A View from the South
Science diplomacy in the developing world

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The World Academy of Sciences (TWAS)
The historic 1972 meeting between Mao Zedong and Richard Nixon signalled the importance of science diplomacy between North and South.
Agreements signed in 1979 by Deng Xiaoping and Jimmy Carter set in motion a transformation that literally shaped the world as we know it today.
The power of science diplomacy

- Total US-China trade rose from USD 2 billion in 1979 to USD 592 billion in 2014.

- 275,000 Chinese students now attend universities.

- The world is more stable and prosperous.
The power of science diplomacy

But long before 1972, science and science diplomacy had begun to reshape the contours of North-South engagement.
Trieste: A bridge between cultures

“From Stettin in the Baltic to Trieste in the Adriatic, an Iron Curtain has descended across the continent.”

– Winston Churchill (1946)
Trieste: A bridge between cultures

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Trieste: A bridge between cultures

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But late in the Cold War, a new vision emerged: a bridge between North and South.
Trieste: A bridge between cultures

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In 1983, a few years after Salam won the Nobel Prize, they were partners in the founding of TWAS.
Trieste: A bridge between cultures

A team of 42 elite scientists representing 19 nations were the founding Fellows of the Third World Academy of Sciences.
Trieste: A bridge between cultures

"The Third World Academy [of Sciences] … must serve in the cause of enhancing South-South and South-North collaboration."

– Abdus Salam (1983)
A voice for science in the South

- 1,140 elected Fellows
- 117 women
- 15 Nobel laureates
- 94 countries
- 124 Young Affiliates

The World Academy of Sciences
for the advancement of science in developing countries
TWAS’s guiding principles

Backed by science and engineering, a nation can address challenges in agriculture, climate, health and energy.
A troubling gap

In the realm of science, an enormous gap remains between North and South.

The same gap exists in science diplomacy.
A troubling gap

The science divide between South and North is wide and keeps widening, with the exception of countries such as Brazil, China and India.

Aid focused on building science capacity can help to reduce this divide.
Building the bridge

TWAS and other science academies and organizations are working to bridge this North-South gap.
Building the bridge: challenges

Though many scientists and policymakers in the developing world engage in international cooperation, many – or most – are not familiar with science diplomacy.
Building the bridge: challenges

Development through science and technology begins with knowledge.

So does science diplomacy.

Many developing nations have not developed this capacity.
Building the bridge: challenges

Developed nations – and emerging nations – have more resources, more experience, and more expertise.

They have more power.
Building the bridge: challenges

How do you build a partnership that is mutually beneficial and as near to equal as possible?

We are slowly beginning to develop experience in this area.
On regional and global issues such as climate change, ocean health and education, science diplomacy is critical for advancing international cooperation.
Building the bridge: solutions

For science diplomacy to flourish, nations must cultivate science-diplomacy relationships that are balanced and fair.
Building the bridge: solutions

Build trust:
- Respect for independence
- True research partnership
- Cooperation to build capacity
- Shared benefits
Building the bridge: solutions

Science and engineering organizations, including academies, can play a leading role in this process.
Building the bridge: solutions

To build science diplomacy capacity:

- At home, support and advise government and diplomats
- Abroad, build external networks
The role of TWAS

The World Academy of Sciences has science diplomacy initiatives focused in two areas:

- South-North leadership dialogue
- Education and training
TWAS leadership dialogue

'Science & Diplomacy: Central Europe and Southern Mediterranean'
• 50 science and policy leaders from 12 nations
• Organized by Italian Ministry of Foreign Affairs, Hungarian Academy of Sciences and TWAS
Africa-Italy Day 2014

- Farnesina palace, Italian Ministry of Foreign Affairs headquarters
- 100+ African and Italian diplomats, members of parliament, scientists and business leaders
TWAS courses and workshops

• Lectures and workshops in such areas as energy, transboundary waters and fisheries
• Summer courses bring together scientists and diplomats
IAP, the global network of science academies

IAP speaks with one voice for 107 academies in 97 countries

- Affiliated regional networks in Africa, Latin America, Asia and Europe

- March 2015: “Academies of Science as Key Instruments of Science Diplomacy”
  [Science & Diplomacy, published by AAAS]
InterAcademy Medical Panel (IAMP)

IAMP is a global network of 70 medical academies and medical sections of science academies, more than half in the developing world

- Promotes health research, education
- Provides policy advice to governments
- Issued 'Call for Action to Strengthen Health Research Capacity in Low- and Middle-Income Countries' (2013)
A shared vision

Science diplomacy cannot solve every problem.

If we understand that South and North have different histories and different needs, we improve our chances of fully realizing the potential of science diplomacy.
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