

# Promoting Nuclear Stability in South Asia

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# Agenda

- Acknowledgements
- About the Science, Technology, and Global Security Working Group at MIT
- Project on *Promoting nuclear stability in South Asia*
  - Objectives
  - Progress
  - Future

# Acknowledgement

- Rudolf Adam, President, BAKS
- Ambassador Rudiger Ludeking
- Goetz Neuneck, Co-organizer
- Danielle Mancini from MIT and Jan Stupl from IFSH, coordinators
- Abdul Hameed Toor and Khalid Banuri in Islamabad
- Marvin Miller and Geoff Forden at MIT

# The Science, Technology, and Global Security (STGS) Working Group

## Researchers

- Prof. Ted Postol, PI
- Geoff Forden
- Subrata Ghoshroy
- Marvin Miller
- John Thomson

## Administration

- Danielle Mancini

## SOUTH ASIA



Map No. 4142 Rev. 3 UNITED NATIONS  
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Department of Peacekeeping Operations  
Geographic Section

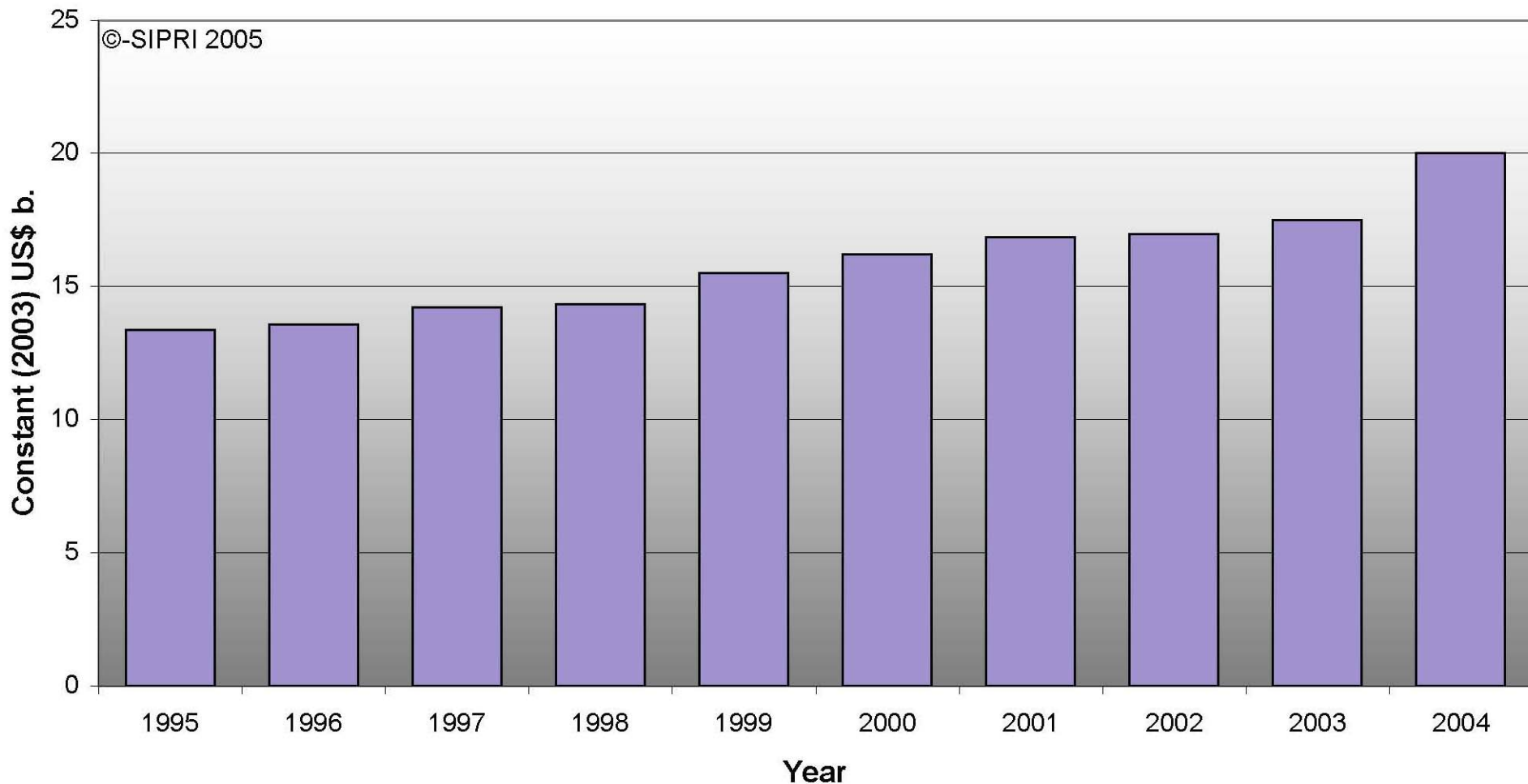
# Nuclear weapons a “dangerous place”

