Smart Villages Seminar: Introduction and Overview
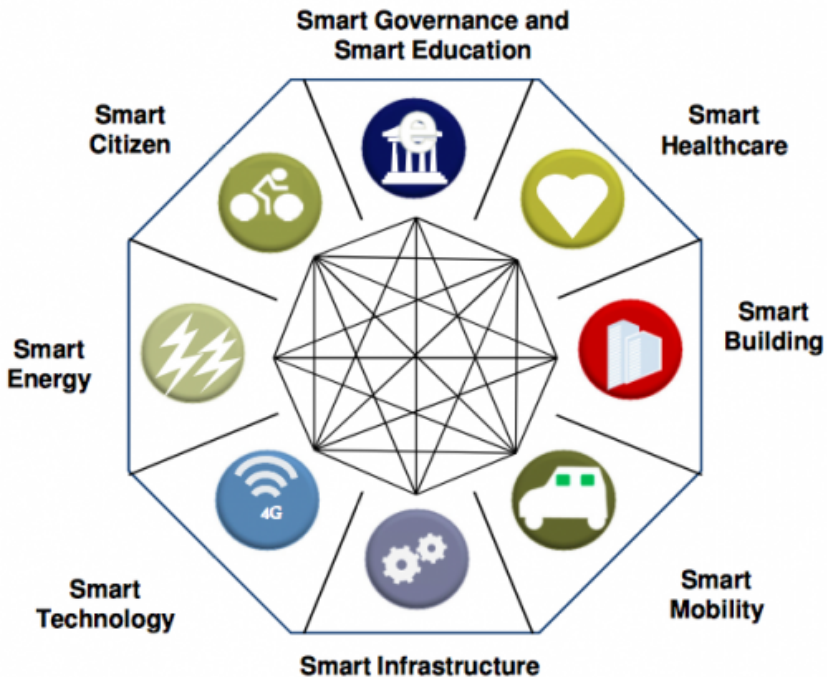
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Smart Cities and Smart Villages

Smart City Concepts

- Smart Governance and Smart Education
- Smart Citizen
- Smart Healthcare
- Smart Energy
- Smart Building
- Smart Technology
- Smart Mobility
- Smart Infrastructure

- ▶ Much discussion on smart cities
- ▶ There are plans within the University of Toronto to build a School of Cities
- ▶ In certain contexts, it may be more relevant to speak of smart villages
- ▶ Not just a difference in scale, but in basic approach
- ▶ Focus is not on the building of physical infrastructure, but on opportunities
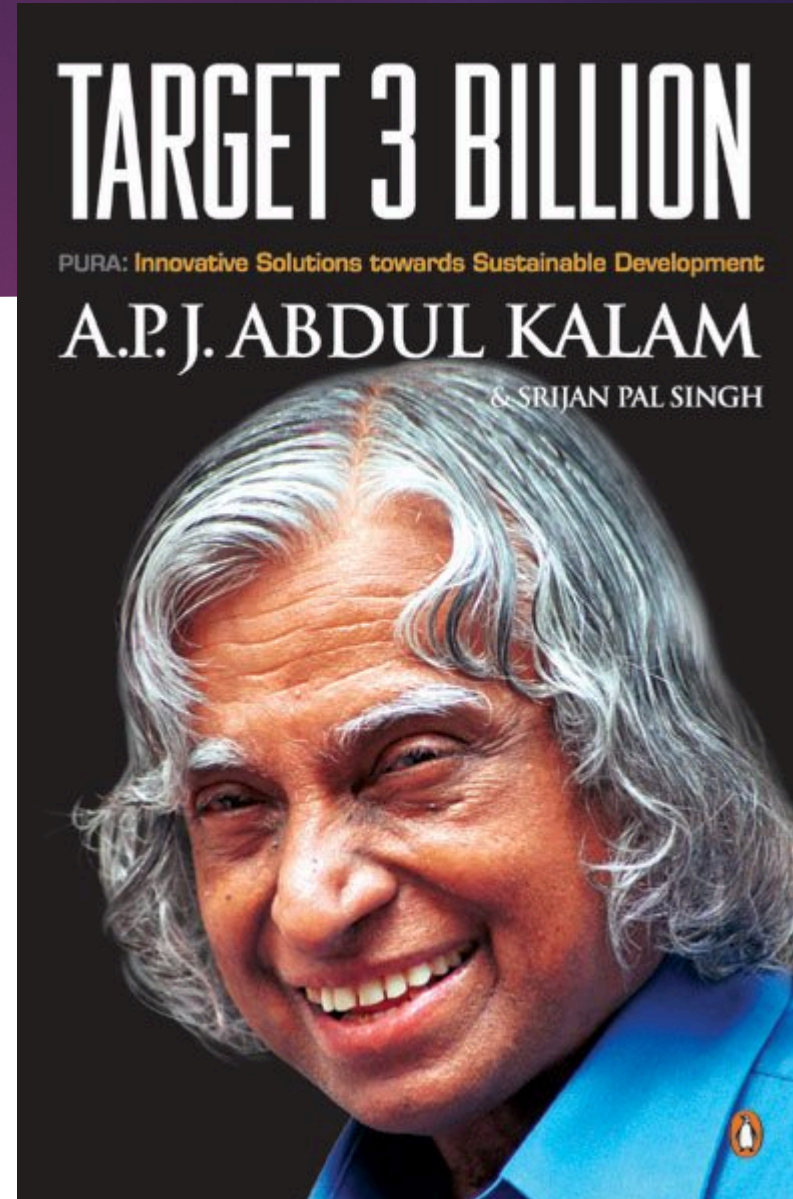- ▶ I am a student

