

Environmental Model of Atmosphere

- from Japan to East Asian Countries-

by

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1. Abstract

Japan has made a remarkable progress not only in the area of the economic development but also in the area of the pollution control after the world war the second. This paper, firstly tries to make analysis of Japanese pollution policies to the mainly atmospheric problems and to fix the specified Japan Environmental Model of atmosphere during this forty years, secondly to make the analysis to NIEs countries and the developing east Asian countries, finally to make the recommendation of the importance of the application of the advanced technologies to the transitional environmental issues.

2. Introduction

The growth of Japanese GNP of this forty years is a remarkable expansion and the economies of NIEs countries followed Japan like the flying traveling style of wild geese.

This paper intends to remind the another phase of Japanese social policies. Those are the environmental public pollution matters. Some Japanese pollution control policies were effective to protect the earth from the environmental contaminations. Especially against the atmospheric problems Japan's governmental controls were executed stage by stage after 1970's. The performance should be recognized by other countries at the time of the ending 20th centuries.

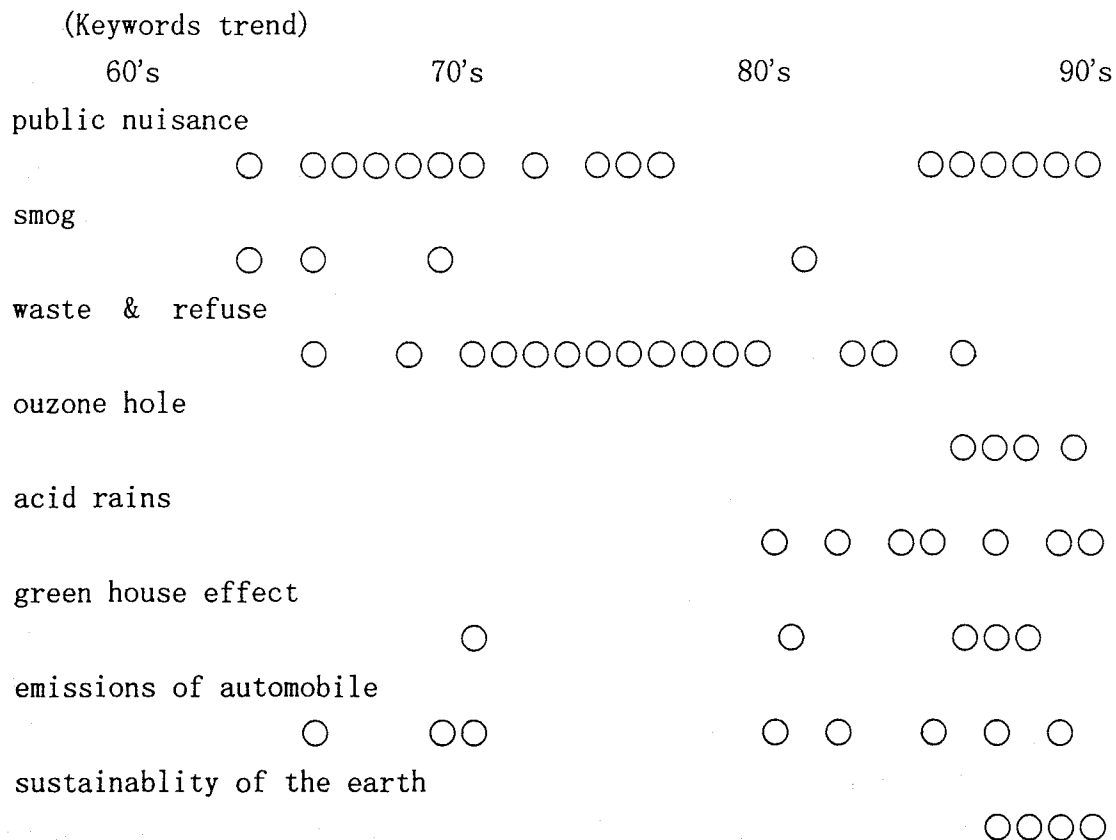
Among the major factors, the China economies has started to make another

development and pollution matters toward the 21st centuries, and we have to consider the China progress almost as ourselves for Asian people. Because China has 1.2 billions populations, the influence of the economic development and provisions shortage would make other Asian countries like dependent. Asian countries have to make policies altogether for the sustainable environments of the earth.

To meet the end of the century we need to cope with the environmental critical matters, and have to try to find some ways for the next generations to protect the earth from contaminations. For the achievement of these goals, making the Japan environmental model of atmosphere could be helpful as well as useful.

3. Quality Analysis from the literature surveys

To watch the trend of pollution problems in Japan, it is necessary to follow the social pollution problems in Japan after 1960's. To make this jobs specifically, we made keywords analyses of over one hundred publications in the metropolitan city library about the public control. Through the survey of the literatures, we could follow the keywords of Japan pollution matters as follows.



4. Major factors of atmosphere pollutions

4.1 Protection of public nuisance in 60's

There is an explanation of "no public nuisance five years ago" on the book published in 1968. The number of registered automobiles were only eight millions ten thousands in 1965.

