



# Welcome to Workshop on: “Modernising Agricultural Engineering Programmes to meet Africa’s Agenda 2063: The Africa We Want”

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PAN AFRICAN SOCIETY FOR  
AGRICULTURAL ENGINEERING



# Questions for Group Discussion

Questions	Facilitation and Reporting
1. Are the Agricultural Engineering curricula offered at various institutions meeting the needs of industry? If not, what needs to change?	Prof Umezuruike Linus Opara Ms Boeboe Neethling
2. What transformation of Agricultural Engineering curriculum is necessary to support the transformation and industrialisation of agriculture in Africa towards Agenda 2063 and beyond?	Prof Emmanuel Bobobee Prof El Houssine Batali
3. How can quality assurance in Agricultural Engineering programmes be improved to facilitate accreditation?	Prof Noble Banadda Prof Tilahun Workneh
4. What good pedagogical practice should be adopted to meet the needs of current and future students?	Dr Jonathan Cooper Mr Ed Mashatise Dr Thomas Lee
5. What needs to be done to promote engagement and collaboration between Agricultural Engineering degree programmes offered in Africa?	Mr Alastair Taylor Dr Joseph Mpagalile
6. What matrices/milestones are needed to progressively measure/assess the impact of enhanced Agricultural Engineering Curricula on the journey towards the Africa we Want?	Prof Michael Faborode Prof Ayub Gitau Prof KA Taiwo

# Group 6

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- What matrices/milestones are needed to progressively measure/assess the impact of enhanced Agricultural Engineering Curricula on the journey towards the Africa we Want?

# Feedback from Group 6

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- Prof Faborode moderated the session
- About 8-9 participants
- The major measure in INCREASED AGRICULTURAL PRODUCTIVITY
- The SDGs are great indices to measure productivity and other indicators of progress.
- SDG 1 – global poverty
- SDG 2– zero hunger
- SDG 5 – on gender – women are major players
- Consciously integrate the SDGs into the curriculum so students are equipped to take these on (see next two slides for all the SDGs).

# The SDGs

- **Goal 1.** End poverty in all its forms everywhere
- **Goal 2.** End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- **Goal 3.** Ensure healthy lives and promote well-being for all at all ages
- **Goal 4.** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- **Goal 5.** Achieve gender equality and empowerment of all women and girls
- **Goal 6.** Ensure availability and sustainable management of water and sanitation for all
- **Goal 7.** Ensure access to affordable, reliable, sustainable and modern energy for all
- **Goal 8.** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- **Goal 9.** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- **Goal 10.** Reduce inequality within and among countries
- **Goal 11.** Make cities and human settlements inclusive, safe, resilient and sustainable
- **Goal 12.** Ensure sustainable consumption and production patterns
- **Goal 13.** Take urgent action to combat climate change and its impacts\*
- **Goal 14.** Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- **Goal 15.** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- **Goal 16.** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- **Goal 17.** Strengthen the means of implementation and revitalize the global partnership for sustainable development

# The SDGs in Picture



- To transform the Agric sector - - need to meet needs of various sector – crops, livestock, fisheries, forestry
- Hence, Curriculum should be broad based – including animal products, etc
- Also, it should diverse to include all of the value chain (value addition, export promotion, structures, soil and water resources conservation & management.....)
- This enables link-up with the agric sector-industry.
- Industry relevance entails - Agric Eng is not = Farm mechanization or tractorisation only
- Agric Eng must be to enhance Agricultural practice
- Another major goal: transform the rural areas by dev suitable techs adaptable to go from where we are to the Africa we want.
- Need for flexibility and professional adaptation in the curriculum to meet the dynamics of a 4IR society.

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- Poor governmental understanding of what Agric Eng is – mistaken for Mech or Civil Eng
  - Need for awareness of the profession to correct wrong perceptions. Consistent with a goal of PASAE.
  - Employment opportunities not well known, yet these are numerous
  - Entrepreneurship and digital skills inadequate in the curriculum – we shld not just focus on technical skills
  - Reorientation of employers – students trip to Flour mills and could not make the link between the industry and Agric Eng.