

SESSION 3: NUCLEAR SCIENCE AND TECHNOLOGY APPLICATIONS: SUSTAINING, ENABLING AND EMPOWERING

PANEL 3.2: Sustaining nuclear technology through capacity building



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STRATEGY OF UTILIZING NUCLEAR TECHNOLOGY FOR PEOPLE'S WELFARE – INDONESIA'S EXPERIENCE

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The challenges

1. Nuclear ????
2. Only a small number stakeholders have activities related with nuclear technology
3. Sectoral-ego
4. Some private sectors reluctant to invest in high-cost technology

So, what should we do?

A man wearing a dark baseball cap with the word "CARDINAL" on it and a patterned t-shirt is standing in a field of green crops. He is looking down at a small green bean he is holding in his hands. The background shows a rural landscape with houses and trees under a cloudy sky at dusk or dawn.

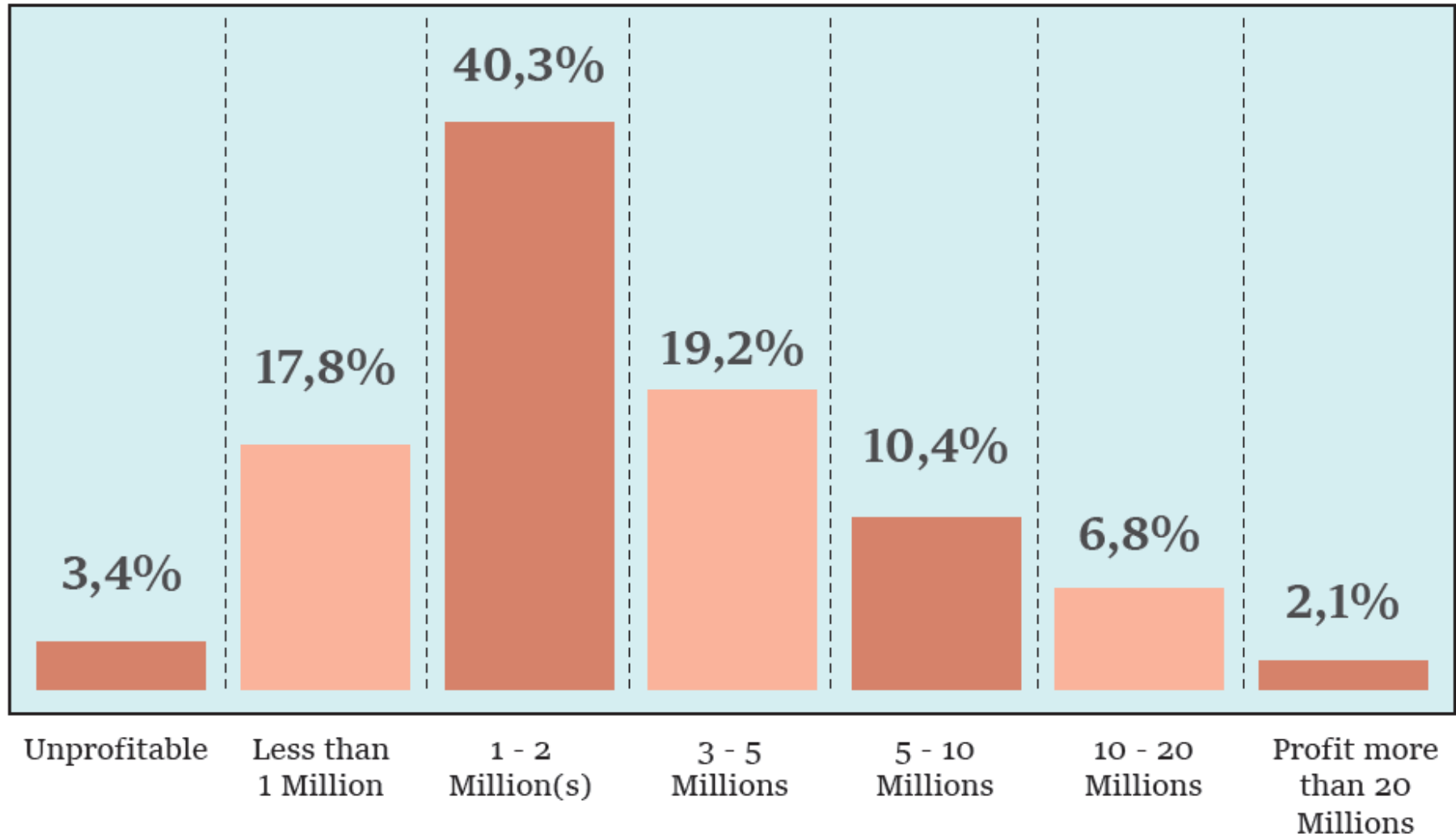
AGRICULTURE

Strategy 1: Promotion using incentive (PHLIN)

1. Started since 1999
2. Dissemination of rice and soybeans varieties from BATAN's R&D
3. Involving 19-24 regions
4. Each region receives incentive of 75 million rupiah/year from BATAN
5. Total area ~50,000 Ha/year



Does the farmer's income increases? Survey conducted in 2016



Obtained benefits measured in Indonesian Rupiahs (IDR)

Strategy 2: Science Techno Park (STP)

1. Since 2015 BATAN, in cooperation with 3 regions, has STP program:
 - A national STP in Jakarta
 - 3 Agro Techno Park (ATP) in Sumatera, Sulawesi, and Java
2. The goal in 2019: The establishment several start-up companies that are not subsidized by the Government
3. At present, 11 start-up companies in 3 ATP have been formed



