

LIST OF 2014 PNRI PROJECT BENEFICIARIES

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PROJECT TITLE	BENEFICIARIES
1. Development of an Integrated Pest Management Strategy against <i>Brontispa longissima</i> (Gestro), an Invasive Coconut Pest, and Other Palm Species - Component 6. Effect of Gamma Irradiation on the Sterility of <i>B. longissima</i>	<ul style="list-style-type: none"> • Coconut growers • Coconut industry • Researchers • Scientists
2. Grain Quality Improvement in Rice (<i>Oryza sativa</i> L.) Through Induced Mutation Breeding	<ul style="list-style-type: none"> • Farmers • General public
3. Improvement of Crop Quality and Stress Tolerance for Sustainable Crop Production Using Mutation Techniques and Biotechnology in Mungbean (<i>Vigna radiata</i> [L.] R. Wilczek)	<ul style="list-style-type: none"> • Farmers • General public
4. Effects of Biofertilization and N Levels on Nitrogen Nutrition of Grain Cereals	<ul style="list-style-type: none"> • Farmers • Agricultural sector
5. Environmental Radioactivity Monitoring in PNRI Grounds and Vicinities	<ul style="list-style-type: none"> • General Filipino public
6. Radiation-Induced Grafted Materials for Environmental Remediation	<ul style="list-style-type: none"> • Waste water treatment industries • Researchers/scientists
7. Application of Nuclear Based Receptor Binding Assay (RBA) Technology in the Analysis and Risk Assessment of Harmful Algal Blooms (HABs)	<ul style="list-style-type: none"> • Researchers/scientists
8. Developing PNRI Capability for Electron Beam Technology Applications	<ul style="list-style-type: none"> • Researchers • academe • regulatory bodies • Industries/environmental/agricultural/medical sectors • Philippine Army • General public
9. Food Origin Authentication and Detection of Synthetic Acetic Acid Adulteration in Philippine Vinegar Using Liquid Scintillation Counting and Isotope Ratio Mass Spectrometry	<ul style="list-style-type: none"> • Nutri-Asia • Vinegar industry • FDA
10. Multi-Element and Black Carbon Determination of Air Particulate Samples from Caloocan City	<ul style="list-style-type: none"> • EMB • Caloocan City LGU • General public
11. Assessment of Indoor Air Particulates (PM2.5) at Selected Rooms at the Philippine General Hospital	<ul style="list-style-type: none"> • UP Manila community and researchers
12. Assessment of Respirable Air Particulate (PM2.5) Pollution Sources in Metro Manila by Nuclear Analytical Techniques and Receptor Modelling	<ul style="list-style-type: none"> • LGUs • EMB • EU-GFA • General public
13. Tc-99m and Tc-99m Radiopharmaceuticals: Preparation and Quality Control for Nuclear Medicine Applications	<ul style="list-style-type: none"> • Nuclear medicine centers and practitioners • Hospital patients
14. Isotope Techniques Application for Groundwater Resources Characterization and Assessment	<ul style="list-style-type: none"> • Water utilities • Water resources regulators/policy makers • LGUs • General public
15. Development of Sterile Insect Technique for Dengue Mosquito Vector, <i>Aedes aegypti</i> , Using Gamma Irradiation	<ul style="list-style-type: none"> • Health sector • Researchers/scientists

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16. Mutation Breeding of Priority Agricultural Crops: Component 1. Ornamentals	<ul style="list-style-type: none"> • Researchers • Plant breeders • Ornamental plant growers • Commercial nurseries/farms • Floriculture industry • Hobbyists/private collectors • National and international germplasm collection (genebanks)
17. Enhancing Agricultural Productivity in Mindanao through Nuclear Technology: Fruit Crops (Mangosteen and Cashew)	<ul style="list-style-type: none"> • Farmers • Agriculture sector
18. Enhancing Productivity of Locally Underused Crops through Mutated Germplasm and Evaluation of Soil, Nutrient and Water Management Practices [RAS/5/064]	<ul style="list-style-type: none"> • Farmers • Agriculture sector
19. Application of Nuclear Analytical Techniques for Efficient Nutrient and Irrigation Management in Corn Production	<ul style="list-style-type: none"> • Backyard farmers • Commercial corn growers • Water managers • Water users association • Researchers and scientists • Government agencies • Research and academic institutions • LGU's • Non-government organizations
20. Water Balance and Loss Assessment of the Upper Pampanga River Integrated Irrigation System (UPRISS) and Magat River Integrated Irrigation System (MARIIS)	<ul style="list-style-type: none"> • Government agencies (NIA, DA-RFUs, LGUs) • Policy makers • Researchers • Engineers and scientists • Academic institutions • Non-government organizations (irrigators associations, farmers associations) • Private sector
21. Nutrient Dynamics Assessment of Inorganic and Organic Rice-Based Farming Systems in the Pampanga River Basin through Lysimetric and Isotopic Techniques	<ul style="list-style-type: none"> • Scientists • Academic institutions • Non-government organizations (irrigators associations, farmers associations) • Private sector
22. Supporting Mutation Breeding Approaches to Develop New Crop Varieties Adaptable to Climate Change [RAS/5/056]	<ul style="list-style-type: none"> • Farmers • Agricultural sector
23. Application of Food Irradiation Technology for Enhancing Food Safety, Quality and Agricultural Trade	<ul style="list-style-type: none"> • Food processors • Farmers • Traders • Public consumers
24. Development of Safe, Quality and Shelf-Stable Filipino Ethnic Foods for Immunocompromised Patients and Calamity Victims [IAEA Research Contract No. 16211]	<ul style="list-style-type: none"> • Immunocompromised patients/calamity victims
25. Enhancing Cytogenetic Biological Dosimetry Capabilities of the Philippines for Nuclear Incident Preparedness [IAEA Research Contract No. 17107]	<ul style="list-style-type: none"> • General public • Radiation workers • Physicians • Regulatory authorities

