



UNIVERSITY OF  
**LEICESTER**

Deputy Pro-Vice Chancellor:  
*Global Engagement*  
Vice Chancellor's Office

# Setting the Challenge

Paul van Gardingen



## Inspiration for the day



Gaur Gopal Das:

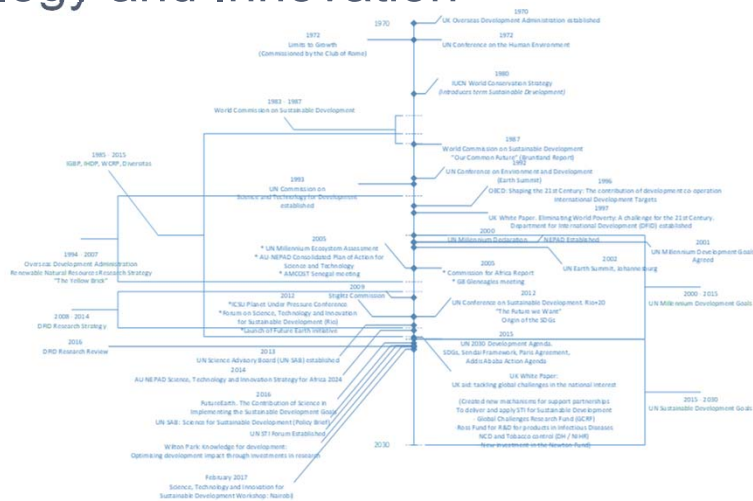
**“Focus on how *you* can *make a difference*”**

*UK-India Strategic Conclave September 2018*

## Outline

- Some inspiration
- A “brief” history linking science, technology and innovation with development
- New ways of working together to address shared global challenges
- A call to action. Four priority themes to consider

# A Timeline of Development, Science Technology and Innovation



# Personal Experience

Science, Technology & Innovation for Sustainable Development.

espa  
ecosystem services  
for poverty alleviation

About Projects Themes Countries Publications Multimedia News & Blogs

RESEARCHERS & ACADEMICS POLICY MAKERS & PRACTITIONERS GRANT HOLDERS

### Countries

ESPA worked in a total of 53 countries, including the 'Situation Analyses' projects which scoped the state of knowledge on human-ecosystem linkages. We list here the countries where ESPA supported full, follow-on projects.

Select a country from the map or list below.

Map Satellite

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## 1996: International Development Targets

1. Reduce by half the proportion of people living in extreme poverty between 1990 and 2015.
2. Enrol all children in primary school by 2015.
3. Make progress towards gender equality and empowering women by eliminating gender disparities in primary and secondary education by 2005.
4. Reduce infant and child mortality rates by two-thirds between 1990 and 2015.
5. Reduce maternal mortality ratios by three-quarters between 1990 and 2015.
6. Provide access for all who need reproductive health services by 2015.
7. Implement national strategies for sustainable development by 2005 so as to reverse the loss of environmental resources by 2015.

## 2001: Millennium Development Goals



## 2015: Sustainable Development Goals

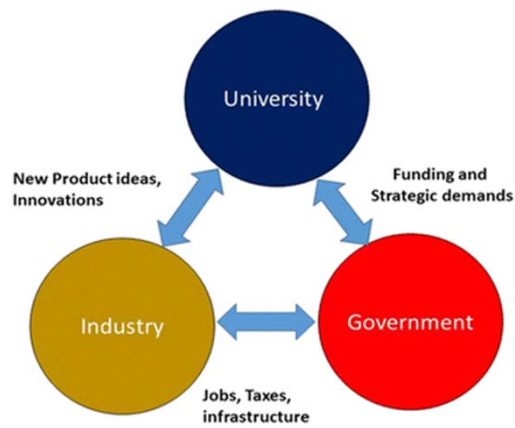




## Sustainability. “Triple Bottom Line”



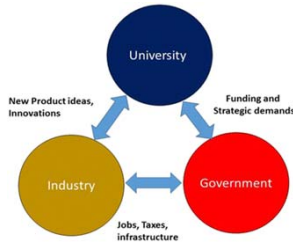
## How Academics have conceptualised Innovation...



## A View of the Roles of Higher Education



# Bringing the concepts together for Global Sustainable Development?



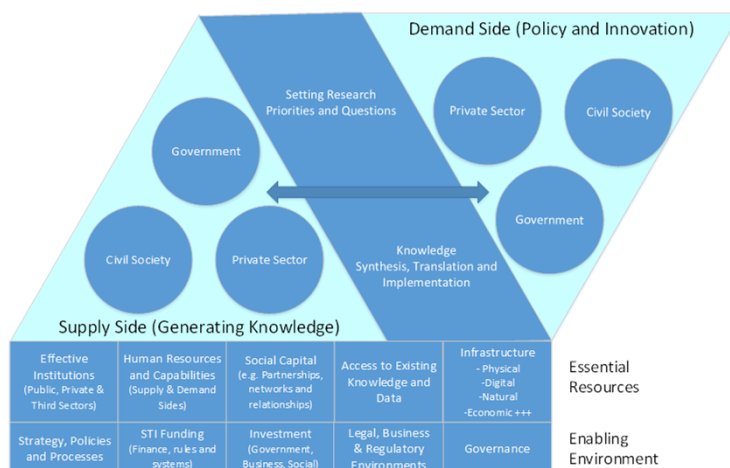
## Building a New Way of Working Together: Gazi Bay & Nairobi: 2017