The Rural-Urban divide

- More than 3 billion live in villages

- The Rural-Urban divide represents a challenge and an opportunity:

  - Challenges: incomes, services, cultural identity, environment

  - Opportunities: source of talent and markets, prosperity, peace

PURA

- Problem has been analyzed in "Target 3 Billion" by Abdul Kalam and Srijan Pal Singh

- Providing Urban amenities to Rural Areas

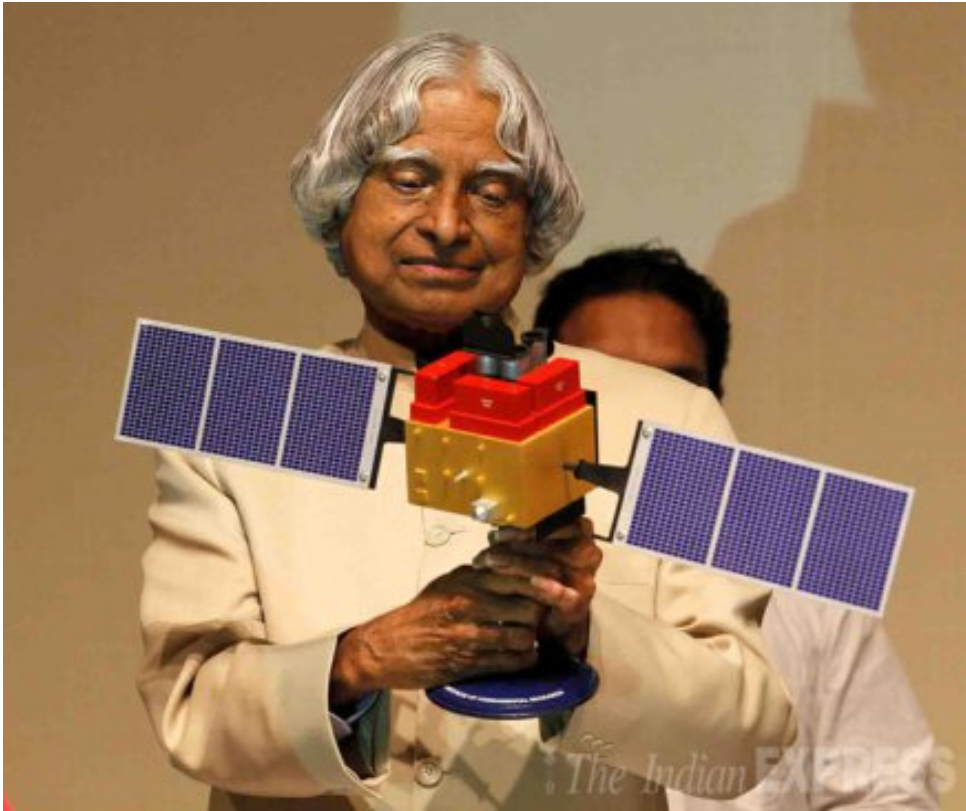- Global peace and prosperity is to be built on sustainable development

