

Flood Benefit Evaluation in the Lower Mekong River

SO KAZAMA¹, KENGO KAKIUCHI² and MASAKI SAWAMOTO²

¹Graduate School of Environmental Studies, Tohoku University ²School of Engineering, Tohoku University

The Mekong River flood spreads widely water in Cambodia. It is known that the flood gives a lot of benefits for residential people. In order to understand these benefits quantitatively, hydrological and hydraulic numerical simulations contribute the price value estimation for fishery and agricultural productions. The simulations in the case of 1994 and 2000 floods are carried out to compare the benefit difference on flood magnitude. The 2000 flood is a record-break in Cambodia and the 1994 one is typical flood. As the evaluation results, fishery production is not much difference in both years, which produce almost 250 million USD, although the 2000 is 10% greater than the 1994 one in water level. Agricultural productions in 1994 and 2000 are 320 million and 290 million USD, respectively. On the other hand, the 2000 flood damaged paddy field in June – August period and its amount is 90 million USD. Although these results were picked up some portions from all flood influences, we can understand that these flood benefits are not small.

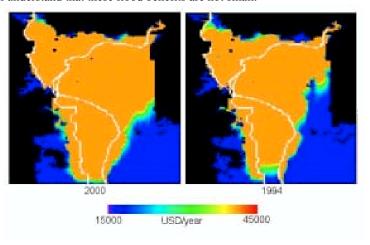


Figure 1. Agricultural benefit distribution in Cambodia

References

[1] S. Kazama et al., J. Hydroscience Hydra Eng., 21(2), pp85 (2003).