

**PRESENT STATUS OF THE PUBLIC
INFORMATION ACTIVITIES
IN THAILAND**

by

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Present Status of the Public Information Activities in Thailand
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Introduction

Nuclear energy utility in Thailand has been operated for a certain period of time. It has been increased since 1962 when the Office of Atomic Energy for Peace (OAEP), or the present Office of Atoms for Peace (OAP), first operated the Nuclear Research Reactor. Nuclear energy has been developed for usage in various fields, for example, medical application, agricultural application, and industrial application.

Since the subjects concerning nuclear energy are complicated and difficult to understand, Public Relations and Public Information for these subjects are necessary, which OAP has been proceeding constantly similar to other governmental offices.

From the accident at Chernobyl Nuclear Power Plant in 1986, OAP's Ongkarak Nuclear Research Center Project has faced a great number of difficulties. OAP has tried to offer the public more about nuclear information and create several activities for local people in Ongkarak area of Nakornnayok Province. Everything seemed good until the accidental incident of Cobalt-60 in Thailand itself in the year 2000. Taking this accident, the NGO attacked the ONRC Project terribly. Therefore, OAP has to initiate more Public Information activities.

Status of the Public Information Activities in Thailand

During the past year, OAP has hired Pro-link Ltd. Company, a private company, to operate several kinds of activities via radio, television, and newspaper media as followed:

Television Media

- A 3-minute documentary program "Enriched with Nuclear Technology" (*Roo Fuang Ruang Technology Nuclear*), broadcast on Channel 3 every Thursday from 11.25 am. to 11.30 am. The documentary was produced and broadcast from July – December 2002, a total of 24 episodes.
- A 3-minute documentary program "Enriched with Nuclear Technology" (*Roo Fuang Ruang Technology Nuclear*) in a game-

show style, broadcast on Channel 3 every Thursday from 11.25 am. to 11.30 am. This program gave an opportunity to students from different schools to participate in the game to win a scholarship. It was produced and broadcast from December 2002 – April 2003, a total of 16 episodes.

- A 3-minute documentary program “Enriched with Nuclear Technology” (*Roo Fuang Ruang Technology Nuclear*), broadcast on Channel 11 every Saturday during 06.30 pm. to 09.00 pm. The documentary was produced and broadcast from July 2002 – April 2003, a total of 40 episodes.

In conclusion, there are 80 episodes of documentary produced for television media.

Radio Media

- A 1-minute documentary program broadcast every Monday and Friday at 10.05 am. via “Cooperative Helping” (*Ruam Duay Chuay Kan*) program on FM 96.0 MHz from September – October 2002 and from January – March 2003, a total of 44 times.
- A 3-minute special report broadcast every Monday to Friday during 07.30 am. to 08.00 am. (after morning news) on FM 92.5 MHz from June 2002 – May 2003, a total of 96 times.
- A live program broadcast every Monday to Friday during 05.30 am. to 03.55 pm. on FM 98.5 MHz from July – September 2002, a total of 66 times. The host of this program corresponded with audiences and presented some information of OAP in a certain period of the program.

In conclusion, a total of radio-broadcast programs are 206 times.

Publication Media

- A special scoop, in special articles, published during July 2002 – May 2003, a total of 6 times.
- News or pictures in newspaper published during June 2002 – April 2003, a total of 6 times.

The company operated television and radio broadcast as well as publication altogether to make repetitive PR so that general people can recognize and understand nuclear subjects more and more.

When the contract was terminated, OAP currently hires Team Consulting and Management Ltd. Company to operate as followed:

Television Media

A 3-minute documentary program will be produced and broadcast on ITV (Freedom Television) from February – July 2004, a total of 40 episodes.

Radio Media

A 1-minute documentary program will be produced and broadcast by 2 radio stations from January – May 2004, a total of 66 episodes.

Publication Media

A newspaper article, of which the size is ¼ of newspaper page, will be published from November 2003 – August 2004, a total of 12 times.

For ONRC, OAP has operated several training programs to offer nuclear information to teachers and students in Nakornnayok Province. The important activity that has recently been proceeded in late September is a working seminar in the topic "Human Relations and Psychology in Communicating Nuclear Information with Education Administrators". Administrators from primary schools in Ongkarak District, Nakornnayok Province were invited to join the seminar with OAP senior officials to exchange their opinions. The conclusions are very useful, for example, Nuclear Information Services should be prepared with informal language and focused on young people, or academic institutes in Nakornnayok Province should increase educational activities to inform nuclear knowledge, etc.