4.2 Local pollutions control in 70's

Thermochemical smog attacked over high-school students in mid-Tokyo in 1970 and 43 students were fell sick and 11 went to hospital. Other topic of the increasing waste became a big problems. Los Angeles thermochemocal smog was the worldwide news.

4.3 Wide area pollution in 80's

The keyword acid rains found in the translated book from Canada. Emission gas became the problem again, and NOx and SOx problems were observed in Japan. The number of registered automobiles counted approximately 38 millions in 1980 and 46 millions in 1985. Ouzone hole was a big news worldwidely in 80's and freon was noticed as an injurious to the earth.

4.4 Sustainability of the earth environment in 90's

The serious pollution problems invade the earth environment globally. How to sustain the earth environment has come to the challenging theme for the people.

5. Japan model

Growth phase

- GDP of Japan
- Registered Automobile Numbers
- Energy Cumsunption

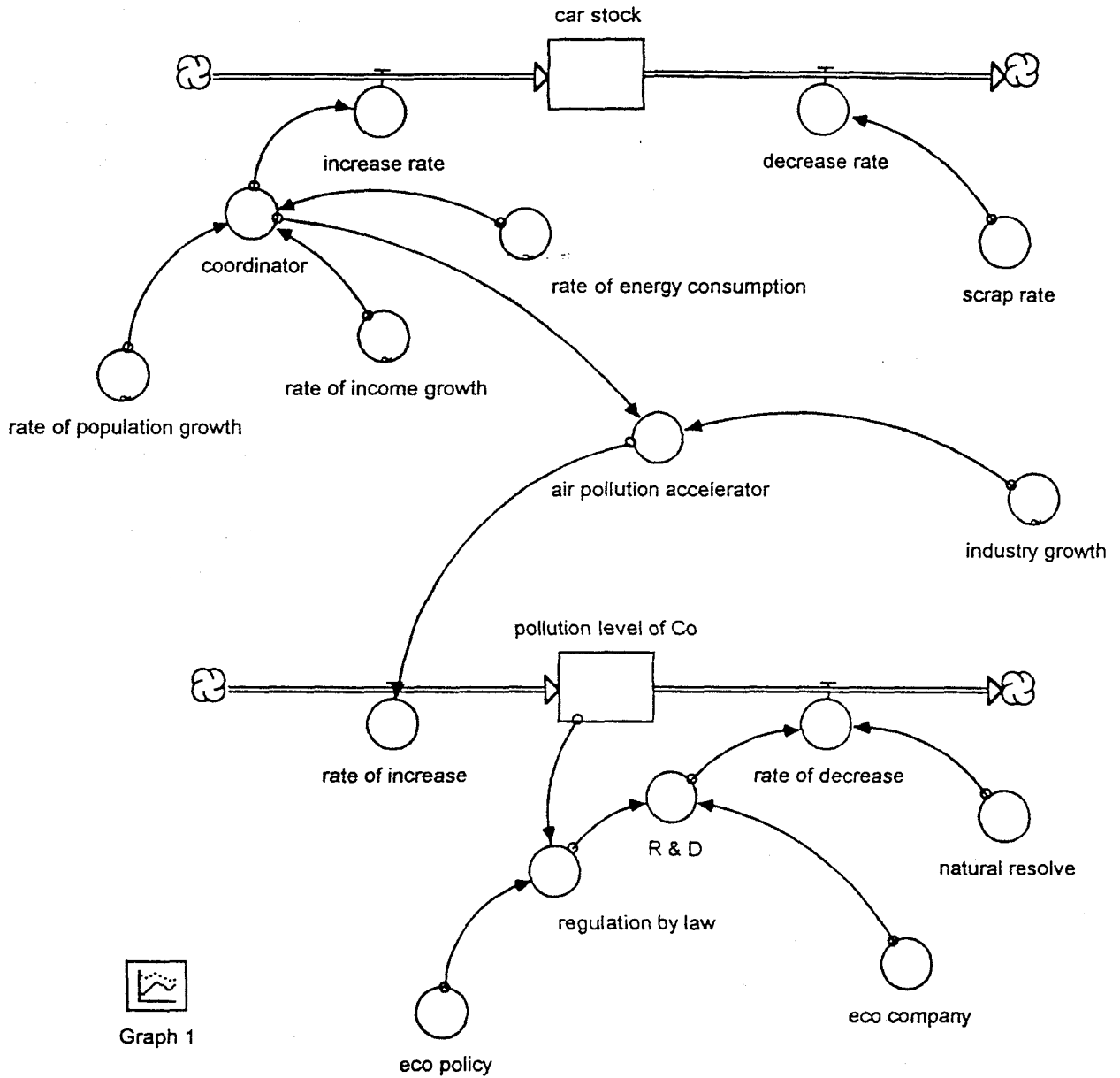
Pollution control phase

- NOx, SOx emissions
- SO₂ level in the atomoshere
- CO Level in the atomoshere

Law history

- Control over the smoke and soot in 1962
- Control over the atomoshere pollution in 1968
- Control over the treatment and scavenge of waste in 1970
- Permission and limitation of emission gas of automobiles in 1973
- Control over the ozoune layer protection in 1988
- Reduction of NO₂ from automobiles gas of specified area 1992

6. The possibility of immigration of Japan model to Far East Asian countries
(Flow Diagram)



Graph 1