

## **Interaction Among Extreme Climatic Events in North China, Immigration for Land Reclamation and Management Policy in Northeast China: A case during 1660-1680AD**

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A case during 1660-1680AD is studied on the interaction among extreme climatic events, immigration for land reclamation and management policy, based on the records of annually increasing farmers and farmland, management policy in Northeast China and extreme climatic events in North China. It is found that migration from North China to Northeast China for land reclamation during 1660-1680AD was an adaptive response to the drought and flood occurred in North China. More immigration and reclamation during 1665-1678AD happened during the drought period of 1664-1680AD in North China, when frequent severe drought appeared in North China whereas less disaster happened in Northeast China. The three peaks of immigration and reclamation were corresponding to 3 drought events in North China with one or two years lag. The highest peak of immigration to Northeast China for reclamation was induced by the drought event in 1664-1667AD and flood event in 1668AD in Northeast China. As a response, the exploration policy in Northeast China had been changed from encouraging migrating to Northeast China for reclamation to forbidding. This ban did lower the amounts of immigration and reclamation, but could not entirely prevent the immigration due to the extreme events. The continual change of farmland tax policy during 1670's was also closely related to the drought events in North China. A response chain is built from extreme events to immigration and reclamation, and then reaching to the management policies.

Keywords: immigration and reclamation, extreme events, Northeast China, Qing Dynasty