15.2: Common Pool Resource Theory

With a brief history of megaconferences now complete, we can move on to discussing the substance of the debates on climate and the environment. The notion of public goods comes from the original definition of a good that is non-excludable and non-rivalrous. Think of it as something that anyone can access at any point in time without making it any less available for anyone else to consume. The best example of a public good is knowledge; in this case we can use the example of information that we find on the internet. All knowledge, once freed and put online for public consumption, is nonexcludable and non-rivalrous in consumption. You cannot exclude anyone from consuming knowledge and learning, unless they do not have access to the means for knowledge transmission, which may be the case in some countries where specific websites are banned. You also experience nonrivalry in consumption. Air is another example of a public good. Under normal circumstances nobody can stop you from breathing air into your lungs, and the fact that you breathe air does not stop someone else from having the opportunity to enjoy it. This is the definition of a perfect public good: one that is always non-rivalrous in consumption and non-excludable in access.

Common pool resource theory derives from Garrett Hardin (1968), who said that if left to our own devices we would exhaust all the resources available for our consumption. Imagine if you were a shrimp fisher. You need to fish and sell your catch to sustain your family. Let's say that there are 10,000 shrimp in the small catchment that you fish in. But there are 99 other fishers in the sea at the same time as you. If everyone cooperated and consumed only 1/100th of the total available shrimp, each would have 100 shrimp to sell. If at any point any fisher catches more than 1/100th, there will be other fishers negatively affected. Hardin used a similar metaphor to make the point that if resource consumers behave selfishly, they would exhaust the resources they were supposed to preserve. Hardin called this the tragedy of the commons. Closed bodies of water, plots of land and large-scale areas of forests are all common pool resources. They are rivalrous in consumption, but nonexcludable.

One can summarise the theory of common pool resources by placing goods in four specific categories: private goods, common goods, club goods and public goods. This categorisation framework has two dimensions. The first dimension is
excludability. If you can prevent someone from accessing a good, that good is excludable. The second dimension is rivalry in consumption. Goods that are depleted are rivalrous in consumption. If I consume an apple, you cannot consume that same apple because I have already eaten it. Private goods, such as food, clothing and other material objects, can be purchased and acquired because they are tradable. As a result, these goods are both rivalrous in consumption (if I buy a car, nobody else can buy that exact same car) and excludable (you cannot buy a car unless you have the money to purchase it).

Goods that are non-rivalrous in consumption and non-excludable are called public goods. These are the things that everybody can enjoy. Consuming them does not reduce the possibility of someone else having the same opportunity of consumption. Air is a public good. Everybody can breathe air without worrying that at some point they will not be able to breathe simply because somebody else is also breathing. Finally, common goods, which are also called common pool resources, are those goods that are non-excludable but rivalrous in consumption. Fish in a fishery, trees in a forest, water in an aquifer or a lake. All these natural resources are common goods and, therefore, common pool resources. What makes common pool resources so interesting is that the theory, developed by Elinor Ostrom (1990), argues that despite the fact that humans are supposed to be selfish, faced with conditions of scarcity we are able to self-organise and govern our common pool resources (our ‘commons’) in a sustainable manner. One of the reasons why Ostrom’s work had such an impact was because her theory of cooperative approaches to resources governance contradicted Hardin’s tragedy of the commons model. Instead of being so selfish that they would want to fish all the shrimp (for example), Ostrom found that fishers would build a shared agreement to reduce their own consumption for the wellbeing of the collective. Obviously, this is an example on a relatively small scale. What remains to be seen is whether we can achieve global cooperation to protect our global commons. One way to think about this is through the lenses of global public goods, as discussed below.