



India and Germany – Strategic Partners for Innovation

Indo-German collaboration to enhance implementation of innovations

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19-20 May 2014, Bonn



Policy for Science and Science Policy for Development

- ❑ **Synergizing Science, Technology and Innovation**
 - Extent to which STI enterprise integrates vertically and creates social and economic goods through innovation with impact on the national development processes
 - There is discovery element in science. There is also solution dimension to modern science. Balancing and interconnecting discovery and solution dimensions of science need new mechanisms and pathways
 - Enrolling Indian society and Indian industry as major stakeholders in the process



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Priorities of STI Policy 2013

- ❑ Nourishing the root of science by promoting excellence
 - Focus on science education & teaching and attraction of talents to science
- ❑ Combining Excellence with Relevance
 - Grand challenge programs with matching deployment of resources
- ❑ Performance-Reward Relationship
 - Performance Related Incentive System (PRIS) for basic research
- ❑ Delivery systems for STI outputs to stake holders
 - Partnerships with socio-economic ministries and State Governments for enhancing the stake holder value of STI enterprise



Priorities of STI Policy 2013 (contd.)

- ❑ Attracting Private Sector investments into R&D
 - R&D for public and social goods objectives through PPP model
- ❑ Partnership among stake holders to scale R&D successes
 - Closing gaps in translational research leading to application of R&D findings
- ❑ Gaining Global Competitiveness through collaboration
 - Strategic partnerships and alliances with other nations for value addition to national programs and addressing global issues
 - Participation in global consortia for mega science projects



International Cooperation

- Leverage 'international collaborative advantage' for national programs and addressing global challenges
- Bilateral agreements with more than 83 countries with active cooperation with 41 countries
- Cooperation significantly strengthened with Australia, EU, France, Germany, UK and USA with co-investments exceeding US\$180 m during last five years
- Average Impact factor of publications through cooperation is 5.4 compared to 3.7 from national publications
- Cooperation with African countries launched through new India Africa S&T Initiative
- Bi-national S&T Bodies with France, Germany, Russia and USA
- Global Innovation Technology Alliance (GITA) as a platform to engage in industrial R&D, technology development and innovation
- Industrial R&D cooperation with Canada, France, Germany, Israel, Russia, USA



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India's International S & T Engagements

Asia

- Israel
- Japan
- Korea South
- Myanmar
- Singapore
- Sri Lanka
- Thailand
- Vietnam

North America

- Canada
- Mexico
- USA

South America

- Argentina
- Brazil
- Chile
- Mexico

Europe

- Austria
- Belarus
- Belgium
- Bulgaria
- Czech Republic
- Finland
- France
- Germany
- Hungary
- Italy
- Netherlands
- Norway
- Portugal
- Romania
- Russia
- Slovenia
- Spain
- Sweden
- Switzerland
- Ukraine
- UK

Africa

- India Africa Initiative
- Botswana
- Mauritius
- South Africa
- Tunisia

Oceania

- Australia
- NZ



सत्यमेव जयते



Multilateral / Regional

ASEAN
BRICS
EU
IBSA

IOR
NAM
TWAS
SAARC

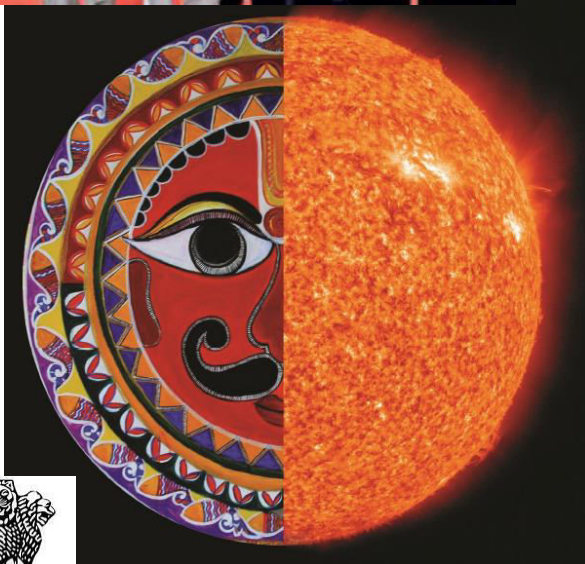
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Sustainability in the
Water-Energy-Food Nexus

Flagging off in grand style



- Winding its way through 56 Indian cities, the train called Science Express brought information about all forms of science to the people of India in an innovative, interactive way attracting 12 million visitors over the years



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Indo-German S & T Centre

- Supports “2+2 technology projects” (with the participation of science and industry on both sides in each case) on the basis of joint German-Indian invitations to tender for various fields of research, each side funding €2m/year
- Conducts joint workshops and symposia for German and Indian scientists
- ‘Genome Sequencing of Chickpea’ in *Nature*; and setting up solar plant in Manuguru with Schott Solar/Fraunhofer ISE and Thermax/IIT-Delhi



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Innovation in the water sector

- Indo-German Competence Centre for River Bank Filtration for long-term cooperation between Germany and India in the field of bank filtration (RBF) and water resources management
- NIRWINDU - Safe and sustainable drinking water production in India by coupling natural and innovative techniques
- Indo-German Water Network
- SAPH-PANI project under FP7



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On the anvil

- Proposal by GWSP for collaboration with the WAR for Water division of the Department of Science and Technology, Govt. of India
- THANK YOU FOR LISTENING!



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