oriented management system

	Trustee (owner)	Cestui que trust (beneficial use)	Manager (managerial use)	Rights sum up to
Access	(X)	(X)	(X)	X
Subtraction	(X)	(X)	(X)	X
Management	(X)	(X)	(X)	X
Exclusion	(X)	(X)	(X)	X
Alienation	X			

Source: Berge 2002 pp14-33 in Schmithüsen, Iselin and Herbst (eds) "Forest law and Environmental Regulations", ETH, Zürich, ISSN 1420-1143

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## Well-defined rights 1

- Security for the future
- Well-established property rights do NOT require alienability
  - Alienability promotes efficient resource allocation
  - But it is not a necessary condition for the promotion of efficiency

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## Well-defined rights 2

- Self-governed commons resource systems can
  - Develop boundary rules to exclude non-contributors;
  - Craft authority rules to allocate withdrawal authorizations; and
  - Devise forms of active monitoring and graduated sanctions
- **Also without rights of alienation**

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## Well-defined rights 3

- Well defined rights do not depend on being established by the “state”
  - Roman law traditions
  - Common law tradition
  - Customary law
- Collective-choice arenas are needed
- Conflict resolution mechanisms are needed

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## Failure of government property rights because (1)

1. The vastness of the areas transferred to state ownership (in most counties over 50% of total land area);
2. The speed and manner in which the transfer of ownership has been made;
3. The failure to recognize and accommodate the customary rights of individuals and communities to the forest, which has created resentment among local populations;

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## Failure of government property rights because (2)

4. The limited budget and administrative, technical, and enforcement capacities of the newly established estates
5. Growing pressures from expanding rural populations; and
6. The failure of rural development to provide alternative employment and income opportunities

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## Reduction of externalities / transaction costs (1)

1. Accurate information about the condition of the resource and expected flow of benefits and costs are available at low cost
2. Participants are relatively homogenous in regard to information and preferences about the use of the resource
3. Participants share a common understanding about the potential benefits and risks associated with the continuance of the status quo as contrasted with changes in norms and rules that they could feasibly adopt

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## Reduction of externalities / transaction costs (2)

4. Participants share generalized norms of reciprocity and trust that can be used as initial social capital
5. The group using the resource is relatively small and stable
6. Participants do not discount the future at a high rate
7. Participants have the autonomy to make many of their own operational rules which if made legitimately, will not be interfered with, and even potentially supported and enforced by, external (local, regional, and national) authorities

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## Reduction of externalities/ transaction costs (3)

8. Participants use collective-choice rules that fall between the extremes of unanimity or control by a few ( or even a bare majority) and thus avoid high transaction or high deprivation costs
9. Participants can develop relatively accurate and low-cost monitoring and sanctioning arrangements

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## Also important:

- The regime in which the system is embedded
  - Self-organisation possibilities
  - Provision of relevant information
  - Role of national government
- Resource attributes
  - Storage and flow of resource units
  - Size and distribution in space of yield

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## Local property rights

- Self-designed rules perform better
  - Information is timely and relevant
  - Rules are adapted to social conditions (often part of the general local culture)
  - Economize on monitoring and sanctioning costs
  - Enforcement swift and effective

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## Scaling up

- Dilemmas and problems of collective action are repeated at higher scales (larger resource systems and more people)
- Larger resource systems need organisations of local organisations (nested/ federal systems)

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## Conclusions

1. No single, uniform set of rules can possibly address the myriad problems faced by most resource users
2. No one knows the nuances of the physical and cultural environment better than the resource users themselves
3. Local-level organisations are not panaceas. Some problems require higher level coordination
4. Local level governance structures are not anachronisms. They will continue as long as local users are allowed to govern themselves

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## Land reform in Kenya (Ensminger 1996)

- The problem to be explained is the unravelling of formal titling in Kenya
  
- Kenya was the first country in Africa with a comprehensive government titling program
  - Prior to the program there were a widespread move towards “privatization” (=individual title)
  - Given that, the lack of success of the government program is surprising

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## The problem of compliance with formal rules

The main problem is described differently

- Anthropology: Contextual fit of institutions
- Sociology: Embeddedness of institutions
- Economics: Formal institutions building on informal institutions

In our case this means:

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## Reasons for failure (1)

- High transaction costs
- Lagging factor markets in capital and labour
- Asymmetric information work to the advantage of the better educated in the establishment of property rights,
- Lack of “fit” between property rights and system of production

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## Reasons for failure (2)

- Household consumption needs varied considerable over time, fixed land rights did not
- Lack of fit between property rights and system of inheritance
- Lack of fit between ecological conditions and property rights

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