

Ecological Situation of Selenge River Basin of Mongolia

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The Selenge river basin is, one of biggest watershed area of Central Asia with wealth nature resources such as, forest, agriculture land, surface and ground water, gold and coal ores etc. River Selenge flow to the Baikal lake-worlds biggest fresh water reservoir. Nowadays result of human influence and climate warming Selenge river watershed area faces significant environment problems: degradation of terrestrial and aquatic ecosystems, increases in soil erosion, shortage of clean and accessible freshwater, loss of biodiversity, declines in fisheries, and the possibility of significant changes in climate. Last 40 (1960-2002) years in the Mongolian part of Selenge river basin area, air temperature increased 1.73° C (Suhbaatar st.). Annual precipitation not much changed. Result of climate warming, dried out many of lakes, rivers and springs, soil fertility declined, vegetation biomass decreased. Consequence is, fall of agriculture productivity, and loss of livestock's. Improper land use policy also has a negative impact of nature and environment.

Selenge river watershed area is basic agriculture region of Mongolia, where situated 875.1 thous. hectare arable land, which is 72.5 % of all agriculture land of country. The main agriculture soil is dark kastanozem soil with sandy loamy textures, fragile by erosion specially wind deflation. Present time, result of improper use of arable land more than 60% arable land degraded and

not more use in agriculture. Floodplain is main pasture-land, hay making place and ploughed land of territory. Result of overgrazing, cut of trees or bushes in river valleys, floodplain dried, meadow area decreased, vegetation cover degraded, topsoil eroded and soil fertility drastically declined. There are, also influence of climate warming.

In the Selenge river watershed areas, especially wetland and north forest slopes widespread out permafrost with thickness 5-50meter. Nowadays, climate warming impacted melt of permafrost.

The last 10 years, human-technical pressure increased in this region. There are many of gold, coal mining and settlement towns concentrated and continue grow up. Result of them, increased degradation, pollution of environment, worsening normal living condition. In the soils capital city of Ulaanbaatar, Erdenet and Darkhans marked high concentration of heavy metals and organic pollutants.

As a environmental change of Selenge river watershed regions, assume a more central place in human affairs, science must accept the responsibility of developing and communicating the essential knowledge base that societies can use to debate, consider and ultimately decide on how to respond to environment change.