

Science, Knowledge Swaraj and Democracy

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Contents

- The missing dialogue: Knowledge, democracy and science policy
- Is an alternative science policy possible?
- The KICS network
- Knowledge Swaraj – An Indian manifesto on S&T
- Piloting Knowledge swaraj
- Extending KS – new possibilities for universities



Indian S&T establishment: Weakly socialised, whither civil society?

Society to 'catch up' with science, Indian citizens lacking in scientific temper, message of science to reach every citizen – STP 2003

Civil society and citizens have little say in science policy- The role of science in Indian democracy is being revisited with a new intensity. ..The only problem is that the key players (Indian scientists) are missing in action. Sunita Narain

S&T planning process involves very few citizens .. 11th Plan Subgroup

Public distrust on science increasing – Interacademy report on Bt brinjal, Jaitapur & Koodankulam discussions



Indian S&T policy, knowledge and democracy

- Innovation valued - but only those of the experts
- People have a right of access to S&T but not in creating it.
- Inter academy report on Bt brinjal - lacking independence, openness or willingness to listen....
- Draft innovation law - no mention of poor, grassroots, community, civil society
- ICAR reorganisation report - align better with market but not with people... Context of farming crisis, nothing 'open' in KIA or such reports
- TN Bill - sought to penalise non-agri graduates from offering advice to farmers... BRAI bill
- 11th Plan Midterm Appraisal (agri) - celebrates private extension ignoring community based extension that has reached scale



KICS: Knowledge In Civil Society

- A contemporary engagement on S&T instns..
Space of PSMs and PPSTs
- Group emerged out of 'anti-science' concerns of CSOs and marginalisation of science studies in India
- Discussion group (60 members...), workshops, sharing sessions, research reports, policy advocacy, students group, manifesto
- Network with several centres, recently regd as trust in Hyd www.kicsforum.net

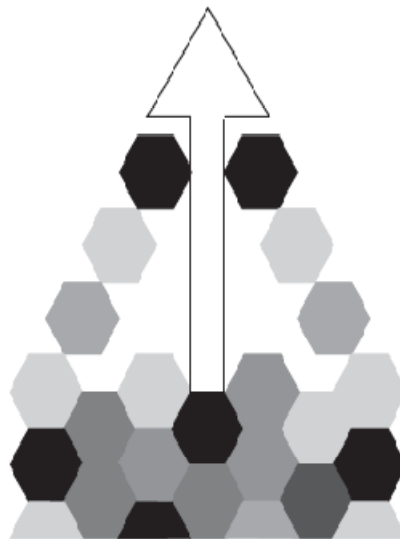


Dialogues on Knowledge and democracy - KICS

KIA workshop
2006



National Workshop
On
Policy Matters:
Insights from Civil society engaging with
Science and Technology



