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Effects of Regional Land Consolidation on Ecosystem Services Values— —A Case of Jiawang County Xuzhou City

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Taking Jiawang County Xuzhou City as an example, this paper discusses the method of reckoning the effects on ecosystem services value (ESV) caused by regional land consolidation. And through coefficient of sensitivity (CS), dependency degree of the change between ESV and transferring area (TA) is analyzed. The following results and conclusions could be obtained :

①the area accession of cultivated land in land consolidation major depends on land filling dike-pond. ②The value of ecosystem services of the study area declined from 4771 to 3436.83 ten thousand yuan, with the net decline of 1334.18 ten thousand yuan every year. And if cultivated land is used 30 years, the total loss of ESV will be 20985.61 ten thousand yuan. ③The contribution of various ecosystem functions to the overall value of the ecosystem services comes from the increase in soil formation and disposition, food production, climate regulation, gas regulation, raw materials and recreation, while water conservation, waste treatment, entertainments and bio-diversity conservation had a decreased effects. ④The sensitivity analysis suggested that when other agricultural land, construction land, unused land and other land are transformed into cultivated land, coefficient of sensitivity(CS) between ESV and TA is -0.9557, 2.4409, 0.2137 and -2.8175.The result indicates the 4 type of ESV change: including synchronal abatement significantly accession, appreciably accession and significantly abatement in the 4 type situations will emergence when TA is increased. So, the large scale abatement of dike-pond causes large decrease of ESV, and this is the central reason of ESV loss of the study area caused by land consolidation.

【Key Words】 : [Land Consolidation](#) [Ecosystem Services Value \(ESV\)](#) [Value Coefficient\(VC\)](#) [Coefficient of Sensitivity \(CS\)](#)

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