묘지의 환경영향평가

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At the close of the year 1990, the tombs in south Korea will cover the area of 940 km^2, which is 0.9% of the entire landspace. Annual increase of 200,000 tombs is encroaching on landspace by 10 km^2. Although it is a small and overpopulated country, large sized graves are increasing in number.

According to this study, the decrease in the forest area caused by tombs results a decrease both in the production of O_2 by 912 tons and in the absorption of CO_2 by 1,225 tons per year. As a result, there will be an increase in the amount of CO_2, which is one of the factors that cause the greenhouse effect. And the decrease in the forest area diminishes the amount of water conservation by 628,103 tons, and increases the amoumt of slil-runoff by 1,324,798 m^3, the anount of soil slop failures by 482,309.9 m^3, and the area of landsliding by 1.54%, respectively. A current terrestrial animal-substance is decreasing at the amount of 93,679 kg (dry weight) and a current underground animal-substance is increasing at the amount of 1,473,678 kg(dry weight). If there are forests in the room of tombs, more water would evaporate or transpire as water vapour from forests than from tombs, so evaportranspirration of water from forests requires more evaporation heat of 2.1×10^{13} calories than from the tombs. Consequently the air temperature falls locally rather than producing a green-house effect. If there are also forests in the room of tombs, forests might reduce high frequency noises to some extent, because 60% of the total tombs are situated within 500 m of the villages.

To reduce the effect of environmental impact of tombs, we must plant many coniferous trees in the area of traditional tombs. It is also suggested that the straw-mat mulching should be utilized for the soil-runoff control. For an educational purpose, we must decrease the illustrations of tombs to some extent in elementary school curriculum. In the textbooks the illustrations of a cinerary urn and a cinerarium must be contained, instead of traditional tombs. In addition, in the subjects dealing with environment for the elementary, secondary and high schools, the environmental impact of traditional tombs should be taught for all students so that their opinion on 'traditional tombs' will be changed.