During the past September, OAP hired Rajabhat Institute of Suan Dusit to survey the public opinions toward OAP. It can be concluded that OAP is fairly known (59.41 %). About the OAP information, 88.73% of surveyed people have been informed via television, newspaper and radio respectively. However, they are not satisfied with subjects, knowledge, and amount of the information (43.24%). The OAP prominence is

Nuclear Research (13.09%). The weak point is insufficient PR for the OAP information (45.50%), consistent with proposals to improve OAP by operating Public Relations via several media about the Office's working procedures.

For the ONRC topic, it is fairly known (34.80%). People understand the ONRC role and duty that it is a Center of Research, Develop and Apply Nuclear Energy for National Development (first place). However, they thought the ONRC establishment might be dangerous.

Evaluation of FNCA PI Activities in Thailand

OAP adopted the questionnaire of the FNCA countries to survey opinions of high school (Mathayom 6) students from schools in Bangkok and environs, and Ongkarak District, Nakornnayok Province. There are 1,120 examples, 744 boys and 376 girls at the average age of 17 – 18. Most of the students like to learn subjects concerning with science (60.27%), and used to learn about "radiation" and "radioactive" (87.11%). Most of them have never been to Radiation Research Institute (67.61%) but they are used to X-Ray radiation treatment (68.12%)

There are some interesting topics in the questionnaire that can be concluded as followed:

- The most interesting topic for students is **their own life in the future, Science and High Technology, and Energy and Environments** respectively.
- They are informed with scientific and technological news via **television and radio, newspaper, and Internet** respectively.
- About their interest toward the radiation topic, most of them **are slightly interested** (77.59%), and **understand the definition of radiation a little** (82.92%).
- When they hear the word "radiation", most of them agree about **utility** (57.82%), **the trend for future utility** (72.43%), and **danger** (68.18%). If they hear the word "radiation", most of them will think of **X-Ray Radiation Treatment, Nuclear Power Plant, and Cancer Treatment** respectively.
- About the radiation utility in different sections, students know some radiation usage for Agricultural and Medical Application.

However, they know a little radiation usage for Industrial Application.

- About the **definition** of Nuclear, most of them understand that it is an origin of energy (54.04%), and think that Thailand should have solar energy (46.64%) and nuclear energy (27.65%) as the origins of energy in the future.

Conclusion

OAP has operated much PI of Nuclear Energy but the result is still unsatisfactory. Therefore, advanced Public Relations is needed especially the subjects of ONRC that has already received the Construction Permit to build the Nuclear Research Reactor.

Attachm
ent

**Conclusion of the Opinion Survey among High School
In the Topic of Radiation Knowledge
September 2002
Office of Atoms for Peace, Ministry of Science and Technology**

1. Are you interested in these following topics or not? Select three that you are most interested in.

Result

- No. 1 Their own life in the future**
- No. 2 Science and High Technology**
- No. 3 Energy and Environments**
- No. 4 Lifestyle in School and Friends
- No. 5 Medical Science and Public Health
- No. 6 Family Life
- No. 7 Cultures and Sports
- No. 8 Political Subjects / Country Administration
- No. 9 Population and Food
- No. 10 Diplomacy and Regional Controversy

2. How are you informed with news about science and technology, such as, Natural Phenomenon, Human Life, and Computer? You can choose more than 1 answer.

Result

No. 1 Television and Radio

No. 2 Newspaper

No. 3 Internet

No. 4 Teachers / Professors

No. 5 Textbooks

No. 6 Friends

No. 7 Science Magazines and Books

No. 8 Exhibitions, Seminars, Activities

No. 9 Family Members (Father, Mother, Brothers and Sisters)

No. 10 Comic Books and Cartoons

No. 11 Monks and Religious Preachers (Temples, Churches,

Mosques)

3. Are the following explanations about science and technology true or false? Choose 1 answer in each explanation.

(1) The temperature at the Earth core is very hot.

Result

88.33% Answer 'Correct'

8.11% Answer 'Wrong'

8.55% Answer 'Do not know'

(2) All materials with radiation are human made.

Result

7.66% Answer 'Correct'

82.55% Answer 'Wrong'

9.80% Answer 'Do not know'

(3) Most of Oxygen in the air is synthesized from green plants.