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26. Development of Novel Biomedical Products Utilizing Gamma and Electron Beam Facility	•
27. Management of CTBTO Stations in the Philippines: RN52 and NDC-137	• General public • Environmental sector
28. Radiological Assessment of NORM and TENORM in the Philippine Environment	• General Filipino public
29. Radiological Impact Assessment of the Fukushima Nuclear Accident in the Philippine Marine Environment	• General public • Environment sector
30. Establishment of a Real-Time Environmental Radiation Monitoring System in the Philippines	• General public • Environment sector
31. Radon Levels in Dwelling Places in the Philippines and Its Possible Implications to Human Health	• General Filipino public
32. Determination of Concentration Factors of Cesium-137 in Philippine Green Mussels (<i>Perna viridis</i>)	• General public • Environment sector
33. Capacity Building in the Use and Operation of Small Neutron Sources Phase I (2011–2015)	• Academe • Researchers
34. Characterization of Radiation Damage and Applications of Uranium/Thorium Bearing Heavy Minerals Using Nuclear and Other Related Techniques Phase I (2012–2016)	• Mining and minerals industry
35. Transfer of AOAC Accredited Isotope-Based Receptor Assay for Paralytic Shellfish Toxins to Regulatory Setting	• BFAR • Fisheries industry • Researchers/scientists
36. Evaluation of the Effects of Radiation-Modified Carrageenan on the Growth and Yield of Mungbean (<i>Vigna radiata</i> [L.] R. Wilczek) and Peanut (<i>Arachis hypogaea</i> L.)	• Farmers • Researchers/scientists
37. Supporting Pollution Assessment and Clean-Up Efforts of Selected Water Bodies in the Philippines	• DENR • Environmental managers • BFAR • Fisheries industry • Researchers/scientists
38. Hemostatic Agents from Radiation-Modified Polysaccharides and Their Derivative: Product Development and Efficacy/Safety Evaluation in Animal Model	• Health sector • Military • General public
39. Field Detection System for Saxitoxin: Assay Development and Optimization	• Environmental managers • Fisher folks • General public
40. Enhancing National Capacity for Extraction of Uranium, Rare Earth Elements and Other Useful Commodities from Phosphoric Acid	• Fertilizer and extractive industries • Agricultural, environment and health sector
41. Verification Survey for Radioactive Rare Earth Minerals in Northern Palawan	• Mining and minerals industry • Community/settlers health sector • Tourism industry
42. Characterization of the Natural Radioelement Signatures of Porphyry Copper-Gold Deposits in the Philippines by Gamma Ray Spectrometry: Implications to Minerals Exploration	• Mining and minerals industry

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43. Radon Monitoring of the Valley Fault System and Philippine Fault and its Implication as an Earthquake Precursor	<ul style="list-style-type: none"> • General public
44. The Use of Radon in the Monitoring of the Valley Fault System and Its Implication as an Earthquake Precursor	<ul style="list-style-type: none"> • PHIVOLCS • LGU • Local residents of the study area
45. Baseline Radioactivity Measurements in Southern Palawan District	<ul style="list-style-type: none"> • LGU • Local residents of the study area
46. Preparation of In-House Reference Materials for Radioactivity Measurements for PNRI Inter-Laboratory Exercises	<ul style="list-style-type: none"> • PNRI • Customers
47. Neutron Activation Analysis of Marine Sediment and Rice Samples [FNCA]	<ul style="list-style-type: none"> • LGUs • Public • Researchers/academe
48. Air Pollution Source Apportionment	<ul style="list-style-type: none"> • Industries • Researchers/academe • Students • General public • LGUs
49. Enhancing National Capacity in Applications of Industrial Radioisotope Techniques [PHI/1/018]	<ul style="list-style-type: none"> • Petroleum and petrochemical industries
50. Iteration of Design and Safety Assessment of the Deep Borehole and Near Surface Disposal Facilities in the Philippines [PHI/9/026]	<ul style="list-style-type: none"> • PNRI • Industries • Government institutions and hospitals
51. Development and Applications of Isotope Techniques for Hydrological Studies	<ul style="list-style-type: none"> • LGUs • Researchers/academe
52. Isotope Provenance Studies in Material Origin Identification/Assignment and Environmental Studies	<ul style="list-style-type: none"> • LGUs • Public • Researchers/academe • Consumers

Prepared by:


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