

Ilmi G. N. Hewajulige

INDUSTRIAL TECHNOLOGY INSTITUTE, SRI LANKA

Industrial Technology Institute
Sri Lanka

Nuclear
Technology
for Climate

Mitigation, Monitoring, Adaptation

18-19 September 2018

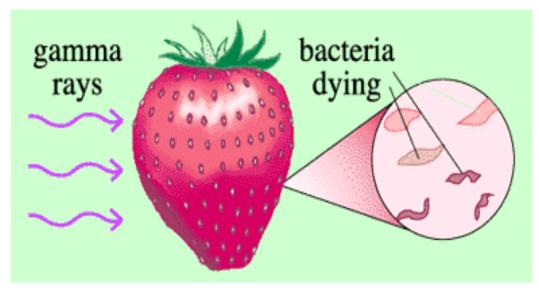
Food Security and Safety challenges that climate change poses

Global worming will cause complex changes in climate

Rise in Temperature will have negative effects on,

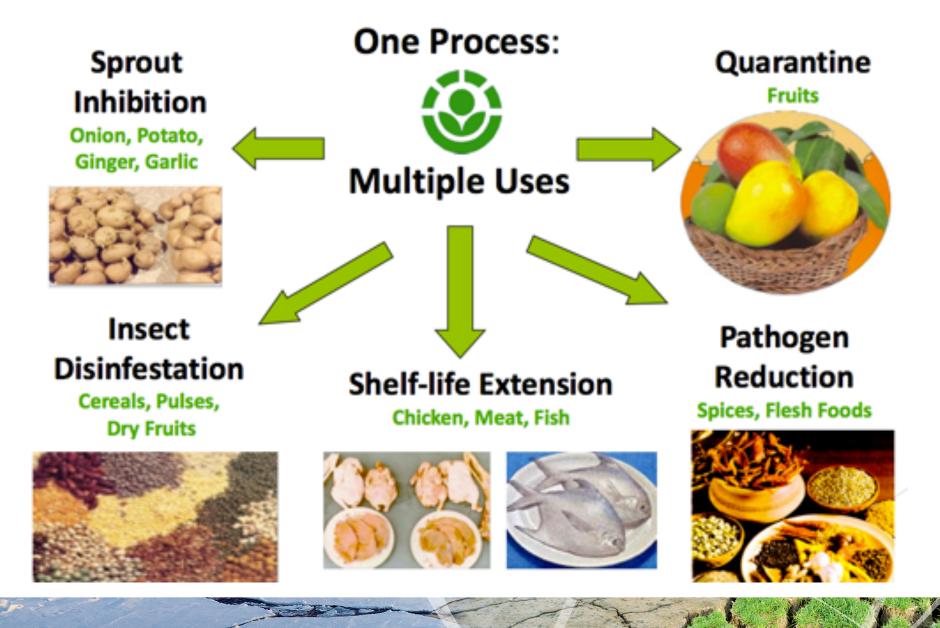
- Food Production
- Increase postharvest losses
- Proliferation of insect pests
- Pose quarantine issues
- Food borne microorganisms, parasites change leading negative effect on human health
- New resistant pathogenic microbial strain development
- Extreme weather Increase natural disasters
 Need Emergency preparedness Emergency food

Food Irradiation – Is a Preservation technique



- Decrease food borne diseases
- Improve food security
- Effective sterilization of insect pests quarantine treatment
- Provide shelf stable emergency rations

Benefits of Food Irradiation



Success Stories in use of food irradiation

• As a Phytosanitary treatment



Irradiated fruits from Thailand, Vietnam, India, Bangladesh to USA / From Australia to New Zealand



India Mango



Vietnam Dragon fruit



Irradiated Potato - Japan

Gamma Irradiation As a Sanitary treatment







Space food in Korea



China: Research on fresh cut salads for immuno-comp. patients Irradiated food products in chinese market













Success Stories in use of food irradiation

Emergency Food Development









Indonesia

Pakistan

India -R&D

Philippines – Irradiated Energy bar



Sri Lanka – R&D

