The Korean Nuclear ODA Policy Development

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1. Introduction

Korean nuclear Official Development Assistance (ODA) is established with support from institutes such as the Korea International Cooperation Agency (KOICA) and the Korea Atomic Energy Research Institute (KAERI). KOICA's grant aid mainly made through the activities including IAEA's training program, and KAERI currently runs the inter-regional education & training cooperation called Asian Network for Education in Nuclear Technology(ANENT) which aimed to achieve the goal of encouraging web based education-training network via cooperation with IAEA. Yet now these programs are focusing more on assisting nuclear infrastructure rather than highlighting nuclear education and training.

This paper aims to, first, do a self-evaluation about the Korean ODA policy; second, to study the transition of the international nuclear atmosphere; and third, by apprehending the trend of the subjects of Korean nuclear ODA policy, to discuss the overall appropriate trajectory of Korean nuclear ODA.

2. Evaluation of domestic nuclear ODA

Two surveys were conducted to evaluate the Korean nuclear ODA policy. Survey was conducted to the participants in an Annual event of Scientist-technician held in July 2010, and science-technology experts such as professors, hands-on staffs, and concerned graduates students from the Korea Institute of Science & Technology Evaluation and Planning (KISTEP).

The overall conclusion of this survey can be summed up as three parts. First of all, a decent amount of the respondents have positive opinions about Korean nuclear ODA policy. Additionally, they are fully aware of both the direct and the indirect effect will link to nation's interest. Lastly, they think further progress about this issue should be taken seriously. However, they also warned about the limited effect of the public exposure to the result and effect of Korean nuclear ODA policy so far.

More specifically, on 'Policy goal' the respondents think the policy of Korean nuclear ODA is suitable for its policy purpose. However, they doubt how well the actual ODA policy reflects the original purpose of the policy. On 'satisfaction', although they comprehend this policy quite well, they think the support about it is very limited. On 'effectiveness', most of them agrees that ODA nuclear policy is a very effective strategy to handle overall national policies. Last but not least, on 'effete of the policy,' it is concluded that there was not enough public attention about the plausible result and

possible effect of nuclear ODA policy. However, they have high expectations about the positive secondary effect of nuclear ODA policy.

3. Transition of international nuclear atmosphere

To examine the aspects of fast changing international nuclear atmosphere, and on purpose of studying the transition of international society's nuclear interrelationships and hegemony based on the time of Fukushima nuclear accident; the author coded agreements, conclusion of contracts, and nationwide information between counties around March 2011 and analyzed those via NetMiner4.

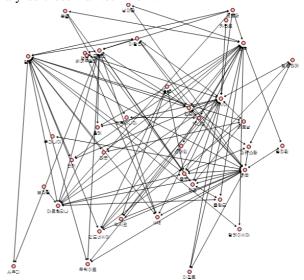


Fig. 1. Nuclear relation before Fukushima accident

Before 2011 Fukushima nuclear accident, the network among countries was complicated and diversified. This shows that the interaction within countries was active and constant. Russia, United States, and China were three major counties in the network, while Korea, Japan, France and Argentina were in the second largest group of interaction.

In contrast, after Fukushima accident, we can easily notice that the network is significantly simplified. This is mainly due to many countries trying to keep a low profile about nuclear involved issues, including new agreements, contracts and any interaction whatsoever. It is especially interesting that nations which used to have interactions with several countries at the same time, tried to confine her interaction with only one nation or even ceased any kind of interrelationship. Despite the accident, Korea and Japan kept interacting with each other. While Korea tries to focus on human resources, education and technical transfer; Japan on the other hand tries to

focus on the interactions between the NPP contract and agreement.

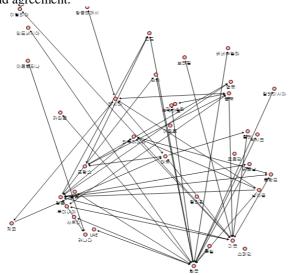


Fig. 2. Nuclear relation after Fukushima accident

4. Change of the subject of domestic nuclear ODA

Korea now focus on 'Improvement of Korea's international role as one of the advanced nuclear technology countries' based on 4th nuclear plan. A major purpose of this plan, in which more than two trillion dollars will be invested, is first to effectively distribute the follow of the commodities to three different parts: research and development fund at Ministry of Science and Technology, electric foundation fund at Ministry of Commerce, and general accounts. The object of this plan is to raise the productivity of research and development of nuclear issues via well-organized performance management.

After the Fukushima nuclear accident, budget for nuclear safety development skyrocketed from 2.7 million to 11.8 million which is 331.6% of augmentation. The project 'To develop the technology to prevent black out accident and major failure of NPP' eared another 11 million dollar for the same reason.² Originally, the person who's in charge with research and development and who's in charge with generation and export were working at two different independent institutes: Ministry of Education, Science and Technology; and Ministry of Knowledge Economy, but due to the raising demands of improvement of nuclear power security, the Nuclear Safety and Security Commission was newly launched as a president affiliated organization in October 2011. To improve the nuclear regulatory independence, Nuclear Safety and Security Commission was established last October.3

5. Conclusions

When we consider the evaluation of the effectiveness of the nuclear ODA policy, it is clear that the purgation and publicity activities about the necessities and effectiveness of the nuclear ODA toward the public. Especially, we have to focus on the transparency of the decision making process, reasonable expenditure of the budget, and the establishment of an evaluation procedure.

Considering the change of the international nuclear cooperation network after Fukushima accident, we need to make a balance with a dual approach that can be defined by an active strategy that directly exports NPP facilities and a passive strategy that links to the improvement of international cooperation about peaceful uses of atomic energy.

Lastly, when we consider the transition of domestic nuclear ODA policy, to strengthen cooperation and relation between more diversified nuclear subjects we need to establish an ODA committee. If the ODA committee can secure the related budget and decide the priorities where to spend it, maximize the efficiency, and evaluate its policy regularly, the nuclear ODA policies will advance to the next horizon.

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¹ Kim Min Hun, Nuclear international Cooperation, http://blog.naver.com/energyplanet/

² Yonhopnews, Next year National R&D budget will grow 11 trillion, 2012/08/02

³ Min Byung Ju, Role of the nuclear related facilities,