

Topic-Setting Program to Advance Cutting-Edge
Humanities and Social Sciences Research
(Global Initiatives)

Progress Report
(Summary of Final Report)

[Policy decision-making and public participation on energy, chemicals and water
issues: an international comparative study]

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Institution: Osaka University

Academic Unit: Graduate School of Law and Politics

Position: Professor

Research Period: FY 2013 – FY 2016

1. Basic information of research project

Research Area	Relevant Development on Scientific Communication and Decision-Making
Project Title	Policy decision-making and public participation on energy, chemicals and water issues: an international comparative study
Institution	Osaka University
Core-Researcher (Name, Academic Unit & Position)	DATE Noriko, Graduate School of Law and Politics, Professor
Project Period	FY 2013 – FY 2016
Appropriations Plan (¥)	FY 2013 3,300,000 JPY
	FY 2014 9,950,000 JPY
	FY 2015 8,400,000 JPY
	FY 2016 6,900,000 JPY

2. Purpose of research

Nuclear power and energy matters are typically the source of numerous frictions between science/technology and society. That sort of problem is the reason why decision-making instruments in the field of science and technology policies are an urgent agenda. Despite the fact that cutting-edge mechanisms and good practices such as consensus building conferences are already in place, they are either on a trial stage or limited to a region or to a certain area of science. Furthermore, it is difficult to state that such issue has an international-wide common ground of understanding.

The Aarhus Convention, adopted in 1998, aims at securing the environmental rights and the promotion of environmental democracy by guaranteeing the “Green Access Rights”: access to information, public participation in decision-making and access to justice in environmental matters. Despite the fact there is a relatively standardized legal framework on e.g. environmental assessment for issuing a permit, on the other hand, as for energy strategy and environmental planning issues, for example, the public participation instruments vary considerably according to the country. We may also identify abundant non-governmental institutions performing non-official participation initiatives, as well as recognize that issues such as ensuring democratic legitimacy and effectiveness are a major concern. Those issues prove the necessity of a systematic international collaborative research on public participation issues.

3. Outline of research (Including study member)

This research project’s object is to develop the public participation instruments concerning the environmental policy related to science and technology. Although limited to the environmental field, it could extend for many branches. In this sense, this project will focus on the following fields of study: (1) nuclear power and energy; (2) chemical substances management; and (3) water management. The target countries will be Brazil, China, France, Germany, Thailand and the United States.

(1) Nuclear Power and Energy Field. Largely criticized in many countries, not only in Japan, for lacking a democratic decision-making structure. The accident at the Tokyo Electrical Power Company’s Fukushima nuclear plant has awakened the society for such issue. In Japan, the “innovative energy and environmental strategy” was adopted based on the results of deliberative polling. However, it has affected neither the Atomic Energy Basic Law nor the Nuclear Reactor Regulation Law, which remain lacking provisions about public participation. This project will evaluate, in collaboration with international experts, the developments of decision-making instruments on energy policies after the Fukushima accident. As a

result, we expect to shed new light on the Japanese profile on participation and nuclear issues, as well as its position before the international community.

(2) Chemical Substances Management Field. As per verified in the PRTR system, risk communication legislation have advanced very fast in many countries. Internationally, the Strategic Approach to International Chemicals Management (SAICM) and the Minamata Convention on Mercury have both stressed the importance of the dialogue with NGOs and the consensus building. As for the Chemical Substances Management Field, there are many specific and pioneering cases targeted by preceding research, in comparison with the Energy Field. By aggregating such field to this project, we aim at ensuring research results pointing to positive experiences on consensus building.

(3) Water Management Field. It is a source of conflicts especially on international river courses, such as the Columbia, the Mekong and the Danube. Impacts on the biological diversity or technological matters are often the point at issue. The existing public consultation and participation-based consensus building instruments may target policy-making or specific decision-making (e.g., licenses or permits). In this project, we will focus the former.

However, some aspects of the latter will be taken into consideration to clarify the characteristics of the policy-making instruments. In doing so, we aim at contributing to the development of an international consensus building mechanism.

The research method will have the following characteristics. First, the three branches of investigation above mentioned will be studied from a multidisciplinary perspective comprising the following academic fields: Law, Sustainability Science and Technological Society Theory. Osaka University has specific departments for each of these disciplines, enabling an integrated approach. Second, the research representative and other contributors of Osaka University have their own networks in their respective areas of expertise. We will combine these unique research networks to build an even broader and diversified one. Finally, the conventional Japanese research on consensus building instruments tends to focus basically on developed countries experiences. However, this project will also count on the participation of front line researchers from Brazil, China and Thailand. That will enable us to widely explore the diversity and commonalities of consensus building instruments across the globe.

On the other hand, revealing an international common goal on this matter might prove to be a challenging task.