Proceedings & Papers

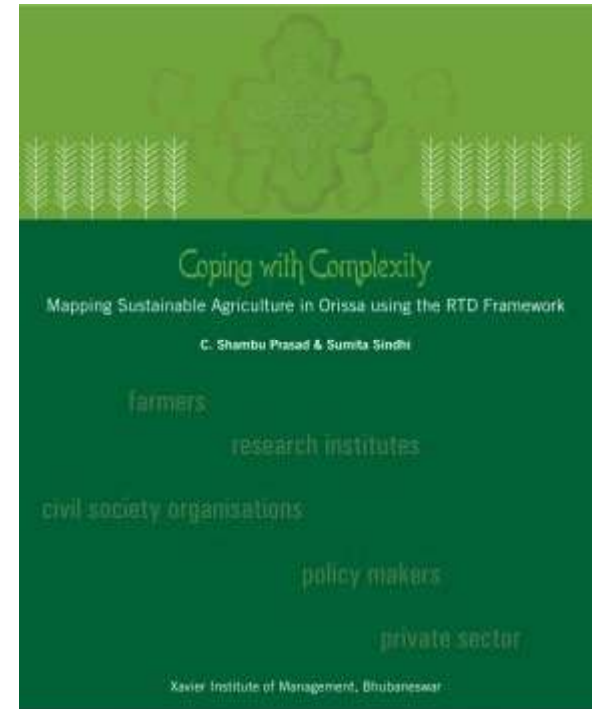
3rd & 4th August 2007

School of Social Sciences, University of Hyderabad

Workshop Partners



RTD framework on Orissa's
agriculture policy - 2009



Universities & CSOs thinking
together on 11th plan



Grounded Theory in Sustainable Agriculture: The NPM story

CONSTRUCTING AGRARIAN ALTERNATIVES

HOW A CREATIVE DISSIDENT PROJECT ENGAGES WITH
THE VULNERABLE LIVELIHOOD CONDITIONS OF
MARGINAL FARMERS IN SOUTH INDIA

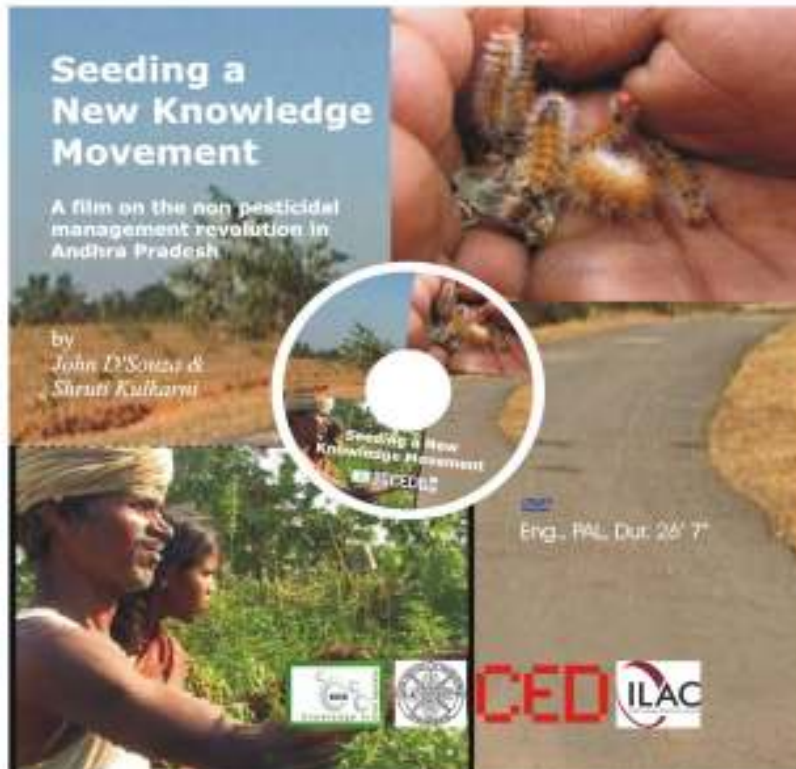
PROEFSCHRIFT

ter verkrijging van de graad van doctor aan de Universiteit Maastricht,
op gezag van de Rector Magnificus, Prof. mr. G.P.M.F. Mols
volgens het besluit van het College van Decanen,
in het openbaar te verdedigen
op donderdag 21 april 2011 om 12.00 uur

door

JULIA QUARTZ

geboren op 26. oktober 1976 te Friedberg/Hessen (Duitsland)



Newer research perspectives



-Thinking through Tungabhadra... how does a view from below look like

-How can academics take up axioms or research generated from civil society and practice?

-Assessing Social Enterprises: The Search for new parameters

-How can academics co-create knowledge?

-How can this lead to more informed and grounded policy....?

-How can social and natural scientists work together .. **Contested agronomy**



A rethinking globally

- *Sussex's A New Manifesto (2010) – 3 D (2010)*



- *Taking European Knowledge Society Seriously (2007)*
- *EU Green paper on Research and Innovation*
 - “The research, business, government *and civil society communities and citizens* are called upon to engage in this important debate.”
- *India's 'A New Decade of Innovation' – NIC 2010-20*
 - ‘From Jugaad to Frugal Engineering’...”Discourse”



