Evaluation and Monitoring System on Urban Modern Agriculture in Beijing

Meng Sujie
Beijing Municipal Bureau of Statistics, Beijing, China mengsujie@bjstats.gov.cn
Wang Jinzeng
Beijing Municipal Bureau of Landscape and Forestry, Beijing, China
Ma Dongchun
Beijing Water Authority, Beijing, China
Wang Yanyan
Beijing Municipal Bureau of Statistics, Beijing, China wangyan@bjstats.gov.cn
Zhan Dongjuan
Beijing Municipal Bureau of Statistics, Beijing, China zhandj@bjstats.gov.cn
Yang Xiaoqiong*
Beijing Municipal Bureau of Statistics, Beijing, China yangxiaoqiong@bjstats.gov.cn

Abstract
In the process of accelerated social and economic development and rapid urbanization in Beijing, the economic share of agriculture has been declining year by year; the fundamental role and important functions of agriculture has been gradually neglected. The present statistical system in agriculture is mainly based on its traditional “production” function, without including its functions regarding people’s leisure (named “life” function) and the ecological environment (named “ecology” function). For the government, the production data in agriculture under this system seems not scientific enough to reflect and evaluate agriculture comprehensively, objectively and fairly, and hence can not provide sufficient information for them to formulate relevant policies. This research, with the functional orientation of “urban modern agriculture” as the basic conception, innovatively puts forward and interprets the concept of “ecosystem service value of urban modern agriculture”, which incorporates the life and ecology functions besides its productive function; it evaluates the services offered by the four ecosystems relevant with agriculture in Beijing (which are forests, farmland, grassland and wetland) for humanity’s survival conditions, living environment and economic and social development through theories and approaches in the fields such as ecology, economics, etc.. Combined with the conventional statistical system, the “Evaluation and Monitoring System on Urban Modern Agriculture in Beijing” is then established with the standardization of the evaluation process. This system is believed to offer beneficial supplement to the present statistical system in agriculture and provide basis to establish the ecological compensation mechanism, with important realistic significance and application value in re-understanding the value of agriculture and reflecting the development status of urban modern agriculture of Beijing comprehensively and objectively.

Key Words: Ecosystem Service Value, Urban Modern Agriculture