Study Members

Principal Investigator	DATE Noriko	Osaka University, Graduate School of Law and Politics, Professor Research Field: Law (Nuclear Power, Energy, Chemicals, Water)
Research Collaborators	MITSUNARI Kenji	Osaka University, Executive Vice President of General Planning and Evaluation Research Field: Law (Science and Technology Social Studies, Science and Technology Democracy Comparison)
	KOBAYASHI Tadashi	Osaka University, Executive Vice President of Education Research Field: Science and Technology Social Studies (Nuclear Power, Energy, World Wide Views)

NAKAYAMA Ryuichi	Osaka University, Graduate School of Law and Politics, Professor Research Field: Law (Nuclear Power, Energy, World Wide Views, European Relations)
HIRAKAWA Hideyuki	Osaka University, Center for the Study of Co*Design, Professor Research Field: Science and Technology Social Studies (Chemicals, World Wide Views)
FUKUI Kota	Osaka University, Graduate School of Law and Politics, Professor Research Field: Law (Chemicals, American Relations)
MATSUMOTO Kazuhiko	Osaka University, Law School, Professor Research Field: Law (Nuclear Power, Energy)
MATSUMOTO Mitsuo	Osaka University, Osaka School of International Public Policy, Associate Professor Research Field: Law (Water, Nuclear Power, Energy, American Relations)
HARA Keishiro	Osaka University, Graduate School of Engineering, Center for Open Innovation Research and Education, Associate Professor Research Field: Sustainability (Water, Asian Relations)
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4. Research results and outcomes produced

This research highlighted that the strengthening of Participation Principle is a trend not only in Asia, but also in the entire world. Although Asia has strengthened the participation-related provisions since 1990s, it has been said in many Asian countries that environmental law is like a castle in the air due to the several enforcement problems.

However, in recent years, new developments that were not considered sufficiently at the time of the adoption of the Aarhus Convention, such as emphasis on the rights of indigenous peoples and communities, specialization of the environmental judicial system, etc., have been recognized, leading to improvement in effectiveness.

Among them, first, the range of participants has enlarged from landowners to communities, NGOs and the average citizen individually, as well as the diversification of public consultation and consensus building instruments. The French initiative called “Grenelle de l’environnement” places government, traditional interest groups (businesses and unions) and environmental NGO on the same level. A similar approach is utilized in various international negotiations as a “platform”. But for that, it is necessary the network of NGOs to be well organized such as in Europe.

In contrast, initiatives such as Planungszelle and World Wide Views differ from the Grenelle de l’environnement since one of the formers’ main objectives is the promotion of the effective participation of a wide range of citizens. Recently, similarly to the German state of Baden-Württemberg, “Participation Assessment” legislation, enabling discussion on the most suitable participatory instrument according to each issue, has been arising. Such measures densify the planning of the participation systems.

Second, in contrast with traditional courts, which do not judge administrative or technical issues, the

specialization of courts in environmental issues as well as the strengthening of the judicial control over technical matters is clear. Some of the evidences of this situation found by this research, even though limited to Asia, are: (1) environmental courts (India, the Philippines and China) and branches (Thailand); (2) special environmental litigation acts and regulations (e.g., India and the Philippines), (3) expert members (India), and (4) environmental law specialized judge system (Indonesia).

Expert members are not those who perform the investigations under their authority. Rather, they convey the terms of experts' comments in an easy-to-understand manner, being a bridge between experts and legal professionals. They play an important role in the considerations of effective environmental measures. Also, for example, the Indian National Green Tribunal is commanding organizations to formulate the rehabilitation plan for the Yamuna River, as well as following up on its performance. In other words, such court is actively involved in the enforcement of laws and court decisions.

Focusing on specific fields, as for nuclear power, the United States and Germany have learned from past failures on high-level radioactive waste policy and are now exploring ways of democratization of expertise knowledge and the specialization of democratic government.

In the nuclear phased-out Germany, the bitter experiences of opposition movements at Gorleben, regarded as a candidate site for the nuclear repository, led to the Repository Site Selection Act. This law prescribes the principle of information disclosure and the principle of public participation for selecting repository sites in a fair and transparent way.

On the other hand, in Japan, even after the Fukushima nuclear power plant accident, the energy and nuclear legislation continues to lack not only public participation provisions but also governments' hearing provisions. In addition, the members of the Nuclear Regulation Authority consist only of technical experts and do not include experts in social science (e.g., law experts).

The basic concept is that the examination of nuclear power issues is considered as a purely technical problem. Hence, the necessity of participation itself is not fully recognized for such situation. After the Fukushima accident, so far more than 20 lawsuits on nuclear power plants have been filed or are being prepared. This background reveals that currently the public only can count on litigation as a legal instrument to challenge nuclear power plants.

Regarding water management, not only in Europe, but also in Asia (e.g., Thailand) and Latin America (e.g., Brazil), it has been evidenced that the following actions are spreading: elaboration of a water management plan, establishment of a participatory management organization (e.g., basin committee), integrated water management. In Europe, according to the Water Framework Directive and the SEA Directive, public participation is indispensable for elaborating plans. In the case of the Baden-Württemberg state in Germany, guidelines on early participation were created. Regarding the Rhine River, about 100 workshops were held in the entire state, and 75% out of 140 proposals collected have been adopted.

As for South America, in Brazil, a basin committee is established for each watershed. Representatives of municipalities, water users (e.g., fishermen), environmental NGOs, etc. participate in the committees, where discussions are open to the public. However, ensuring continued financial resources remains challenging. In addition, the mechanism of developing large-scale dams and the mechanism of the watershed committee are not necessarily fully adjusted. That leads to another difficult problem: the linkage between consensus building instruments using local knowledge and the decision making process of large scale projects.

As described above, it is possible to say that the objectives of the initial research project, which proposed an analysis of the international trend of environmental democracy focusing on nuclear power and water management issues to reveal its international extent, has been largely achieved.