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MEASUREMENT OF GROSS ECOSYSTEM PRODUCT AND REALIZATION PATH OF ECOLOGICAL PRODUCT VALUE OF QINGHAI PROVINCE IN THE CONTEXT OF CARBON PEAK AND CARBON NEUTRALITY

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Abstract

Under the background of carbon peak and carbon neutralization, research on gross ecosystem product (GEP) calculating is of great significance in Qinghai province. Calculation of the GEP of Qinghai Province is conducive to the overall development of compensation mechanism between supply and benefit places of ecological products and lays ownership foundation for later carbon sink trading. The value of ecological products in Qinghai Province was calculated, based on Wang's fourth industry theory. Based on accounting data, from 2015 to 2020, GEP in Qinghai Province was continuously increased and the annual average growths rate of ecological product value was 7.87%. GEP in 2020 was 1114.051 billion yuan, of which the total material product ecosystem value was 210.108 billion yuan, total adjusting services product ecosystem value was 298.917 billion yuan, and total cultural services product ecosystem value was 605.026 billion yuan. The ecological function of Qinghai province is far greater than merely production function. It is the ecological security barrier in China and Southeast Asia and is the water conservation area of Yangtze, Yellow and Lancang rivers. Hence, calculation of GEP and development of ecological economy of Qinghai Province are of great practical importance for China and Asia. Seven implementation paths are proposed in this paper, including promoting the confirmation and registration of natural resources rights, establishing a compensation model, formulating the value calculating index system, establishing an ecological product quality traceability system, establishing an ecological resource rights and interests trading platform, increasing support for green finance, strengthening the construction of management institutions and teams.

Key words: ecological product fourth industry, ecological product value, gross ecosystem product, measurement of gross ecosystem product, Qinghai province

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