Footnoting Alternatives

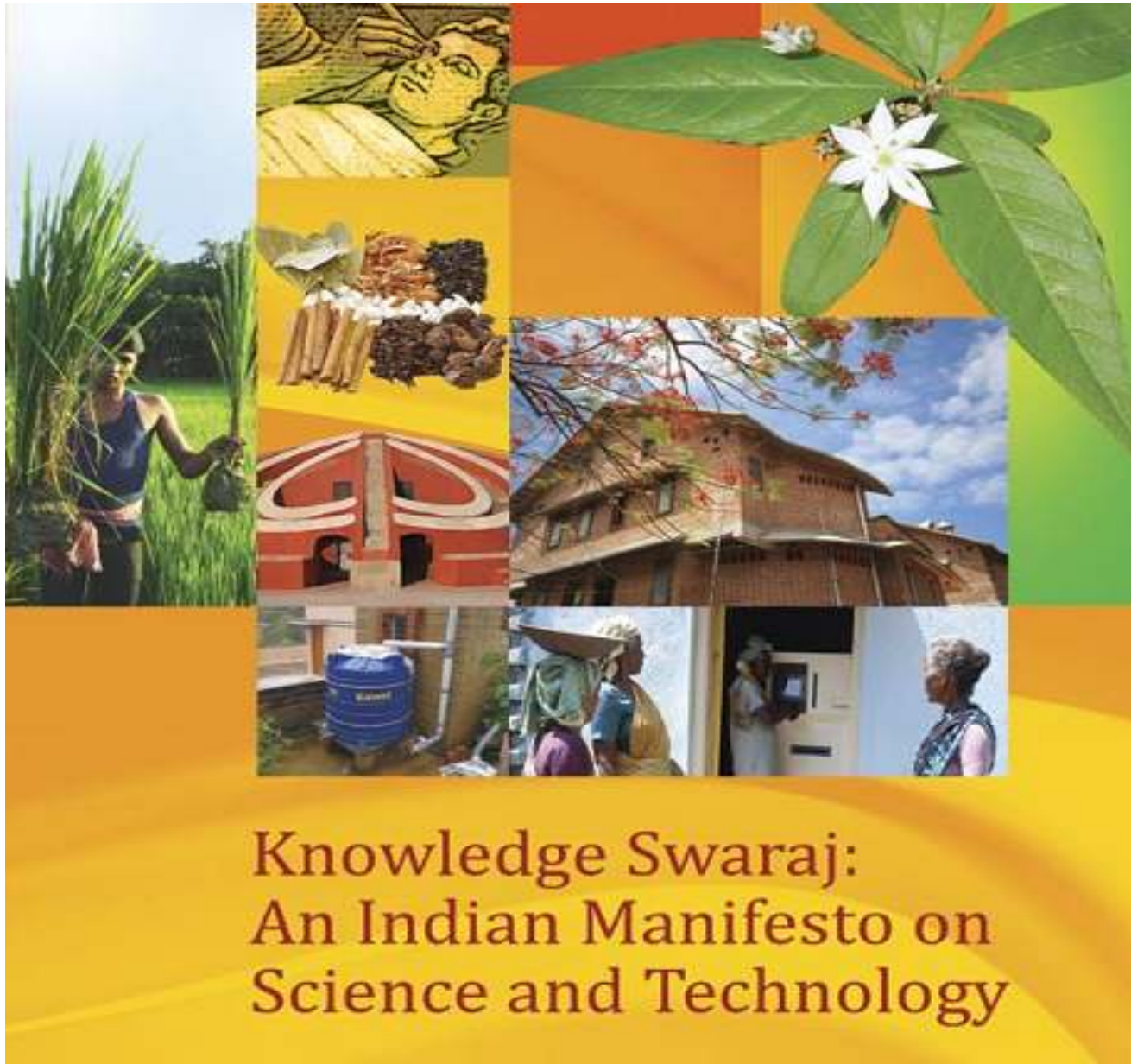
- “Finally, room for discourse is critical to accommodate alternative views and voices and create a culture of questioning. We want to create the right avenues for discussion and debate to get the right inputs from outside the system as well.”... NIC



Idea. Inclusion. Imagination. Innovation. India

- How can we expand the space for discourse on innovation in the country?
- Can NIC and the scientific establishment provide citizens space for ‘subversive & irreverent dialogue’?
- What if citizens were to write their own policy?