- Kashmir dispute unresolved since 1947
- Internal insurgencies in both India and Pakistan
- Border dispute between India and China
- Maoist insurgency in Nepal
- Tamil insurgency in Sri Lanka
- Transition to democracy in Pakistan, Bangladesh, and Myanmar (Burma)
- Resurgence of Taleban in Afghanistan

# Build-up of conventional weapons aggravate the situation

- India has undertaken a major modernization program
  - aircraft, missiles, air defense, and submarines
  - missile defense
- Pakistan is also procuring sophisticated systems
  - Aircraft, missiles, submarines
- Indian security calculus not guided by Pakistan alone – the China factor.

# Military Expenditure in South Asia, 1995–2004



*In 2004, Indian defense budget was \$15 billion and Pakistan's \$3.7 b  
India spends roughly 2.1 percent of the GDP and Pakistan about 4.5%*



# Impact of introducing missile defense in south Asia

- Adds uncertainty and potentially undermines Pakistani nuclear deterrent
- Pakistan likely might develop a more sophisticated nuclear force in response
  - Mobile launchers, including submarine-launched missiles
- Deployment of cruise missiles by both sides

# The China factor

- Chinese modernization influenced by US policy towards Taiwan and also US-Japan security collaboration
- Indian strategists believe that their missile defense system cannot counter Chinese missiles
- US missile defense program influences China's strategy and linkages to space weaponization and fissile material production cut-off

# Some Indian strategists argue need for missile defense

- India has a “no-first-use” policy
- Pakistan does not
- A “credible minimum deterrent” assumes survivable weapons and hence the need for missile defense
- Consequently, some argue that an ABM-like treaty is not appropriate

# Little tradition in the region of independent analysis of defense issues

- Most scientists knowledgeable about the issues are part of the government
- Current discussions outside the government limited to a small group of security analysts – mostly non-scientists - who are close to the defense establishment
- Little transparency in decision-making process and relative absence of parliamentary oversight
- An embryonic military-industrial complex that is learning fast from their US counterparts

# Motivations for the project

- Initiate a dialog among Indian and Pakistani scientists and policy analysts
  - technical and policy analysis of weapon systems to be jointly undertaken by participants
- Improve nuclear stability
  - Accident prevention, shared missile-launch warning
- Help bring about an informed debate on the desirability of certain weapon systems
  - Missile defense, cruise missiles, etc.

# Topics Selected to date

- Assessing the impact of India's deployment of a BMD system
- A framework for nuclear stability in southern Asia
  - A shared missile-launch surveillance system
- Space security
  - Opportunities for cooperation
  - Prevention of weaponization of Space
- Impact of the proposed US-India nuclear deal
- Energy security and ramifications of increased deployment of nuclear power

# Lessons-learned from the US-USSR experience

- Role of the scientists in arms control and disarmament
- The ABM Treaty
- What is and what is not relevant to South Asia?
- Avoiding pitfalls
- Multi-lateral vs. bilateral (the China factor)
- Transparency and verification mechanisms

# A stability framework for southern Asia

- Applicability of an ABM-like treaty
- Utility of the proposed shared missile launch warning system
- Possible enhancement of the recently concluded agreement between India and Pakistan on pre-notification of missile flight tests



# Weaponization of Space

- Topic selected because of
  - the common ground between Pakistan and India on this issue
  - Linkage of space weapons to missile defense
- Will cover several issues:
  - The new US Space Policy and military space initiatives
  - Chinese, Indian, and Pakistani space programs and US concerns
  - The PAROS initiative

# Progress to date

- Two successful visits to Pakistan and India in October 2005 and March 2006
  - Met with the Minister of Defense in India and the Commander of the Strategic Forces in Pakistan
  - Made a number of presentations in Islamabad and New Delhi
  - A two-day conference was held in each country:
    - A Pugawsh conference in Islamabad
    - A joint conference with IPCS New Delhi

# Looking forward

- We are extremely happy to be meeting in Berlin for this conference and excited about the high level of government and non-governmental participation
- I am looking forward to substantive and productive discussions to help define specific issues of mutual interest among the participating delegations- at the *Closing Plenary*
- In the near term, the focus will be on publishing the conference proceedings with full length articles after peer review