The Marine Socio-Economics Project (MSEP): Building the Socio-Economic Capacity of Marine NGOs



economics as if people and the planet mattered

Economics Briefing 10 Ownership and property rights

Different ownership models for natural resources determine how they are used as well as the outcomes that result from their use. This briefing looks at the how property rights have developed through history, how they have been enforced – and what issues these different ownership models pose for nature.

Property is fundamental

Property rights are central to the way that market economies work. Without clear and enforceable rights to property, and the freedom to sell these rights to somebody else, a market cannot function. Imagine if all your property could be arbitrarily taken away at any time? Because owning something would not actually guarantee you the rights to use that thing, it would be impossible to trade ownership securely or establish acceptable market prices for things.

Property rights are enforced, almost universally, by the state, which claims a 'monopoly on violence' over its territory: if anybody other than the state steals or abuses property rights, they risk being punished by state forces such as the police or military.

A state also finances itself by enforcing tax payments – a form of property confiscation, but one that is generally (in most liberal democracies) subject to some system of checks and balances that prevents its misuse.

Property throughout history

Although it is common to think of property as being 'private' (i.e. held by a given individual or institution) this is not always the case today, and was not always so in the past.

The concept of property evolved alongside civilisation, as small, hunter-gatherer societies moved to stable encampments and took up early agriculture. Along with private property, various other forms of common or general ownership developed. In ancient Babylon, for instance, 'Hammurabi's Code' stipulated that all land was originally owned by 'Marduk', the patron god of the city – who had allowed his vice-regent, the King, to oversee the fair use and exchange of land by his citizens. Likewise, land in the Ottoman Empire was owned exclusively by the state, but leased out for use by others. 'Commons' of various kinds – from grazing rights in fields to the use of rivers for fishing – also emerged, regulated often by convention and enforced by agents other than the state. Much agricultural land in Western Europe, prior to the enclosure movements, was held in common.

In some cases, the state has actually acted to *prevent* property rights being enforced, most obviously with the steady outlawing of slavery.

Although the tendency over time has been for property regimes to expand, reducing the number of things without owners, many important features of economic life remain exempt. Ideas (outside of the intellectual property regime), air and seawater are three obvious examples. In these cases, enforcement of property rights would be prohibitively expensive.

Enforcing property rights

Enforcing property rights is not always simple. Take intellectual property, for instance. Ideas and knowledge inside people's heads are, for obvious reasons, outside of property law. Yet, once these same ideas have been turned into physical things – such as writing, design plans, computer codes, or finished products – we can officially own them and claim property rights over them.

We can protect ideas (in their material form) through patenting, which provides a legal monopoly on an idea's use. Patents encourage innovation because once innovators are sure their idea won't be stolen and exploited by someone else, they are more willing to spend time and money developing it.

Copyright, in a similar way, protects the use of cultural ideas (such as art, music and

literature), as well as sensitive or commercial information (such as Coca-Cola's recipe). Like patenting, it enforces a kind of legal monopoly over the reproduction of copyrighted material.

These forms of intellectual property are all subject to increasingly complex systems of legal regulations – which can often lead to lengthy court cases over their use.

Changes in technology pose huge challenges to the intellectual property regime: pirating a film, for example, used to be difficult, timeconsuming and involve a loss of quality. Now, digital encoding makes it cheap and easy to reproduce huge volumes of recorded information.

Private property failures

Aside from the practical challenges surrounding its enforcement, there are clear theoretical problems with the property rights system. Conventional economic theory associates these with 'non-rival consumption', access rights, and the unintended side-effects of use.

Non-rival consumption

"Non-rival consumption" refers to the capacity of some goods to not be depleted through use. Ideas are, again, an obvious example, as they can be reproduced perfectly in perpetuity. Other examples might include the provision of lighthouses or free-to-broadcast radio transmissions. In all three cases, since additional consumers of the commodity have no impact on the availability of the commodity, enforcing private property rights does not guarantee a fair or efficient use. For that to occur, the commodity must be consumed as it is used, enabling the supply and demand price mechanism to function. If it does not, the commodity will almost certainly be under-supplied by the market alone.

Access Rights

"Access rights" refers to the ability of the property owner to regulate access and use of the property. Fences, walls and doors are one way to do this with land and buildings, and can be legally reinforced. But at least some things are extremely hard to prevent access to. The road network is one example, since it is too huge to police; another is open seawater. In both cases whilst it would be at least theoretically possible to restrict access, in practice the immensely high costs of enforcement generally prevent anyone from attempting to do so. In economic models, such resources are often termed "public goods". (These are not to be confused with the moral concept of "the public good")

Because of the impossibility of restricting access to public goods, their use may become economically excessive. The sea becoming overfished, for instance, is a classic example of the "tragedy of the commons" in which free access leads to excessive consumption. A single fisher does not intend to deprive others of a livelihood, but the effect of their fishing activities is to reduce the number of healthy, breeding fish in the sea, which in turn contributes to a steady depletion of stocks over time. In other words, the action of fishing has an externality - an unpaid cost that is paid for by others. Positive externalities sometimes exist, too: a lighthouse may be paid for by taxpayers in one country, but sailors from other nations would also benefit.

Different allocation mechanisms

In all the cases above, a private property regime may not be the best way of sharing out resources, due to the difficulty of enforcing meaningful property rights. As environmental issues very often have this feature, private ownership models might not be the most suitable way to deliver environmental sustainability or social justice. There is, however, a classic argument in favour of granting property rights on public goods called the 'Coase Theorem'. This supports trying to impose at least some kind of property rights system over public goods, in order to allow users to trade their rights. Even if such property rights were imperfectly enforced, Coase Theory maintains they would lead to a socially more optimal outcome than would otherwise occur. The Theorem provided the theoretical rationale for the introduction of carbon trading, in which a public good (the earth's atmosphere) was subject to a trading regime. It is so far unclear if the attempt has been successful, however.

Activists and academics have begun to return to the issue of property rights and their allocation, seeking to break out of the old duality between private and state property. Elinor Ostrom, winner of the 2009 Nobel Prize in economics, stressed the need for a diversity of property forms and governance structures in managing the use of environmental resources. By placing management as close as possible to use (i.e. local management), and allowing a range of different property forms, the complexity of issues generally involved in environmental questions can be reconciled. Ostrom stressed the importance of convention and tradition in containing knowledge about fair and sustainable use that could be lost through the imposition of a more formal property regime.

Further reading and useful resources

- Coase, R. (1960), "The problem of social cost", *Journal of Law and Economics* 3:1
- Hardin, G. (1968) "The tragedy of the commons", *Science* 162
- Ostrom, E. (1990), *Governing the Commons*

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