

Science, Technology and Development

- Science and technology for whom?
- Society is the beneficiary of S&T
- Innovations and policies are required from time to time to serve the needs of the society
- Scientific and technological development should help all in the society – equitable
- It should be sustainable

S&T in India

- 1947-67** – Nehru wanted India to be industrially developed and focussed on Science and Technology Education in the country
- **1967-87** – Nuclear Power, Space Missions, ISRO, Green Revolution and Antarctica Mission
- **1987- till present** – Biotechnology, Climate Change, Communication technology, Automobile technology, IT, Medical Science, Manufacturing Technology, Aerospace, Nuclear Science and Space Science, clean energy (Solar and other renewable sources of energy), Nano Technology

Sustainable Development

- 1987 – World Commission of Environment and Development

“Development that meets the needs of the present without compromising the ability of future generation to meet their own needs”

Mahatma Gandhi

“There is enough in this world for everybody's need but not for everyone's greed”

The problem

Growing Inequalities – Knowledge Divide -----

Troubled World

- We need science and technology for development
- We need science and technology for the environment

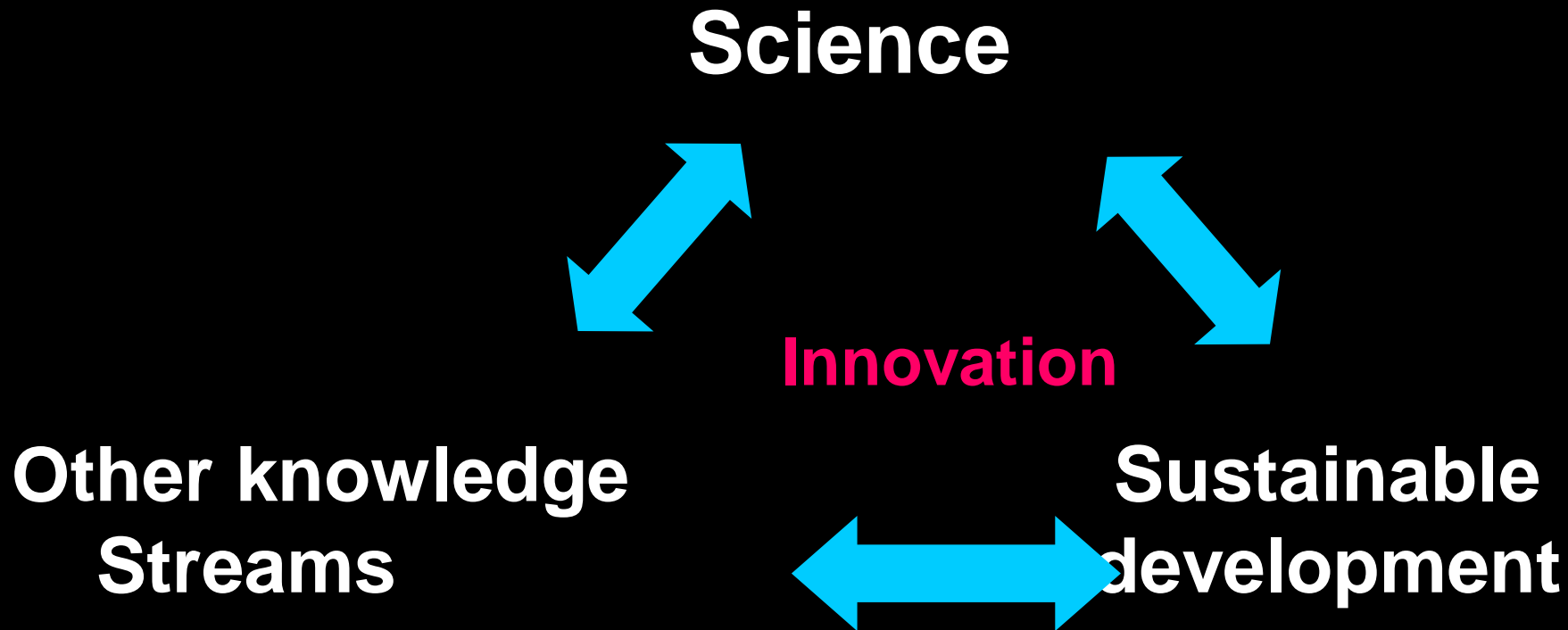
We have high consumption – depleting resources and stressed planet (environment)

The pivotal role of S & T.....

“The 20th century’s unprecedented gains in advancing human development, industrial growth and eradication of poverty in certain regions of the world came largely from technological breakthroughs”

In the 21st century, this role needs to be recalibrated

A “new” role for Science



Science needs to shed its splendid isolation

Bengaluru



Environmental Pollution



Pollution/Degradation



E-Waste



What can S&T Do?

- Science and technology have to engage with the society and policy to bring about change through innovation
- The change that S&T will bring about has to be sustainable and not challenge the environment
- S&T should also learn from other disciplines especially social sciences to make technology acceptable to the humanity
- People are the centre and they have be engaged with innovations and appropriate technology e.g Joint Forest Management

Science



Values
Methods
Products

benefits

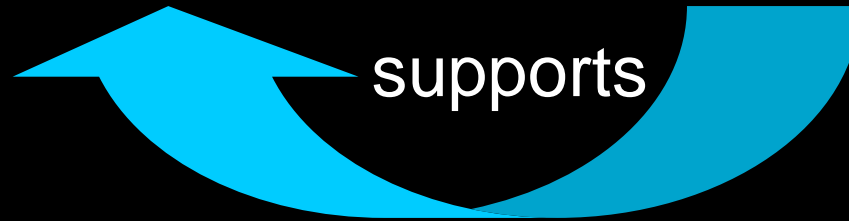


Society



Acceptability
Equity
Sustenance

supports



A peaceful planet



Sustainable Development



An inclusive world



Eradicate poverty

Secure environment

Science + Society + Policy