Adjustment of Definition and Evaluation Methods of Multifunctionality of Agriculture and Ecosystem Services

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Summary

An abundance of benefits are provided by agriculture and agricultural activity of rural areas. These benefits are the outgrowth of a concept called "Multifunctionality of Agriculture (MFA)". Many studies focused on the economical aspects of MFA in Japan in the 1990s. The Science Council of Japan (SCJ) made adjustments to MFA, and then launched research studies on a national scale in 2001. More than ten years subsequent to the conclusion of these studies, the number of MFA investigations has decreased. In contrast, the number of international studies on "Ecosystem Services (ES)", is also definable as MFA, has increased since the year 2000. Although we use the two terminologies interchangeably, we have not adjusted the definitions. Therefore, in this paper the Japanese definition of MFA is adjusted to have the international definition of ES and the evaluation methods of the services are surveyed.

As a result, "function" is distinguished from "services" as the international definition of ES, but they are not distinguished from each other as the Japanese definition of MFA. In the SCJ study, the "cultural services" defined by ES under MFA in Japan were not subject to an economic evaluation. When we evaluate cultural services, either the travel cost method or contingent valuation method is considered suitable for the appraisal and study.

Key words: Multifunctionality, Ecosystem services, Evaluation methods, Value of rural country, Economic evaluation