<https://www2.le.ac.uk/institution/lias/nairobi-workshop-2017/>



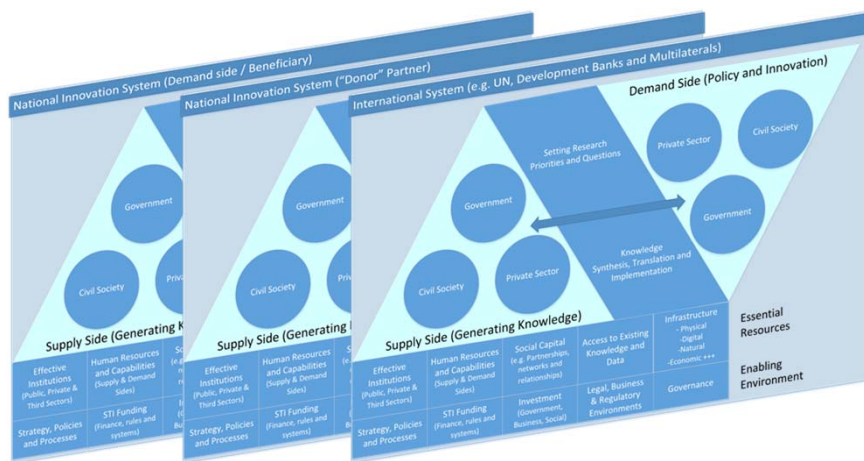
# A Provocation: Science and Innovation for Delivering the 2030 Agenda for Sustainable Development



<https://www2.le.ac.uk/institution/lias/nairobi-workshop-2017/nairobi-provocation-paper>  
<https://www2.le.ac.uk/institution/lias/nairobi-workshop-2017/nairobi-workshop-outcomes-report>

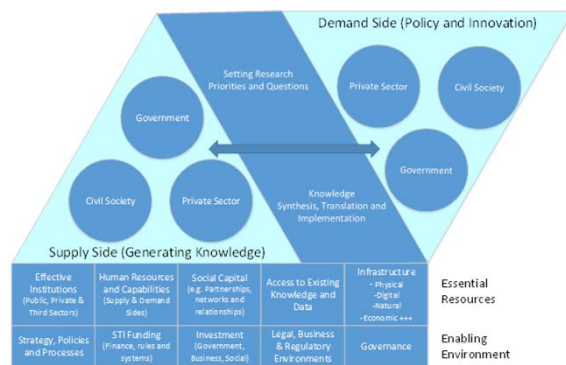


# Global Collaboration: STI For development



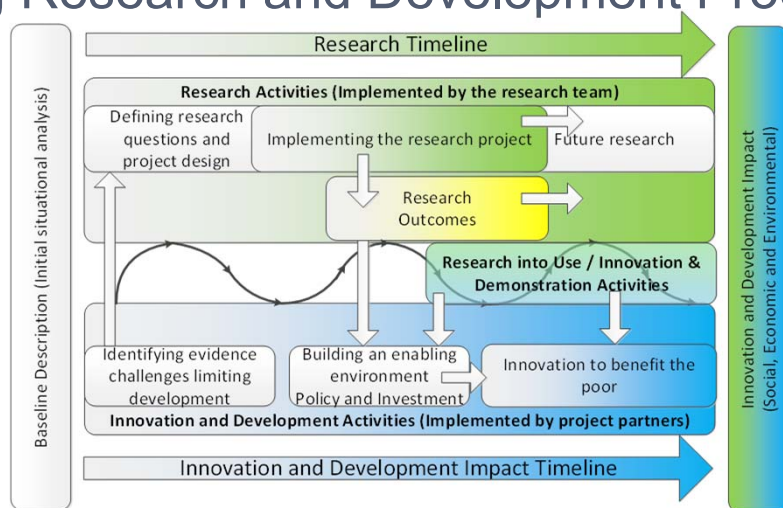
## Ask the Right Questions

- Engage the demand side and knowledge intermediaries from Day 0
- What new knowledge is required to make a difference?
- Aim to produce excellent science with the potential for significant, scalable and sustainable impacts.
  - No need to “dumb-down” science
- Look for opportunities to use new technology and engage a broad group of stakeholders.





# ESPA's Early Thinking: Linking Research and Development Processes



## Change the Way we Work

- Design research for societal impact *in addition to* academic excellence
  - There is no need for compromise
- Involve beneficiaries and knowledge intermediaries in the setting of strategic priorities and research questions
  - Co-design, Co-production, Co-implementation
- Built more effective, equitable and empowering Partnerships
- Adopt approaches that span existing disciplinary boundaries
- Be more innovative in the way that we design and implement research for development

## Madagascar P4GES Project. (ESPA)



## Innovation in Research for Development

- Utilise new technology
  - Frontier and emerging technologies
  - Leapfrog approaches
  - Disruptive technologies
  - Social and other media
- Utilise indigenous knowledge
- Citizen science
- Interdisciplinarity (multi/Inter/trans-disciplinary approaches)
- Big data & High performance computing
- Complexity science

## Create the Necessary Enabling Environment

- Promote equitable ownership of the development agenda by all relevant stakeholders
- Invest in People, Partnerships and Projects
- Change the rules of the game to enable innovation for development
- Change the rules of the game to empower developing country institutions and researchers to participate more equitably
- Embrace entrepreneurship and business as part of the solution
- Ensure that essential resources and investments are available, when and where they will make the most difference

## Working Together: STI & ODA Communities

Focus on the positive difference we can make by working together.

1. Ask the right questions.
2. Change the way that we work.
3. Innovation in Research for Development
4. Create the necessary enabling environment