Knowledge Swaraj: An Indian Manifesto on Science and Technology



<http://kicsforum.net/kics/kicsmatters/Knowledge-swaraj-an-Indian-S&T-manifesto.pdf>



Knowledge Swaraj

- “As important as a S&T policy for India, is the **self-rule by Indian people** of their S&T. That not only implies an effort to think from the perspectives of the people of India when drafting the policy document, but also an effort to create the necessary accompanying measures by **reinventing Indian democracy and its social institutions**. ...
- This Manifesto reinstalls the **citizen as an expert**, as an inventor... the **richness of parallel knowledge systems**, but also celebrates the morality of the weak and marginalized. It challenges the current moral base of S&T as validated by the state...A new S&T policy, for and by the people, needs **cognitive justice**. It gives, following Gandhi, an identity of strength to the weak.”



Is this Utopian in science policy?

- **Taking European Knowledge Society Seriously** Brian Wynne (2007) on Lisbon agenda
- Reinventing Innovation – Regimes of innovation (technoscientific promises and collective experimentation)

Recommendations

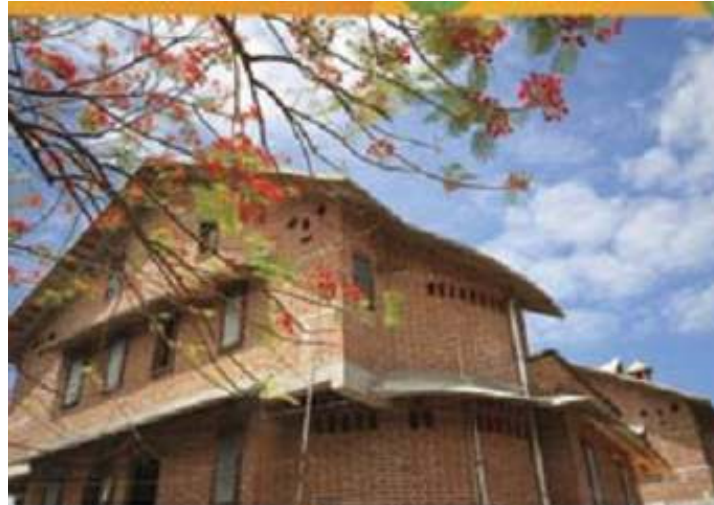
- Shift to Plural Conditional (not Single Prescriptive) Advice
 - Value Social Distribution of Knowledge
 - Support Autonomous Collective Experimentation
 - Establish a New ‘Community Research Council’
- *Can NIC become one such? What if?*



Knowlegde Swaraj through JUSTICE, SUSTAINABILITY, PLURALITY



SRI and conventional rice –*Pilot on NPM, whose knowlege counts*



Chengalchoola slum, Kerala by Baker....
Pilot on Built environment



Rainwater harvesting –
water pilot



Rural ATM used by women labourers
– *Socialisation of science*

Some paradoxes of Indian S&T system

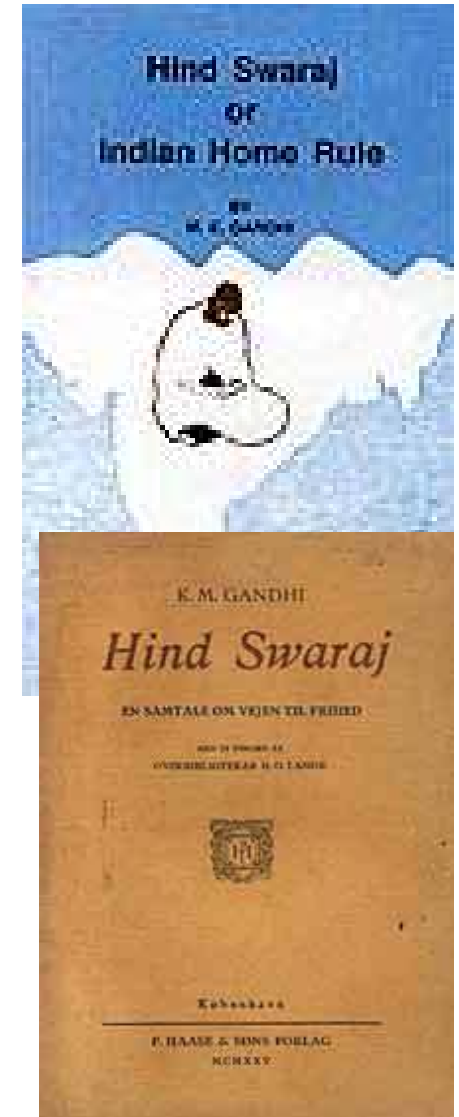
– Self Reliance without Swaraj!

