

WORKSHOP ON STRENGTHENING HUMAN RESOURCES DEVELOPMENT IN NUCLEAR SCIENCE AND TECHNOLOGY

The ability of the country to use nuclear technology in a sustainable manner depends on the availability and competency of its qualified human resources. Lack of enough competent manpower has been a major factor for the low utilization of nuclear technology in Tanzania.



Therefore, there is a strong need for human resources and infrastructure development. This is the key element for planning and implementing every aspect of nuclear technology from general applications to safety and security issues. In order to ensure the development and sustainability of country development plans, and to make nuclear technology contribute to national socio-economic development Nuclear science and engineering has need to be given due emphasis in the country education curricula at different levels of the education cycle. The United Republic of Tanzania is striving to build national capacity to support on-going and future nuclear applications. The demand for competent personnel with knowledge in nuclear

science and engineering has been growing in the fields of health, agriculture, livestock, industry, research, mining and energy production. The demand has been further fuelled by economic development the country is experiencing in recent years. This growing demand will inevitably require an adequate attention to capacity building in science education. Capacity building through education is necessary to sustain and develop the peaceful utilization of nuclear technology. It is vitally important to ensure the supply of qualified nuclear specialists in a variety of areas: the operation of (and specialist technical support for) existing facilities; construction and development of new facilities; research and development for the (current and) next generation of facilities; continued improvement of regulatory activities, and; several medical and other industrial applications. In order to better manage and enhance the use and application of nuclear science and technology, the users and operators must have appropriate skills and knowledge gained from education in undergraduate programs, graduate studies, postdoctoral work, and also from the education of pre-college students and improved awareness of the broader public. There has not been a corresponding growth in the supply of professionals with the requisite expert knowledge and skills in nuclear technology. Besides, the country doesn't have adequate educational and other capacity building programs in nuclear science and engineering that will alleviate the current and more importantly the future knowledge and skills gaps. A shortage of qualified and experienced personnel in various fields of nuclear applications. Nuclear education and training is an indispensable element of human resource development (HRD) and nuclear knowledge management

(NKM) to preserve knowledge and transfer it to the young generation, and to secure a qualified workforce for safe and sustainable nuclear development. The development of any national nuclear energy programme is dependent on the successful development of the workforce, through a sustainable government and industry supported nuclear educational and training programme. It is expected considerable technical and other support from the International partners will continue to support the country to develop multi-pronged capacities in the peaceful use of nuclear science and technology.