

## Population health and global data sciences in Grene Ecohealth project

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Age of global and big data has come. The amount of data explosively increase and the expectations of exploring such data and effective utilization of data analysis results go wide of the mark. We enjoyed somehow the benefits from the big data analysis in daily life and some of the field in sciences; however, how can it be delivered to the health field, especially in areas or regions where the data collection is difficult due to the lack of data collection system? In developed countries, we can have data related to health and it has been already used for improvement public health service system. Furthermore, it has been linked to environmental data to know the results from climate and environmental changes. But this is only limited to developing countries and data or information from developing countries or regions, where the most vulnerable people from climate changes live and no information exists even on population, is still lack in identifying and monitoring the real situation. To sort out such information lack situation, the GRENEcoH project, a GRENE-Ecohealth project that is running under the GRENE-environmental information program, has started data collection of population health in areas in the Lao People's Democratic Republic using up-to-date technology to collect and link individual data. The system called in general as Health and Demographic Surveillance System (HDSS), which collect information about residents in the certain given areas for research. The HDSS programs are run in different areas and by different organization in African and Asian countries, however, in Japan; the HDSS is not paid enough attention. In this presentation, the introduction and the scientific and social values of HDSS and our technology will be presented.

Keywords: developing countries, marginal areas, population health, infectious disease