A SAMPLE OF TWAS ACTIVITIES IN 2018

Max Paoli
TWAS Programme Coordinator

17 April 2019
22nd COMSATS Coordinating Council Meeting, Tianjin

1) Regional Research Grant Conference
2) TWAS – IsDB Cooperation for Sustainability Science
3) Dissemination efforts to reach out to LDCs
4) Education for Sustainable Development: young scientists
5) Possibilities for collaborations
1) Regional Research Grant Conference

2) TWAS – IsDB Cooperation for Sustainability Science

3) Dissemination efforts to reach out to LDCs

4) Education for Sustainable Development: young scientists

5) Possibilities for collaborations

---

**TWAS PROGRAMMES**

*to support science in the developing world*

- PhD Fellowships
- Post-doctoral Fellowships
- Research grants
- Exchange Associateships
- Prizes and Awards
- Regional Partners
- Young Affiliates and TYAN
‘Building Skills for Science in Africa’

2018 Research Grants Conference

28 – 31 August 2018
Dar es Salaam, Tanzania
GENDER BALANCE

49%

Key topics covered:

• African perspective and women in science
• Importance of publishing your research results
• International peer reviewed publications and predatory journals
• Plagiarism and academic honesty
• Collaborations and interdisciplinary research
• Transformational research and links with industry
• Patents and intellectual property
• The role of teaching
• Author Aid and mentorship for writing
• Writing and preparing a scientific research proposal
• Feedback on benefits of the grant and remaining challenges
• Sustainable development and SDGs
In December 2018 Ameera gave a seminar on “How to write a research proposal” inspired by one of the workshops at the TWAS Research Grant Conference in August 2018.
1) Regional Research Grant Conference

2) TWAS – IsDB Cooperation for Sustainability Science

3) Dissemination efforts to reach out to LDCs

4) Education for Sustainable Development: young scientists

5) Possibilities for collaborations

COOPERATION ON SUSTAINABILITY SCIENCE BETWEEN

[Logos of UNESCO, TWAS, and IsDB]
TWAS – IsDB Project

1) Research Grants

2) Post-Doctoral Fellowships
SPECIFIC AREAS OF FOCUS IN SUSTAINABILITY SCIENCE

1) Ecosystem services, conservation and management of natural resources.
2) The 6th mass extinction, biodiversity loss, land-use change.
3) Energy: renewable energy technologies, fossil fuel dependency, energy from fusion, waste-to-energy technologies, biofuels including biogas, energy storage, hydrogen-fuel cell technology.
4) Sustainable agriculture, agro-biodiversity, drought-tolerant varieties.
5) Climate change, carbon capture and storage, methane emissions and contribution to GHGs.
6) Plastic and microplastics, plastic in the food chain, biodegradable plastic alternatives.
7) Green and sustainable chemistry, chemistry and nanotechnology for the environment.
8) Water: purity, desalination technologies, underground water.