2.2.2

2.2.1



Strategy 3: commercial contract with private sector



1. Commercial contract with the private sector for a certain of rice variety (**tropiko**) (2017)
2. By this contract, this private sector has a monopoly right for 5 years to distribute **tropiko**
3. It is expected to have **a far greater impact*** than previous strategies.
4. ***This private sector has 440 branches throughout Indonesia**

FOOD



The New Indonesian Gamma Irradiator

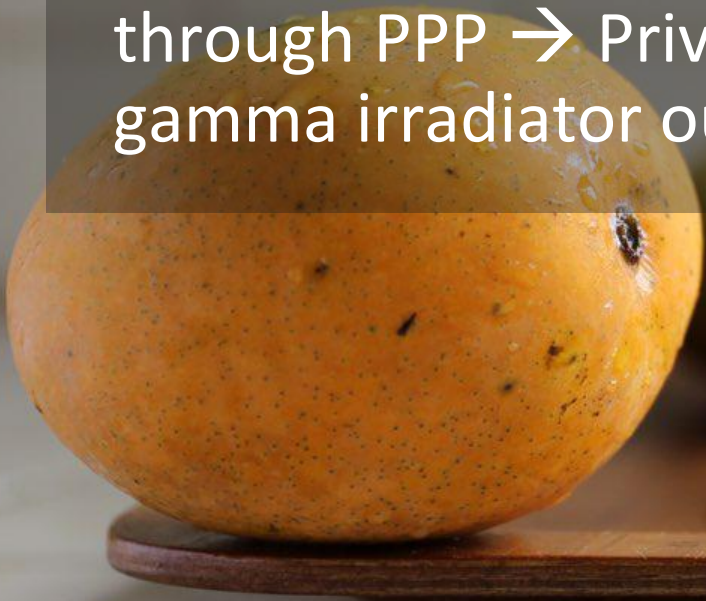


- For food preservation and sterilization of medical tools
- 84% Made in Indonesia (inaugurated at 15 November 2017)

Strategy: Public Private Partnership (PPP)



- BATAN is non commercial organization.
- Government-funded nuclear facilities must be able to provide immediate benefits.
- The government policy: commercialization option through PPP → Private sector can utilize the BATAN's gamma irradiator outside working hours



Closing



These strategies may be used also for the health products (radiopharmaceuticals), industry (non destructive tests), or even the utilization of the research reactors.

“Problems are not stop signs, they are guidelines.”

A close-up photograph of a person's hands, likely of African descent, holding two stalks of rice. The hands are positioned in the center of the frame, palms facing up. The rice stalks are held between the fingers, with one stalk on the left and one on the right. The background is a lush green rice field with some golden-brown stalks, suggesting a harvest scene. The lighting is bright, creating strong shadows and highlights on the hands and the rice.

Thank You