Institute of
Development Studies

Multiple races, multiple interdependencies: Asian challenges in making technology work for the poor

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Humility and context

- I have no Asia expertise and little recent experience

But work with colleagues who do:

- Demos pamphlet with Ian Scoones ‘The Slow Race: Making technology work for the poor’
- ESRC Social, Technological and Environmental Pathways to Sustainability (STEPS) Centre at Sussex

Three races

- The race to the top in the global economy
- The race to the universal fix
- The slow race to citizens' solutions

The race to the top – winners and losers

- Rapid economic growth through hi-tech boom
- Will poverty reduce through ‘trickle-down’?
- Widening inequalities and divides….

The Bengalooru example

Can we fix it?

- Technological fixes with promise of direct impacts on poverty: disease eradication, green to gene revolutions
- Whose problems, whose solutions?
- Missing dimensions: Diverse ecologies, societies, livelihoods; old as well as new technologies; social as well as technical causes of poverty

Elements of the slow race to citizens' solutions

- Pathways to poverty reduction that may involve S and T, but are specific to local contexts
- Linking technical with social, cultural and institutional dimensions
- S and T as part of a bottom-up, participatory development process in which citizens and their knowledge and priorities are central

1. Rethinking innovation

- Shifting emphasis from elite centres of excellence and transfer-of technology, to participatory technology development
- From isolated examples to innovation systems
- Enabling the technology entrepreneurs who are reaching the poor
- Reaching the parts that the private sector does not reach
- Building software as well as hardware

2. Building inclusive regulation

- Addressing the regulation gap – e.g. in bioethics
- Universal standards based on 'sound science' vs. locally- and culturally-attuned regimes
- Transfer of (regulatory) technologies and top-down capacity-building vs. inclusive regulation

3. Engaging citizens

- Citizens as passive beneficiaries of plans developed with formal scientific expertise
- Citizens as consumers of science and technology driven by market-led growth
- Citizens as holders and creators of knowledge, engaging actively with the politicised institutions of science through emergent solidarities
- Cognitive justice

Challenges – multiple pathways, new interdependencies

- Multiple pathways of science, technology and innovation – within as well as between countries

- Interdependencies and balance:
  - -Between the three science races
  - Between training technical scientists, and 'bridging professionals'
  - Between science, technology and innovation – and political and public debate about its social directions