STEPS Students Report

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Through STEPS program, I stayed at SPBU to study about the land hydrology in Russia for 4 weeks.

The main activity of my research was to attend private lectures made by Prof. V. Vuglinsky, who was the supervisor in this exchange program, and to discuss Russian hydrological survey network and water resources in Russia with him. I chose this theme in this stay because the professor valued the process of the development of hydrological network as fundamental knowledge in studying Russian hydrology or water resources. In each lecture, he gave me the list of the recommended books or articles, and it was my assignment to read them and list questions.

I also studied about the development of Japanese hydrological survey by reading academic papers or article mainly issued by the government or governmental research institutes. Based on that, I tried to detect the essential difference between Russian hydrological survey and Japanese one.

After coming back to Tokyo, I summarized my study as "The developing process of Russian hydrological network and comparison with that of Japan" and sent it the Professor to ask him to revise it. Its abstract is as follows.

Russian State Hydrological Institute (SHI) is the governmental institute in charge of hydrology, and under this, there are lots of institutes or networks about meteorology or hydrometeorology.

The first network in Russia was founded in 19th century, and it has only stations for measuring water level by scales. After that, the hydrological survey system had been developing until the collapse of the Soviet Union. The economic depression after its collapse affected the improvement of hydrological network badly.

Now, Russia is making an effort to restore the hydrological network, and for that, it published its goals or loaned money from World Bank.

On the other hand, Japanese network is very advanced especially in the integrated system in which everyone can see the real time condition of rivers, which is useful for disaster prevention.

Actually, 95% of flood in Japan is classified into flush flood, and this trend is totally different from European counties like Russia, which make it difficult for Japan to

export Japanese technology about this field.

In such situation, I think Japan should aim to take initiative about the integrated system of river information, which will be important in the near future in other countries.

In addition, the professor suggested me that I should join the classes held in English in his faculty to expand knowledge about Russian hydrology.

I took part in the classes as below.

• The lecture held in English in the Department of Land hydrology.

I read the academic paper about the survey of the environment in Antarctic, and through discussion, I studied about the attitude of Russian researchers toward the Antarctic or the Arctic.

• The lecture held in CORERIS (The master course of Cold Region Landscapes Integrated Sciences)

I learned not only land hydrology but also total management of cold regions including the knowledge about sediment or city planning in this course.



One of lecture scenes