

# RESEARCH ON THE VALUE OF SOIL AND FERTILIZATION CONSERVATION IN LOESS PLATEAU IN NORTHERN SHAANXI PROVINCE OF CHINA

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## **ABSTRACT:**

Soil erosion is first cause for the degeneration and losses of land resources which is essential for human beings, and this kind of loss gradually becomes a global phenomenon. The purpose of this essay is to quantitatively calculate the value of ecosystem soil and water conservation and provide the scientific decision-making basis for sustainable usage of land and the harmonious development of regional socio-economic development. Based on the characteristics of North Shaanxi loess plateau, this essay used potential soil erosion quantity without vegetation cover to evaluate the soil conservation quantity of each ecological system, and then used the estimated soil conservation quantity to evaluate the economic benefit of water and soil conservation from the three aspects of protecting soil fertility, reducing surface soil loss and sediment accumulation with the market value method, opportunity cost method and shadow project approach. From the entire time, maintain of soil increased by 94.18%, nearly doubled from 1978 to 2000. The conservation value from 1978 to 2000 increases gradually, and the increasing speed between 1978 and 1990 is higher than that of 1990 and 2000. The water and soil conservation value of North Shaanxi loessial plateau at 1978 is 1.8503 billion; and that of 1990 is almost 0.8 billion higher; while the value of 2000 is 0.2414 billion higher than that of 1990. The increase in the period from 1978 and 1990 is larger than that of 1990 to 2000, this is closely related to the vegetation cover degree, this also shows that in the nearly 20 years of time, the series of water and soil conservation projects for North Shaanxi loessial plateau has gained huge success. From the special distribution, we have studied water and soil conservation values of the three different landscapes, the result was that south hill areas north wind drift sand region middle loess hills.