The tragedy of the commons



Beyond the Tragedy of the Commons Garret Hardin's 1968 opus, "The Tragedy of the Commons," is an often-cited work. A guick look in the internet literature on the subject suggests that a great deal of theorizing and literature emerged from Hardin's write-up. Science, the journal that published the work of Hardin, described Hardin as a biologist but Hardin's work also appears popular among anthropologists, economists, sociologists, environmentalists, and development professionals. In his analysis, Hardin developed an argument based on a hypothetical situation. He said, " picture a pasture open to all" and argued that when a pasture is open to all, each herdsman will keep as many cattle possible on the commons (Hardin, 1968, p. 1243). In contrast, when resources are not owned in common or pasture is not open to everyone, a herdsman places just enough cattle so that benefits or utility exceeds the impact on grazing that the additional cattle would bring (Hardin, 1968, p. 1242). When resources are owned in common or are free for access, the tragedy of the commons manifests itself. This definition is implied but not directly stated in Hardin's work. According to Hardin (1968, p. 1243), the problems associated with commons or the tragedy of the commons can be averted by private property or something similar. Hardin also said that the other solutions are "coercive laws" or "taxing devices" that make it cheaper for the polluter to treat his pollutants" (Hardin, 1968, p. 1244). As suggested earlier, commons refer to properties owned in common or in which people can have free access or freely use. When no one owns the resource and the resource is free for access like the air or the ocean, it can also be considered as part of the commons or the communally-owned resources. In the United States, one example in which the tragedy of the commons may be happening is in the Georges Bank in Northeastern United

States (Hinson, 2010, p. 1). According Hinson, fish catch in the Georges Bank has been decreasing since the 1960s because of over-fishing (Hinson, 2001, p. 1). Another example is the Ogallala Aguifer which is an "underground repository of fresh water" covering eight states (Hinson, 2010, p. 6). According to Hinson (2010, p. 6), the Ogallala Aguifer used to be in equilibrium wherein water discharge is equal to water recharge. However, because it is being held as a common resource, the discharge today is at least ten times the recharge (Hinson, 2010, p. 7). According to Varian (2005, p. 644), the problem of the tragedies associated with the commons can be addressed via institutional measures. One of the ways through tragedies associated with the commons can be addressed is via the institution of private property rights rather than the communal rights (Varian, 2005, p. 655). However, Varian pointed out that it is not only the institution of private property that can prevent the tragedies associated with the commons. According to Varian, the other ways are through rules as well as through reducing or eliminating the ambiguity of rules, or even in setting up rules where there is none (p. 644). In the United States, an important legislation is the National Environmental Policy Act of 1969 or NEPA for short. The law was amended on 31 December 2000. According to Section 2 of the Amended National Environmental Policy Act of 1969 (as amended, 31 December 2000), the purpose of the law is to "declare a national policy which will encourage productive and enjoyable harmony between man and his environment" as well as promote efforts that can prevent or eliminate environmental damage. In line with the purpose, the law established a Council on Environmental Protection. According to the Council on Environmental Quality (2007, p. 2), the NEPA is often called as the "Magna Carta" of environmental laws. The

NEPA " requires agencies to undertake an assessment of the environmental effects of their proposed actions prior to making decisions" (Council on Environmental Quality, 2007, p. 2). Section 101 of the NEPA decreed that "it is a continuing policy of the Federal Government" to "use all practicable means and measures" that will " create and maintain conditions under which man and nature can exist in productive harmony" (Council on Environmental Quality, 2007, p. 2). Thus, the NEPA is an example of an institutional solution to the problem and the creation of the Council on Environmental Quality is part of an institutional solution. References Council on Environmental Quality, (2007). A citizen's guide to the NEPA: Having heard your voice heard. Office of the President of the United States: Council on Environmental Quality. Hardin, G. (1968). The tragedy of the commons. Science, 162, 1243-1248. Hinson, S. (2010). Tragedy of the commons. Available in: http://cnx. org/content/m35288/latest/ (accessed 14 July 2011). National Environmental Policy Act of 1969 (2000). Public Law No. 91-190 (as amended, 2000), United States Congress. Varian, H. (2005). Intermediate microeconomics. 7th Ed. New York and London: W. W. Norton & Company, Inc.