ECONOMIC CONCEPTS FOR DESIGNING POLICIES TO CONSERVE CROP GENETIC RESOURCES ON FARMS

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The future food supply of all societies depends on the exploitation of genetic recombination and allelic diversity for crop improvement, and many of the world’s farmers depend directly on the harvests of the genetic diversity they sow for food and fodder as well as the next season’s seed. On farm conservation is an important component of the global strategy to conserve crop genetic resources, though the structure of costs and benefits from on farm conservation differ from those associated with ex situ conservation in gene banks. A fundamental problem that affects the design of policies to encourage on farm conservation is that crop genetic diversity is an impure public good, meaning that it has both private and public economic attributes. This concept is defined and made operational in order to assist practitioners in identifying (1) least-cost sites for on farm conservation (2) policy instruments most suitable for supporting conservation once a site has been located. Published findings regarding prospects for on farm conservation as economies develop are summarized and empirical examples of suitable policies to support farmers’ decisions are placed in the context of economics principles.