## Summary:

After World War II, Japan pursued a series of policies of intensive industrialization. However, the fast growth of Japanese economy, mainly by industrial activities has resulted in serious environmental pollution problems. To solve these environmental issues, Japan implemented various policies to control the pollution such as the incorporation of environmental regulations into the system of industrial policies; use of the direct "command and control" including administrative guidance to the industry and to each firm and preferential treatment; empowerment of municipality to implement ordinances that set more stringent emissions standards; enhancement of pollution prevention industry; standardization of antipollution devices and measuring devices. Japan was very successful with those pollution control policies and considered a paragon of success in conquering environmental problems encountered in the process of rapid economic development.

Many developing countries, including Vietnam are nowadays pursuing industrialization policies like Japan did in the past and facing similar environmental pollution which Japan encountered. Thus, the Japanese experience on industrial pollution control during and after industrialization periods would be very valuable for Vietnam and other developing countries

In recent years, industrial pollution in Vietnam has become very hot and tough issues, mainly due to vigorous economic activities. Although the Vietnamese government has paid high attention to environmental protection by issuing the Law on Environmental Protection in 1994, regulating environmental standards of air and water qualities, specifying discharge standards for wastewater and emission and collecting the wastewater fee following Decree No 67/2003/ND-CP, the pollution is still very serious and do not show the better signal. Many firms in Vietnam still use old production facilities and equipped with almost no pollution control equipment, discharging emission and wastewater into environment. Recently, many firms such as Vedan, Miwon, TuangKang etc.,. were discovered to seriously violate the environmental regulations. It can be said that like many developing countries, Vietnam has substantial environmental regulations, but implementation of those regulations is often problematic. What lessons that Vietnam could learn from Japan in order to better mange the pollution caused by the firms?

The experience of pollution controls in Japan show that Vietnam and also other developing countries should not follow the path "growth now, cleaner later" that Japan experienced because it can come at an unacceptably high price to human health and the environment. Another lesson is that Vietnam should promote pollution control during economic growth through large investment in pollution control equipment, the development of new environmental governance institutions, governmental assistance to industry for pollution control and the development of more economically and environmentally efficient production processes. Enhancement of role of national agencies and local authorities in pollution controls is a critical lesson from Japan that Vietnam could learn. For that purpose, it is necessary for Vietnam to construct and improve the education systems, which supply the researchers and engineers of environmental technology and management, and to establish the local public research institutes with social trust. In addition, the promotion of environmental education and public relations to improve awareness about environment is good to learn from Japan. This should include increased emphasis on health education and the use of health specialists in pollution control policy at an early stage of pollution control. The mass media should be used to alert people to the importance and potential hazards of environmental degradation. Perhaps most important of all the lessons to be obtained from the Japanese experience is that public participation is indispensable to satisfactory resolution of environmental problems

Publication of the Results of Research Project:

Verbal Presentation (Date, Venue, Name of Conference, Title of Presentation, Presenter, etc.) The author has presented the research results in the seminar entitled "*Japanese experience on Industrial Pollution Controls and the Lessons for Vietnam*" on 12 April 2010 in the Department of Resources and Environmental Economics, Hanoi University of agriculture

Report and Paper (Name of Journal and its Date, Title and Author of Thesis, etc.)

One report with title "Industrial Pollution Controls: What Vietnam can learn from Japan" has completed and it is available in the library of Faculty of Economics and Rural Development, Hanoi University of Agriculture for staff and student's references. (Author: Nguyen Mau Dung, Apr. 2010)

Book (Publisher and Date of the Book, Title and Author of the Book, etc.)