Result

67.40% Answer 'Correct'

23.52% Answer 'Wrong'

9.07% Answer 'Do not know'

(4) Laser is concentration of sound waves.

Result

10.78% Answer 'Correct'
50.48% Answer 'Wrong'
38.74% Answer 'Do not know'

(5) Electron is smaller than Atom.

Result

79.17% Answer 'Correct'
14.15% Answer 'Wrong'
6.68% Answer 'Do not know'

(6) The fact that controls a child's sex is father's gene.

Result

50.05% Answer 'Correct'
36.41% Answer 'Wrong'
13.54% Answer 'Do not know'

(7) The important reason that makes the Earth hotter is Freon gas discharge.

Result

33.39% Answer 'Correct'
19.95% Answer 'Wrong'
46.66% Answer 'Do not know'

4. Are you interested in the topic of radiation? Choose 1 answer.

Result

77.59% A little
13.32% A lot
9.09% Not at all

**5. How much do you understand the definition of "radiation"?
Choose 1 answer.**

Result

82.92% Understand a little
12.00% Understand and be able to explain to other people
5.08% Do not understand at all

6. When you hear the word "radiation", what do you think of according to the following topics? Choose 1 answer.

(1) Utility

Result

57.82% Agree
31.48% Agree a little
6.01% No comment
4.33% Still suspicious
0.55% Disagree

(2) Trend for Future Utility

Result

72.43% Agree
19.15% Agree a little
5.14% No comment
3.10% Still suspicious
0.18% Disagree

(3) Familiarity

Result

10.40% Agree
37.30% Agree a little
28.42% No comment
14.03% Still suspicious
10.21% Disagree

(4) Capability to be controlled

Result

26.82% Agree
34.99% Agree a little
14.21% No comment
19.27% Still suspicious
4.71% Disagree

(5) Danger

Result

68.18% Agree

21.12% Agree a little
4.63% No comment
4.81% Still suspicious
1.25% Disagree

(6) Strangeness

Result

15.60% Agree
25.27% Agree a little
28.72% No comment
10.37% Still suspicious
20.04% Disagree

(7) Mystery

Result

20.04% Agree
22.11% Agree a little
26.90% No comment
13.45% Still suspicious
17.51% Disagree

**7. When you hear the word "radiation", what do you think of?
You can choose more than 1 answer.**

Result

No. 1 X-Ray
No. 2 Nuclear Power Plant
No. 3 Cancer Treatment
No. 4 Nuclear Bomb at Hiroshima and Nagasaki
No. 5 Radioactive Residue
No. 6 Food Radiation
No. 7 Radiation Perception
No. 8 Madame Koori
No. 9 Plant Mutation
No. 10 White Blood Cancer
No. 11 Accident at Chernobyl Nuclear Power Plant

**8. The following messages are some definitions of "radiation".
Choose one that is most similar to what you think.**

(1) Materials with radiation originate naturally since the birth of the Earth.

Result

59.72% Yes
20.59% No
19.70% Do not know

(2) The intensity of radiation that has been spread from the origin will not change through the time.

Result

15.44% Yes
65.93% No
18.63% Do not know

(3) Do you believe that general food has radiation?

Result

42.07% Yes
23.47% No
34.46% Do not know

(4) The direction of radiation's beam can change if it is windy.

Result

15.494% Yes
59.27% No
25.25% Do not know

(5) The characteristics of natural radiation and synthetic one is different.

Result

48.39% Yes
23.39% No
28.21% Do not know

(6) Human body has very low radiation spread all the time.

Result

56.99% Yes
8.28% No

34.73% Do not know

9. At this moment there is radiation utility in a lot of fields. Do you have any knowledge about the following topics? Choose 1 answer in each topic.

- (1) Radiation usage to improve and mutate the strains of rice, wheat, soy, flowers, etc.

Result

5.16% Well
42.08% Fairly
28.00% A little
24.76% Not at all

- (2) Radiation usage to examine human health and inner organs.

Result

15.14% Well
64.44% Fairly
16.29% A little
4.14% Not at all

- (3) Radiation usage to separate ingredients and eliminate toxins in the air from industrial factories' smoke.

Result

3.24% Well
21.56% Fairly
30.15% A little
45.05% Not at all

- (4) Radiation usage to halt growth in potato, onion, and garlic.

