

**JOINT UNESCO-WFEO EVENT
THE STRATEGIC ROLE OF ENGINEERING FOR ACCELERATING
THE DELIVERY OF THE 2023 AGENDA**

UNESCO - THURSDAY 27.10.2022

**Roundtable – Engineering as a lever to achieve UNESCO’s priorities
for Africa and SIDS**



**Presentation By: Raj H Prayag GOSK.PDSM
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President Elect of the Southern Africa Federation of
Engineers (SAFEO)**





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Institution of Engineers Mauritius was created on 26.02.1948

to foster engineering science and its application in all engineering disciplines;

to ensure the highest standard of service in engineering;

to improve the status and safeguard the interests of the engineering profession;

to guard against, and eliminate all forms of discrimination within the engineering profession, including gender inequalities, and to use best endeavor to advocate and promote equal opportunities to men and women engaging into engineering education, and in the course of their training and employment, and in their general advancement.





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Sponsored the enactment of the Council of Registered Professional Engineers Act in 1965 and amended in 1966

Requirement to practice in Mauritius:

* 4 year degree of equivalent standard to WA

* Two years of supervised experience





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1

- IEM is engaged in mentoring the graduate engineers for two years leading to their registration

2

- Since 2017 – change its constitution to set up the Engineering Accreditation Board benchmarked with Washington Accord

3

- Being mentored by ECSA and NBA under patronage of WFEO/UNESCO Education Committee





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Working with the three public national universities for the upgrading of their engineering programmes to meet the standard based on OBE principle to meet the Washington Accord Standard

Plan to apply for Provisional status of WA membership in June 2023





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01

Education of the engineers through CPDs

02

UNESCO funded project for trainers of teachers
and integration of C/C into the national school
curriculum (22-25 November 2022)





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IEM is also recognized and consulted on major national issues such as with regard to standards (MSB), Energy policies, Climate Change mitigation and adaptation programmes, water security strategy etc.





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Question of the day:

The pandemic has unearthed new vulnerable areas in Africa, regarding scientific and Technological advances. What are some concrete ways engineers can help communities in the African Region in this area?

Answer:

Pandemic caught the authorities off their guard

There was no planning or contingencies to deal with the pandemic

Lack of an early warning system

Pandemic has highlighted the shortcomings in areas of communications

Lack of internet coverage to get information and to disseminate information across large areas

Infrastructure has also been a major hurdle to get help where it was most needed





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Climate Change issues have compounded the problems

Severity in CC has brought about severe drought and flooding, forest fires and energy insecurity, diseases, lack of medicines and access to medicines

Inaccessibility to information

Inaccessibility to vaccines. Africa /SIDS were at the end of the line to receive vaccines because of incapacity to compete for vaccines and also because of distance between place of manufacture to the country and logistics required to deliver.





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Relevance of education
with regard to C/C

Relevance of yesterday's
education to today's and
tomorrow needs

**Challenges
EDUCATION**

Reticence of Universities
to change and update their
teaching programmes

New Programmes to deal
with new challenges





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**Pro-Active Planning
Engineers play major role
in all these areas**

Better land Use planning
With defined zones for
different land use

Renewable energy in Africa
and SIDS is abundantly
available due to sun, wind

Flood plains ecosystem -
pressure on land use in
coastal areas

Advance warning system to
warn against tsunamis,
cyclones and flooding





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Thank you!

