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CEEECoM

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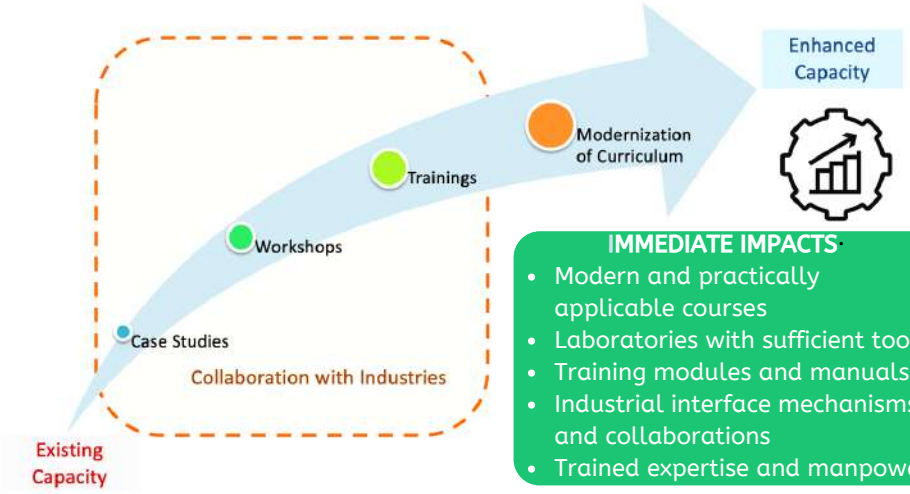
Capacity Enhancement in Electrical Equipment Condition Monitoring and Fault Diagnostics (CEEECoM)

PROJECT OBJECTIVES

- To address the problems related to expert workforce in the field of diagnosis, monitoring, and maintenance of the electrical equipment in Nepali power industries and manufacturing industries by bringing innovation in higher education teaching and learning methods
- To fill the expertise gap and enhance the relevance of Nepali higher education institutions for the labour market and the society as a whole.
- To implement real problem based teaching and learning methods in the curriculum of HEIs of the partner countries.

APPROACH & IMPACTS



IMMEDIATE IMPACTS

- Modern and practically applicable courses
- Laboratories with sufficient tools
- Training modules and manuals
- Industrial interface mechanisms and collaborations
- Trained expertise and manpower

EXISTING CAPACITY

HEIs in Nepal and Bhutan:

- Basic undergraduate courses
- Graduate level course focused in power system engineering
- Lack of projects and thesis works to address real industrial problems and industrial efficiency/innovation challenges.
- Lack of reflection of local governmental and industrial needs and challenges in curriculum and training.

LONG-TERM IMPACTS

- Improved access to quality higher education
- Strengthened human resource and educational capacity
- Strengthened role and relevance of HE in socio-economic development and sustainable development goals including net-zero targets.
- Modern technology and profession practice skill transfer from Europe to Asia.
- Contribution to environmental conservation and climate change effect mitigation with improved efficiency of power system equipment.

KEY ACTIVITIES

Case studies and surveys of the overall condition monitoring, fault diagnostics and maintenance of the electrical equipment in the electricity utility companies and industries of Nepal and Bhutan.

Challenge Assessment Workshops will be organized with participants from the key stakeholders where the expertise of the European partners will be used to come up with the need-analysis for the development of the courses, curriculum, laboratory facilities and training.

Training sessions will be organized where the professional engineers from the electricity utility companies and industries will be trained by using the selected and developed software and tools together with other training materials.

Modernization and practicality enhancement of the relevant courses in existing curriculum of Nepali and Bhutanese universities. This also includes the strengthening of the laboratories for problem-based learning as well as the possibility of using the laboratories as a service component to the industry for the purpose of continuous and life-long-learning.

Mobility provisions for faculties and students from Nepal and Bhutan to visit the European partner universities every year within the project duration, to learn from the teaching and research practices, and build their capacity in the areas within the scope of this project. Students each from the European partner universities will visit Nepal and Bhutan every year during the project duration.