the innovator's idea, allowing him or her to commercialize it, and recoup any investment on research and development. There is a centuries-old debate about the desirability of such rights. They trade off the welfare of the innovator, who deserves compensation for his or her efforts, against the welfare of society at large, which would benefit by unlimited access to the innovation. The public policy goal has always therefore been to find the right balance between these two elements.

Intellectual property has two characteristics in particular which lend it to such special legal protection. The first is that it tends to have high costs of development, and the second is that it tends to have low costs of reproduction. For example, it costs somewhere around US$200 million to bring a new drug onto the market, mostly in development expenditures.[1] Yet, after the drug has been developed it is a fairly simple and cheap matter to then manufacture it. Any good chemist could analyze the contents of a new drug and reproduce it – a process known as reverse engineering. Computer software – so easily copied – is perhaps the best example of these characteristics.

The argument for IPR protection is that without protection from such acts, there would be less innovation. Nobody would be willing to sunk up large amounts of money to develop new products if their inventions could be immediately copied and sold cheaply by others. The stronger the IPR protection, the more money can be recouped by the innovator, and thus the more innovation tends to occur. This is an important point, since innovative approaches to such sectors as agriculture, transportation, manufacturing, information technology, and energy are at the heart of sustainable development. At the same time, following the Brundtland definition's emphasis on the "overriding needs of the poor"[2], affordable access to the results of such innovation is also key to sustainable development. It is important to note that the incentive for innovation is a key justification for IPRs: we will see later that current IPR systems can in fact severely hamper the very innovation they are intended to spur.

There are three main types of IPRs: patents, copyrights and trademarks. Patents under the TRIPS Agreement cover "any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application."[3] This can include what we normally think of as inventions (e.g., a new can-opener, a new drug), as well as the processes used to create them. As we will see later, it might also include new varieties of plants, animals or microorganisms. Copyrights were originally intended to cover literary and artistic works, but now also cover computer software and other such intellectual creations. Trademarks are granted to names or labels which distinguish an article from others.

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[1] Curtis, Carlos A. "Prospects and New Dimensions of International Transfer of Technology", mimeo, Buenos Aires, July 1994.

[2] World Commission on Environment and Development. Our Common Future. London: Oxford University Press, p. 43.

[3] TRIPS, Article 27.1 – The terms "inventive step" and "capable of industrial application" can be read as synonymous with "non-obvious" and "useful" respectively – terms often used in national patent legislation.