

## Supporting South-South Cooperation on Accreditation of Engineering Education Qualifications and Mobility of Engineers in Asia Pacific and Africa

With the global world of today, to be competitive, engineers from developing countries are called to have adequate and updated professional knowledge and competencies to be able to compete with their counterpart from the developing countries. Within the framework of the Malaysian Cooperative Trust Fund to enhance South-South cooperation for capacity building in education and science for the benefit of the Least Developed Countries (LDCs), Small Island Developing States (SIDS) in Asia and the Pacific, linking with African countries; there is a crucial need to leveraging scientific knowledge, engineering and technology as a way to equip individuals and communities with the knowledge, skills and attitudes to live, work and act in any country and region of the world.

UNESCO in association with the engineering bodies has a leading experience in raising the standard of engineering qualifications in universities and institutions of its Member States. In this regards, UNESCO Office, Jakarta in collaboration with the International Science, Technology and Innovation Centre for South-South Cooperation (ISTIC) and the Federation of Engineering Institutions of Asia and the Pacific (FEIAP) is working on a project aiming at fostering policies and capacity-building in science, technology and innovation, with special emphasis on the science, technology and engineering in Asia and the Pacific through knowledge exchange and mutual learning.

## South-South Cooperation on Accreditation of Engineering Education Qualifications

Taking into account the knowledge disparities between countries of the region in terms of science, engineering and technology literacy, there is a need south-south learning alliances. This can be supported by modular curricula programmes on varying levels and topics and adapted to a virtual (e-learning) mode of delivery for adoption by professional bodies and universities.

A first group of pilot countries in Asia and the Pacific have been identified (Pakistan, Papua New Guinea, Myanmar and Timor Leste) and the link with African countries such as Cameroon, Ghana, Nigeria, Tanzania and Sudan. In these countries, UNESCO - ISTIC - FEIAP cooperation is assessing and updating the accreditation system, develop training for assessors on accreditation assessment techniques and provide specific training for professors and teachers on out-based engineering education.

FEIAP has developed an "Engineering Education Guidelines" that is used to assist membership of FEIAP and the pilot countries to achieve the engineering qualification standards that is required to become internationally competitive.

## **Ensuring Mobility of Engineers in Asia Pacific and Africa**

Professional recognition of engineering qualifications is generally straightforward at a national level, however across a border it can become a serious problem and, indeed, some engineering qualifications are not a regulated profession in some countries. Hence mobility continues to be a very difficult issue, despite international accreditation agreements and accords.

With ongoing globalization, enterprises are now looking for competences more on the global market, rather than focusing on local resources. With this in mind, engineering should not be limited by national or regional borders. Thus, especially engineering should not be limited by national borders. It is therefore important to ensure that engineers from the South are well prepare to answer to the globalized world and all its challenges.

By improving the quality of engineering education in Asia and the Pacific and Africa, from national standard to an international standard, this project will enable engineers from one continent to move and work in the other continent without any barrier. Supporting international mutual recognition agreements between countries of Asia and the Pacific and linking with Africa, will help to increase the level of operation and recognition of engineers. This will also help to develop international experience that benefits not only the individual engineer, but the companies that employ them, and the communities they serve.

By improving the Engineering Education, mutual recognition of engineering qualifications from one country or region and overseas engineering qualifications will be recognized according to the "Engineering Education Guidelines" of FEIAP which will remove barriers to professional mobility of engineers

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