TARGET 3 BILLION

PURA: Innovative Solutions towards Sustainable Development

A.P.J. ABDUL KALAM

& SRIJAN PAL SINGH

Concepts of Development

- Constantly evolving:
  - Agriculture
  - Manufacturing
  - Services
  - …?
- Role of Education and Health-care
- Sustainable development
- Need a global perspective
- Beyond global…

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Concept for this seminar

- Started in 2015 when we heard the news of Dr. Kalam's sudden passing away

- Dr. Lakshmanan and I had the idea of an ongoing seminar to study his thought in theory and practice (including an exchange of faculty and students with institutions in developing environments)

- Considered the idea of a 'Kalam Centre' for this purpose
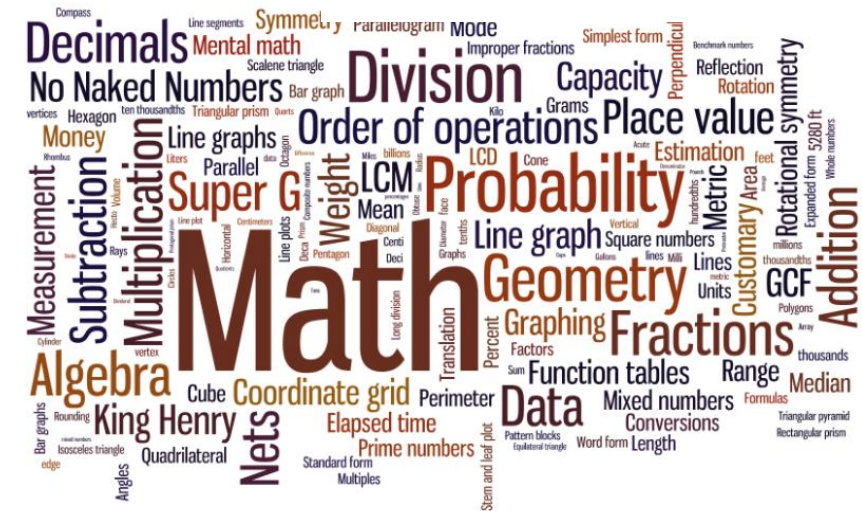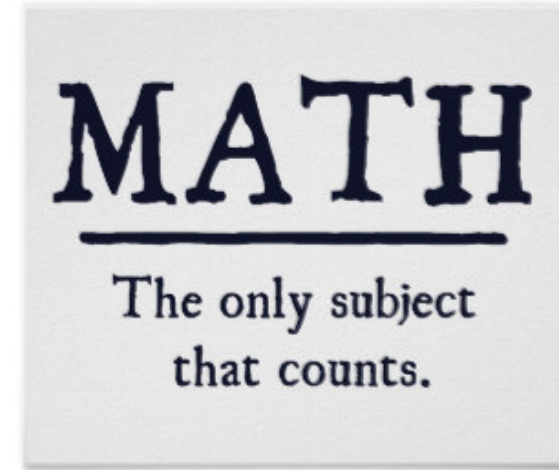
- Decided to begin small with a seminar

Our Speakers

- Solomon Darwin, UC Berkeley

- Terry Beaubois, Stanford

- Y. S. Rajan, co-author of India 2020

- V. Ponraj, Scientific Advisor to late President Kalam

- All have experience "in the field" at the village level

Goals of this Seminar

▶ Engage in discussion with subject matter experts to understand the problem and current efforts

▶ Discuss the formulation of a template or algorithm or framework to turn a village into a smart village

Where's the Math?

- Where there is information, there is math!
- Novel ways to model and analyze information
- Security and privacy
- Are there unique aspects in the context of smart villages?
- Hope to address this in a future seminar.

Opening of a discussion

▶ We see today's seminar as the beginning of an ongoing and longer-term discussion

▶ Hope is to identify partners with different backgrounds

▶ This is the first of a series of seminars

▶ Your comments and active participation are requested!

▶ Please make sure to leave your contact information