19 LDCs out of 58 IsDB countries
1) Regional Research Grant Conference

2) TWAS – IsDB Cooperation for Sustainability Science

3) Dissemination efforts to reach out to LDCs

4) Education for Sustainable Development: young scientists

5) Possibilities for collaborations

NEW TWAS LIST OF 66 S&TL COUNTRIES

<table>
<thead>
<tr>
<th>LDCs</th>
<th>Other Low Income Countries</th>
<th>Additional S&amp;T Lagging Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>Malawi</td>
<td>Bolivia</td>
</tr>
<tr>
<td>Angola</td>
<td>Mali</td>
<td>Cameroon</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>Mauritania</td>
<td>Congo</td>
</tr>
<tr>
<td>Benin</td>
<td>Mozambique</td>
<td>Côte d’Ivoire</td>
</tr>
<tr>
<td>Bhutan</td>
<td>Myanmar</td>
<td>El Salvador</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Nepal</td>
<td>Ghana</td>
</tr>
<tr>
<td>Burundi</td>
<td>Niger</td>
<td>Guatemala</td>
</tr>
<tr>
<td>Cambodia</td>
<td>Rwanda</td>
<td>Honduras</td>
</tr>
<tr>
<td>Central African Repl</td>
<td>Sao Tome and Principe</td>
<td>Mongolia</td>
</tr>
<tr>
<td>Chad</td>
<td>Senegal</td>
<td>Nicaragua</td>
</tr>
<tr>
<td>Comoros</td>
<td>Sierra Leone</td>
<td>Paraguay</td>
</tr>
<tr>
<td>Dem Repl Congo</td>
<td>Solomon Islands</td>
<td>Sri Lanka</td>
</tr>
<tr>
<td>Djibouti</td>
<td>Somalia</td>
<td>Swaziland</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>South Sudan</td>
<td>Syrian Arab Republic</td>
</tr>
<tr>
<td>Eritrea</td>
<td>Sudan</td>
<td>Palestinian Autonom. Terr.</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Tanzania</td>
<td></td>
</tr>
<tr>
<td>Gambia</td>
<td>Timor-Leste</td>
<td></td>
</tr>
<tr>
<td>Guinea</td>
<td>Togo</td>
<td></td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>Tuvalu</td>
<td></td>
</tr>
<tr>
<td>Haiti</td>
<td>Uganda</td>
<td></td>
</tr>
<tr>
<td>Kiribati</td>
<td>Vanuatu</td>
<td></td>
</tr>
<tr>
<td>Lao People’s Dem Rep</td>
<td>Yemen</td>
<td></td>
</tr>
<tr>
<td>Lesotho</td>
<td>Zambia</td>
<td></td>
</tr>
<tr>
<td>Liberia</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### DISSEMINATION

- Angola
- Chad
- Eritrea
- Gambia
- Guinea
- Liberia
- Malawi
- Mali
- Mauritania
- Niger
- Sierra Leone
- Somalia
- South Sudan
- Zambia

### COMSATS Member States

<table>
<thead>
<tr>
<th>People's Republic of Bangladesh</th>
<th>Republic of Kazakhstan</th>
<th>Democratic Socialist Republic of Sri Lanka</th>
</tr>
</thead>
<tbody>
<tr>
<td>People's Republic of China</td>
<td>Democratic People's Republic of Korea</td>
<td>Republic of the Sudan</td>
</tr>
<tr>
<td>Republic of Colombia</td>
<td>Kingdom of Morocco</td>
<td>Syrian Arab Republic</td>
</tr>
<tr>
<td>Arab Republic of Egypt</td>
<td>Federal Republic of Nigeria</td>
<td>United Republic of Tanzania</td>
</tr>
<tr>
<td>Republic of The Gambia</td>
<td>Islamic Republic of Pakistan</td>
<td>Republic of Tunisia</td>
</tr>
<tr>
<td>Republic of Ghana</td>
<td>State of Palestine</td>
<td>Republic of Turkey</td>
</tr>
<tr>
<td>Islamic Republic of Iron</td>
<td>Republic of the Philippines</td>
<td>Republic of Uganda</td>
</tr>
<tr>
<td>Jamaica</td>
<td>Republic of Senegal</td>
<td>Republic of Yemen</td>
</tr>
<tr>
<td>Hashemite Kingdom of Jordan</td>
<td>Federal Republic of Somalia</td>
<td>Republic of Zimbabwe</td>
</tr>
</tbody>
</table>
1) Regional Research Grant Conference
2) TWAS – IsDB Cooperation for Sustainability Science
3) Dissemination efforts to reach out to LDCs
4) Education for Sustainable Development: young scientists
5) Possibilities for collaborations
2005-2014: DECADE for the Education for Sustainable Development initiative led by UNESCO
THE ROLE OF SCIENTISTS

- Keep an open mind and a wide perspective
- Educate and communicate
- Role model
- Moral and social responsibility

TWAS is committed to raising awareness of the SDGs and promoting ESD
1) Regional Research Grant Conference

2) TWAS – IsDB Cooperation for Sustainability Science

3) Dissemination efforts to reach out to LDCs

4) Education for Sustainable Development: young scientists

5) Possibilities for collaborations
GLOBAL CHALLENGES, SUSTAINABILITY ISSUES, SGDs

COMSATS and TWAS can join forces in their efforts to sensitize scientists and young researchers to the SDGs and the whole context of planetary boundaries.