THE RELATIONSHIP BETWEEN CLIMATE CHANGE AND ATMOSPHERIC DROUGHT AND DZUD IN MONGOLIA

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This paper discusses the impacts of climate change on occurrence of atmospheric drought and dzud (severe winter) that observed during the last 60 years in Mongolia.

The traditional pastoral system and rain-fed arable farming are the major economic sectors and the final products of these sectors are directly depends on climatic condition of the given year. The atmospheric drought and dzud are the process of climatic anomaly that happens seasonally at the certain region. The results of this study proves the relationship between agricultural products and atmospheric drought and dzud occurrences. This study gives the possibility of numerical assessment of the consequences of drought and dzud.

According to the drought assessment that based on pasture vegetation quality the frequency of atmospheric drought are different in different natural zones. Particularly the drought occurrence is once a ten year in the high mountain, forest steppe and steppe zones, three times in ten year in the transition zones of steppe and desert-steppe and seven times in the desert zone. Drought occurrences observed ones in two years in desert-steppe zones.

The of white-dzud that happens because of tick snow cover on the pasture that prevents the crazing of animals occurrences once in a two years in the valley of the Tes river and mountain Khan-Khokhii, three times the Khangai, Kharkhiraa, Turgen, Khovsgol mountainous region, one or two times in a ten year in the medium hills of the Altai, Khangai, Khentei maintains and in the area of Dornod steppe.