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Strengthening education and training infrastructure, and building competence in radiation safety in Africa

The challenge...

Building competence in radiation safety through education and training is fundamental to the establishment of a comprehensive and sustainable national infrastructure for radiation safety, in order to protect the public from the harmful effects of radiation. However, several Member States in the Africa region lack national strategies for building competence in this important area.

Postgraduate educational courses (PGECs) in radiation protection are a well-established mechanism to build national competencies in radiation protection and safety. PGECs bring together candidates who speak a common language, and address the education and training needs of graduate-level staff earmarked for positions in radiation protection. All areas where nuclear technology is applied, including industry, medicine and research, are covered.

The project...

Established under the auspices of the African Regional Cooperative Agreement for Research, Development, and Training Related to Nuclear Science and Technology (AFRA), an IAEA technical cooperation project brought together thirty-nine countries in the Africa region to support education and training in the safe, appropriate use of nuclear technology.

Building on earlier progress, the project aimed to build competence in radiation safety in the region, and to help Member States to elaborate national strategies for education and training in radiation safety. This included an assessment of existing and foreseeable needs, taking into account national capabilities and resources, as well as opportunities for Member States to utilize regional or international resources. This model of capacity building encourages self-reliance, and supports cooperation in the region.

Regional PGECs were organized within the framework of the project, and several train-the-trainer events provided national experts with the tools necessary to train their successors.

The impact...

Six five-month PGEC fellowship training courses were organized in Algeria, Ghana and Morocco. In 2013, 20 candidates from 14 French-speaking countries in the region attended the PGEC in Morocco, funded by the European Union. A further 20 candidates from 14 English-speaking countries attended the PGEC in Ghana. This training contributed to meeting the educational and professional requirements of 40 graduate-level staff working as radiation protection officers in their respective national regulatory authorities. Member States reported on progress in developing their national strategies on education and training, and a syllabus for a Masters degree programme in radiation protection was also developed.



PGEC fellows in a classroom, Ghana.

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