THE ROLE OF UNIVERSITAS GADJAH MADA IN FORMING PUBLIC’S PERCEPTION ABOUT NUCLEAR IN INDONESIA THROUGH COMMUNITY EMPOWERMENT PROGRAMS

The plan to build Nuclear Power Plant in Indonesia has been sounded since 1956, but it has always been postponed until now. One of the reasons why it cannot be realized is because the public in Indonesia has misperception about nuclear technology. The information about nuclear technology is still very limited in Indonesia, although the technology has been used in health and agriculture fields. There are some reasons why this misperception occurs. The first reason is insufficient introduction about nuclear chapter to our students in formal schools below university level. The second is there are different levels of understanding between people who live in urban and rural areas. This condition is very unique and specific because Indonesia is an island country. These two main reasons are the most contributing aspects that affect people’s perception about nuclear in Indonesia. This poster exposes innovative ways in educating people about nuclear program in Indonesia. Universitas Gadjah Mada, having the only one Nuclear Engineering Program in Indonesia, has a program which is called community empowerment programs. These programs could be used for disseminating nuclear technologies and nuclear applications in schools, rural communities, urban communities and scientific communities. These programs promote nuclear dissemination through several ways which are suitable with the participants’ education level. After the programs were carried out, an observation was taken to see the people’s opinions about it. Several activities that have been done resulted in increasing the people’s knowledge about nuclear technology, including safety and security aspects.

INTRODUCTION

Nuclear technology has been introduced in Indonesia since 1954. In 1980s, Indonesia government had planned to build the first NPP in Munta area, Central Java but this plan was discontinued due to the protest from anti-nuclear group. According to Presidential Decree No.7/2005, the first NPP was planned to start operation in 2010 and start operation in 2016 in order to supply 2% of the national energy demand. But, the plan was postponed again due to the activities from anti-nuclear group.

PERCEPTION ABOUT NUCLEAR IN INDONESIAN PEOPLE’S MINDSET

ROLE OF UGM IN FORMING PUBLIC PERCEPTION ABOUT NUCLEAR

Three Missions As An Academic Institution

- Enhancing the next curriculum with nuclear aspects in collaboration with relevant national and international institutions
- Research, Involvement, and Nuclear Related
- Nuclear and Security Information

SEVERAL WAYS TO PROMOTE NUCLEAR THROUGH COMMUNITY EMPOWERMENT

1. STRATEGY FOR STUDENTS
   - School Visit
     - using games and sort playing: safety and security in NPP, the role and the benefits of nuclear application
     - Visit Nuclear and Nuclear_irradiation
     - Result: increased knowledge about nuclear
   - Faculty visit
     - using simulation onboard: information about nuclear including safety and security
     - Result: better knowledge about nuclear

2. STRATEGY FOR RURAL PEOPLE
   (in Collaboration With Indonesia Ministry of Education, Indonesia Agricultural Department and BATAN)

- INNMI UGM student chapter programs managed by Students (in collaboration with PNS)
- INNMI UGM Nuclear Engineering Program modules
- Nuclear Engineering Faculty and Nuclear Energy Regulatory Agency (BATAN), BAPETEN, WINS, Texas A&M, University of Tennessee of Knoxville, King’s College London)

3. STRATEGY FOR URBAN COMMUNITIES,
   (in collaboration with Vietnam Nuclear Science and Technology Institute)

- Conducting some nuclear security workshops for Front-Line Officers in two big cities and also for policy makers in nuclear areas (in collaboration with BAPETEN)

4. STRATEGY FOR SCIENTIFIC COMMUNITIES:
   - attended several scientific seminars and conferences (supported by PNS)
   - attending several conferences and seminars
   - attending the Nuclear International Meeting and Nuclear Scientists in Developing Countries
   - Nuclear Engineering Faculty and Nuclear Energy Regulatory Agency (BATAN), BAPETEN, WINS, Texas A&M, University of Tennessee of Knoxville, King’s College London)

CONCLUSION

The public’s perception about nuclear in Indonesia are divided into three groups which are the pro nuclear, the contra nuclear and the group with no opinion. The contra-nuclear group is divided into three categories: The agree with NPP Plan, The disagree with NPP Plan and The Contra nuclear. The contra nuclear groups do not have the same criteria. So it is a problem of technology dissemination and it needs innovations to overcome this problem, so people will have proper information about nuclear. Community empowerment programs from Universitas Gadjah Mada play an important role in disseminating better and balanced information. Several activities that have been done resulted in increasing the people’s knowledge about nuclear technology including safety and security aspect.

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