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Sustainable
Development
Goals



Sida



SWEDEN

STEM and Gender Advancement (SAGA)



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SAGA and WCCE

- The lack of engineers is one of the principal impediments to global economic growth.
- Data on engineering capacity, competence disaggregated by sex, and other variables are necessary to identify issues, such as shortage of human resources, professional disparities and gender inequalities.
- It is essential that data are collected using consistent methods and on a continuous basis as trends are more important than absolute numbers when developing effective policy instruments to address challenges.
- Many countries in Africa and Latin America are currently lacking adequate methods for collecting engineering data.
- Surveys developed by data experts from UIS, UNESCO and ICEE, among others, are needed.



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Goals of the SAGA project

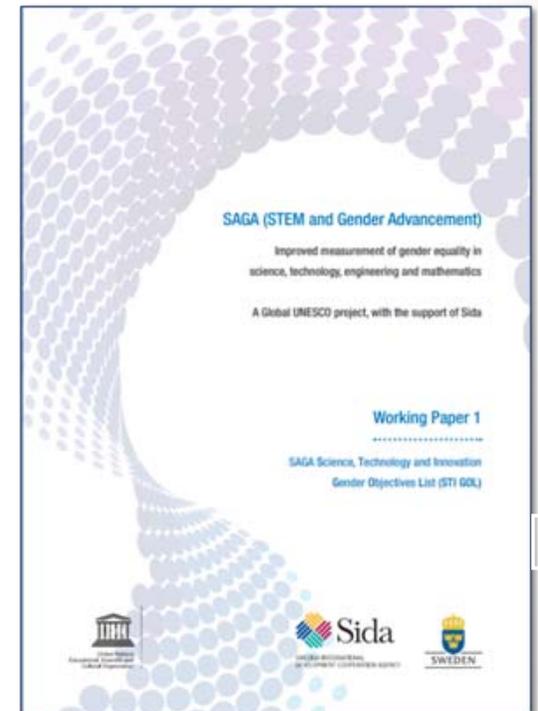
SAGA and WCCE

- Contribute to reduce the **gender gap in scientific and engineering fields** in all countries, at all levels of education and in research.
- Analyse **gender-related policies and indicators** and review how they affect the gender balance in STEM.
- Support evidence-based policy making and strengthen gender equality perspectives in **science policy design**.

SAGA Science, Technology and Innovation Gender Objectives List (STI GOL)

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- Enables the categorization of STI policies and policy instruments, and indicators
- Assists in identifying gaps in the STI policy mix and aims at encompassing all aspects of gender equality in STI policy making.
- Allows the mapping of existing indicators to gender objectives and facilitate identifying gaps
- It has be reviewed by a group of international experts in science policy, indicators and gender equality





Seven gender objectives

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Gender objection 4: Career progression

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4. Gender equality in career progression for women scientists and engineers (S&E)

4.1 Ensure gender equality in access to job opportunities, recruitment criteria and processes.

Promote equal work conditions through, among others:

- gender balance in remuneration
- 4.2 •preventing gender bias in performance evaluation criteria (including productivity measurement)
- adequate safety and security of fieldwork
- sexual harassment prevention policies and procedures.

- 4.3 Ensure gender equality in access to opportunities in the workplace:
- training and conferences
 - research teams, networks (national and international), expert panels and advisory groups
 - publications and patent applications, including preventing bias in review
 - financial and non-financial incentives
 - recognitions, rewards and awards

Gender objection 4: Career progression

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4. Gender equality in career progression for women scientists and engineers (S&E)

- | | |
|------------|--|
| 4.4 | Promote work–life balance through, among others: <ul style="list-style-type: none">• infrastructure for child care• flexible working hours• reduction and redistribution of unpaid care and domestic care• family leave for both parents• appropriate re-entry mechanisms to the S&E workforce after career break or family leave. |
| 4.5 | Promote gender equality in international mobility of post-docs and researchers, and facilitate women’s return. |
| 4.6 | Promote gender balance in leadership positions in S&E occupations (including decision making and research). |
| 4.7 | Promote transformations of STI institutions and organizations (structure, governance, policies, norms and values) aimed at achieving gender equality. |
| 4.8 | Ensure gender equality in S&E professional certifications, in particular in engineering |



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UNESCO and WCCE

SAGA and WCCE

- Engineering is an essential part of SAGA (STEM and Gender Advancement)
- STI Gender Objective 4.8: Ensure gender equality in S&E professional certifications, in particular in engineering



- World Council of Civil Engineers (WCCE)
- Pilot a survey on certification of engineers to identify gaps between women and men applying to achieve a professional registration.
- Data collected could be included in the forthcoming Engineering Report.



Moving forward on gender statistics in Civil Engineering

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The SAGA and WCCE Survey



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Moving forward on gender statistics in Civil Engineering

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- Survey will collect data on:
 - Professional registration applications by sex and age;
 - Registered professionals by sex and age;
 - The number of engineers by sector of registration, level and sex.
- Survey will be disseminated through:
 - European Council of Civil Engineers
 - Asian Civil Engineering Coordinating Council
 - Council of Civil engineering Professional Associations of Portuguese and Spanish Speaking Countries



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Moving forward on gender statistics in Civil Engineering

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For who?

- Future women scientists
- Ministries and high authorities in STI and education
- Official statistics offices and statisticians
- Engineers
- Universities and other research institutions, academies
- Civil society in Member States

- Sex-disaggregated information collected at the global level and within countries through SAGA surveys:
 - Access to more detailed information on drivers and barriers faced throughout education and career
 - Access to certification applications, licenses issued etc.
- More information by fields of education and fields of R&D at more detailed level (disaggregated by sex and narrow categories). For example:
 - Field of education: Engineering, manufacturing and construction -> Engineering
- Information collected through the survey could be included in the forthcoming Engineering Report



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Thank you!

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