Result

7.22% Well
31.65% Fairly
31.48% A little
29.65% Not at all

- (5) Radiation usage for Cancer treatment.

Result

23.50% Well
53.62% Fairly
18.90% A little
3.98% Not at all

(6) Radiation usage to disinfect medical tools, such as, syringes, cottons, bandages.

Result

11.68% Well
35.57% Fairly
32.08% A little
20.66% Not at all

(7) Radiation usage to investigate travelers' baggages at the airport.

Result

21.55% Well
52.12% Fairly
17.58% A little
8.75% Not at all

(8) Radiation usage to prevent damage that may happen with plants and pets by sterilizing pests.

Result

6.08% Well
32.82% Fairly
30.76% A little
30.33% Not at all

(9) Radiation usage to measure thickness of steel plate in iron factories.

Result

7.33% Well
31.51% Fairly
33.10% A little
28.07% Not at all

(10) Radiation usage to examine statues and pictures that are culturally valuable without damage.

Result

11.37% Well
32.86% Fairly
28.63% A little
27.14% Not at all

(11) Radiation usage to analyze small toxins in the air.

Result

4.19% Well
19.86% Fairly
34.82% A little
41.14% Not at all

(12) Radiation usage to produce the heat insulator covering electric wire.

Result

4.51% Well
20.60% Fairly
27.41% A little
47.48% Not at all

10. See the picture No. 1 in the attached document.

A. Which sign is well known and widely used internationally to show that the food has been radiated? Choose 1 sign.

Result

16.97% Choose the picture No. 1
20.83% Choose the picture No. 2
56.10% Choose the picture No. 3
6.10% Choose the picture No. 4

B. Which picture is the symbol showing danger from radiation?

Result

4.16% Choose the picture No. 1
76.69% Choose the picture No. 2
6.05% Choose the picture No. 3
13.10% Choose the picture No. 4

11. The picture No. 2 in the attached document shows the results of radiation utility in medical branch. Choose 1 answer that is consistent with A. and B.

A. Photo of organs injected with radiation substance into a body.

Result

21.87% Choose the picture No. 1
60.18% Choose the picture No. 2
17.96% Choose the picture No. 3

B. Photo of organs from X-Ray Computer (CT)

Result

22.67% Choose the picture No. 1
24.87% Choose the picture No. 2
52.46% Choose the picture No. 3

12. What do you want to know about "radiation"? You can choose as many answers as you want.

Result

No. 1 Radiation amount that will affect health
No. 2 Medical utility
No. 3 Radiation usage in food
No. 4 Measures of safety administration
No. 5 Measures in case of accidents
No. 6 Industrial utility
No. 7 Appliances that use radiation
No. 8 Control Measures according to the laws
No. 9 Plant improvement and mutation with radiation
No. 10 The most advanced research branch
No. 11 No special interest in any case

13. What kind of energy origin do you think Thailand should have in the future?

Result

46.64% Solar energy
27.65% Nuclear energy

13.09%	Firewood and agricultural residues, such as, husk, straw
7.79%	Oil and gas
4.83%	Coal

14. What does "Nuclear" mean?

Result

54.04%	Origin of Energy
19.05%	A branch of fundamental science
15.87%	Weapons, bombs
9.07%	Dangerous material
1.97%	Cartoon story

Personal Data

1. Sex

66.37% Male
33.63% Female

2. Age

0.09% 15 years
4.14% 16 years
66.49% 17 years
28.48% 18 years
0.79% 19 years

3. Do you like to study any subjects concerning with science?

28.97% A lot
60.27% Fairly
10.76% Do not like

4. Have you ever learnt about "radiation" or "radioactive" in your school?

87.11% Yes
12.89% No

5. Have you ever visited any university, research institute, or Public Relations Pavilion to study about "radiation"?

32.39% Yes
67.61% No

6. Have you ever had an X-Ray treatment?

68.12% Yes
31.88% No

7. In your family, does anyone use to have a radiation treatment?

35.64% Yes
64.36% No

8. Have you ever visited these following sites? You can choose more than 1 answer if you want.

Result

No. 1 Museums that have exhibitions about science and technology

- No. 2 Zoos or botanical gardens
- No. 3 Public libraries
- No. 4 Science Research Institutes
- No. 5 Art museums
- No. 6 Power Plants