- India exports Green Revolution to Africa, yet 200,000 farmers commit suicides, rotting foodgrains, HuNGama (high hunger and malnutrition), ecological stress high
- *There is a North within the South*
 - *Climate change is about Equity issues,*
 - *Climate warriors (victims) responsible for low PC emissions not recognised*
- How can India's decade of innovation account for India's diversity and plurality of knowledge

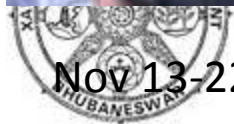


Can we look at Indian traditions of society speaking to science for development?

- Need to **relook at expertise** –
- implies being **open to critiques** of science
- Society becomes vulnerable without **plurality** of knowledge
- experiments on S&T from **civil society** for policy



Taking Indian Knowledge Democracy Seriously: Indian S&T manifesto



Nov 13-22 1909, Nov 20-23 2008, Nov 24 – 28 2009!

Knowledge in U

Inside *Knowledge Swaraj*

Chapters

– Introduction

1. Interrogating expertise

2. From contract to trusteeship: A new role for science

- Science and social movements in India
- Science, (non-) violence and knowledge democracy

3. Sustainability, Plurality and justice

- Redefining sustainability, civil society, plurality and cognitive justice

4. Ethics and Technoscience

- Energy swaraj, Reconstructing sustainability

5. Towards a Knowledge Swaraj

- Need for democratic experiments..
- Elements of a S&T policy Kisan Swaraj Yatra, Practicing Sustainability, Societal dialogues on Nanotechnology



Key ideas of manifesto

Justice

- Taken not given, democratisation of governance, **cognitive justice** important for knowledge democracy

Plurality

- Recognising multiple knowledge systems, different kinds of experts, tapping into capacity of marginalised to contribute, **New commons**

Sustainability

- Long term, universal access to food, health, education, reduction of vulnerability, a **theory of non-violence**



Role of civil society in Science Swaraj



The Five pilots

Hysterectomy in Rural AP

- **Technoscience, medical ethics, violence**
- **Technological responsibility**

Reconstructing Knowledge in BE

- **Plurality** and peoples choices
- **Experts** and **sustainability** in disasters (guidelines..)

Democratising Water sector

- **Civil society** in providing alternatives
- Engaging expertise in water (process guidelines), citizen engagements in rivers (enacting expertise)



Five Pilots contd...

Democratising Climate Change

- Big science, little science (human scale) revisited
- Ethics and sustainability
- Decentralised options and markets

Perceptions on ecological farming

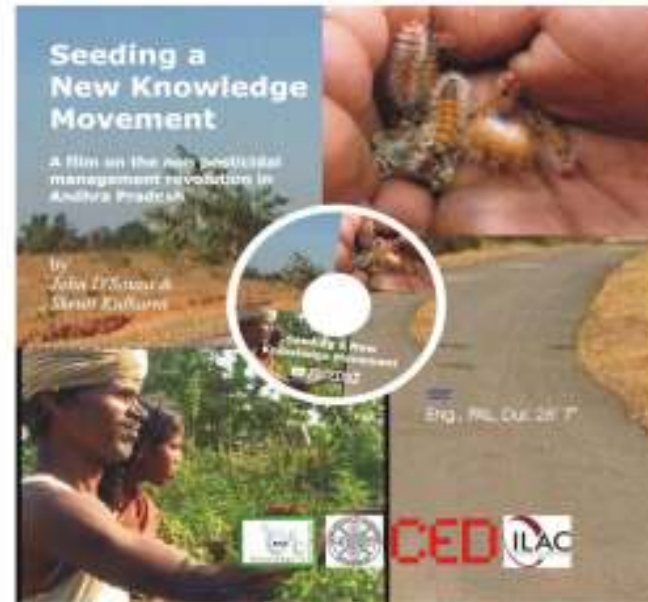
- Whose knowledge counts?
- Sustainability and engaging expertise



Consultative Workshop and Discussions



NPM case engaging with ideas of manifesto



Slogan on apron worn by INECC representatives at Copenhagen



Democratising the climate change debate – FGD involving scientists



Civil society and scientific institutions interface



Medical ethics team brought CWS to work with NIN closely –2010



Piloting Knowledge Swaraj: Some lessons

❖ Need for engaged “experts”

- How and why non-experts should be consulted on choices of priority, policy and ethics.
- Role of Civil Society Organizations

❖ Socialisation of science needs newer institutions and capacities

- Beneficial effects of Knowledge Dialogue (few spaces exist)
- Workshops and consultations platforms for inclusive innovation.

