

# ***How Women Scientists can Help Alleviate Poverty***

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# ***Why do we need science?***

- ★ **Need science → development**
- ★ **Need development → escape poverty**
- ★ **Developing countries lagging behind in S&T → poverty**
- ★ **Women and children bear effects of poverty disproportionately**
- ★ **Makes sense to include women in science to alleviate poverty**

# ***Why do we need women scientists?***

- ★ **Half the population → why loose workforce?**
- ★ **Very few African women scientists → why lose workforce?**
- ★ **But NOT just numbers – women approach science differently → approach development and poverty alleviation differently**
- ★ **We NEED this difference**

# ***How do women approach science?***

- ★ **Traditional rewards → single track science**
- ★ **Favours men > women**
- ★ **RSA National Research Foundation → rating system A, B, C, Y: designed for men by men**
- ★ **Case study: L'Oreal/UNESCO + Hon PhD Sorbonne – lost B**
- ★ **Bacteria → leather decay → GM bacteria → industry → GM plants → virus R → drought tolerance (R12.5 million grant → field trials)**
- ★ **Ratings nightmare → needs orientated (what needs to be fixed?)**

# *How do women approach managing science?*

- ★ **Bridge builders**
- ★ **Case study: UCT Microbiology divided → bacteria OR viruses → different floors. Use bacteria to solve plant virus problem → joint projects = unity!**
- ★ **Science → poverty reduction → work together = unity!**

# ***Why do we need a gender lens in research and policy development?***

- ★ **How research is done (rats and sex of workers; car airbags and safety belts)**
- ★ **What research is done:**
  - **women's and men's crops (hungry people can't make money)**
  - **water infrastructure (who carries water?)**
  - **energy deployment (cities vs. rural)**
  - **transport development (mass in cities vs. rural to market)**
  - **fertility (educate women → ↓ children and ↑ healthy feeding – TOO MANY CHILDREN → overpopulation → poverty)**

# ***What can Academies do?***

- ★ **Influence government → every S&T department has a GENDER DESK that works!**
- ★ **Obtain and maintain sex disaggregated data → influence policy**
- ★ **Influence parents and teachers → girls CAN study science → careers**
- ★ **Ensure own membership/committees/working groups include women**
- ★ **Influence funding agencies → more women scientists**

# ***Practical ways to combat gender inequality in research environment***

- ★ **Hold meeting during school hours**
- ★ **Extend cut-off for 'young scientists' awards from 35 to 45**
- ★ **Require gender representation at conferences, committees, workshops...**
- ★ **Provide technical support during maternity leave**
- ★ **Pay for child-care and pre-school support**
- ★ **Allow women to use conference grants to include child support (local and interenational)**
- ★ **Establish gender equity committees, including monitoring and evaluation**

# *Conclusions*

- ★ **We need science → development → alleviate poverty**
- ★ **Women disproportionately affected by poverty → understand what's needed**
- ★ **Women approach science differently → gender lens to solve relevant problems**
- ★ **Academies role in → Gender Desks in S&T**
- ★ **Practical ways to increase gender participation in research**