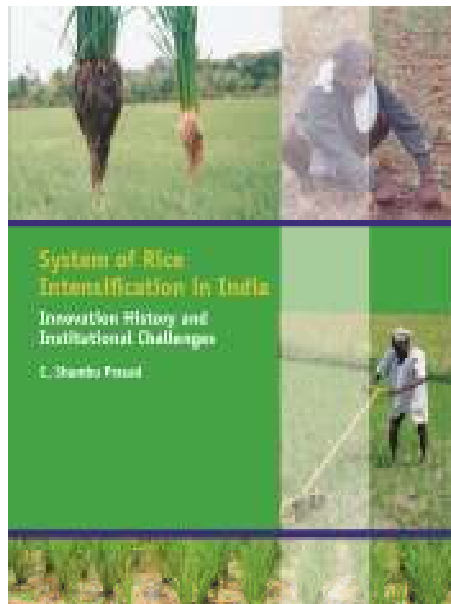
❖ Science Policy as articulating Swaraj

- Look beyond access and spending

❖ Need for technological responsibility

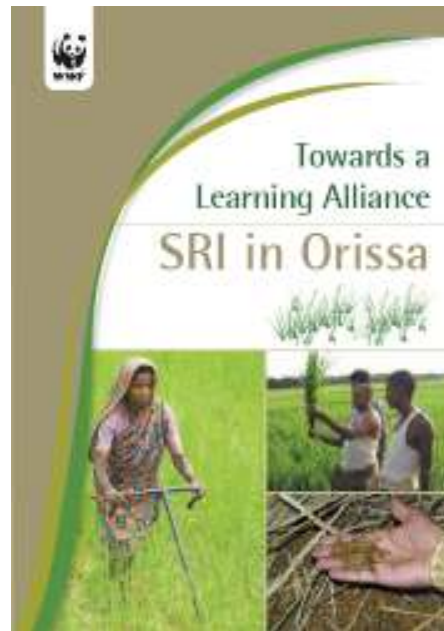


The Learning Alliance Journey: University as a knowledge broker



Nov 2006

National Consortium on SRI.. 2009 onwards



October 2007



December 2008

KS and Universities

- The Livelihoods experiment
- Sector growing academic contribution limited
- Joint teams across institutes and with practitioners visit state missions
- Livelihoods MANTHAN – creation of curriculum that could be used by sector



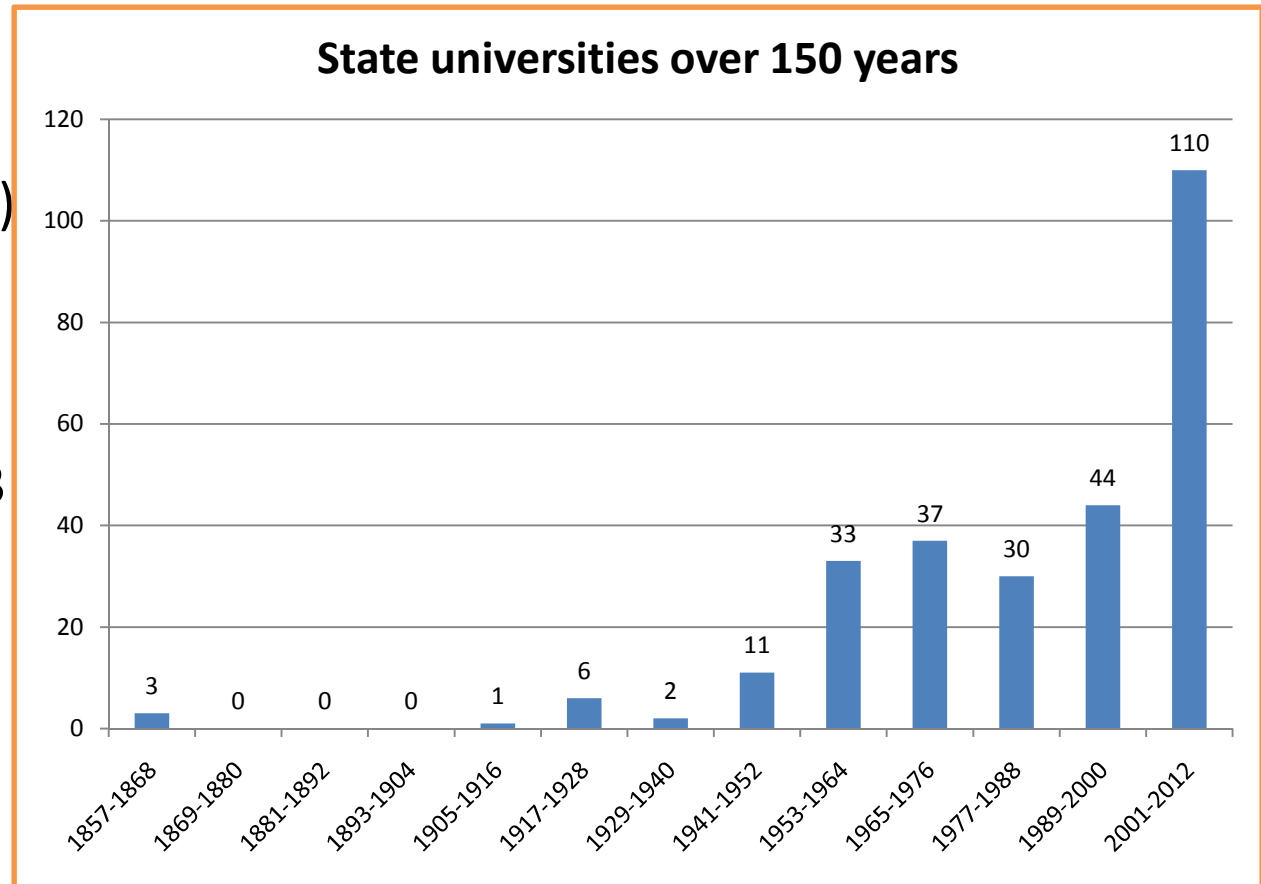
Developmental Universities & Intermediaries

- To increase their contribution to development through the production and distribution of knowledge, universities in developing countries need to transform themselves into “developmental universities.” ... IDRC SA 2006
- “Contextualising the developmental university in India: A preliminary mapping exercise.. Jan – Mar 2012.



Universities in India – An overview

- Central Universities (44)
- State Universities (277)
- Deemed universities (130)
- Institutes of national importance (16 IITs, 13 IIMs and other institute)
- Private Universities (94)...
- 150 + yr history



About 10 of 350 universities located in rural areas.
In addition a rural student has to learn two languages in addition to mother tongue to get into higher education, this increase to three in the case of adivasis.
“Cutting across lines of caste, tribe, and religion or gender a –person born in Indian village is likely to be deprived of any reasonably decent education” – Ganesh Devy....



Development and Universities

- How is development conceptualised in Indian univs..
- Almost non-existent in most central univs and institutes of higher education
- Newer universities have at times explicit role.
 - CUO will be a nationally prominent research university recognised for... for its students' engagement in scholarship, leadership, and **economically relevant education**; for its **extensive network of partnerships**; for its **diverse and inclusive** campus; and for its commitment to addressing tribal society's educational, economic, and cultural challenges.
 - The Sikkim University is being designed in such a way so as to make it known for academic excellence and research, for **its all inclusive institutional character** and a **strong instrument of regional development** and cross-border integration.



Several initiatives outside formal spaces

- Adivasi Academy
- Vidyaashram – Multiversity
- Collaborations with CSOs and univs .. Small but emerging
- Gap Year College
- Newer research networks (MANTHAN..)
- Can the Inclusive Innovation agenda India bottom up, from diverse and creative experiments to univs through research and dialogue?



Some closing thoughts

- Sites of knowledge generation are changing
 - Ideas are often at interface of institutions, location of discourse matters
- Need and scope for changes in practice
 - Beyond academia – industry.. What does this mean in developmental context, whither civil society
 - Valuing joint work... (dis)incentives
 - Celebrate and seek collaborations...poor record in India, ideas more likely across rather than within
 - Celebrating dissent
 - Focus on experiments rather than university reform



Thank You

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