

JNU-STEPS Symposium on Exploring Pathways to Sustainability

Indian and UK experts collaborate on sustainable futures for people and planet



Two-Day Symposium Held on 10-11 February 2014 at JNU Convention Centre, New Delhi

13 February 2014: A two-day long Symposium on *Exploring Pathways to Sustainability* was hosted at Jawaharlal Nehru University on 10-11 February. The Symposium has been co-organised by Centre for Studies in Science Policy (CSSP) at Jawaharlal Nehru University (JNU) and the UK's ESRC STEPS Centre.

Around 100 participants from different parts of the world working in government, academia, civil society and media joined together to discuss and debate different themes of the Symposium which include pathways to environmental health and urbanisation, climate change, uncertainty and risk and grassroots innovation.

Prof. Pranav Desai, Chairperson, CSSP welcomed the national and international delegates by expressing hope and aspirations from this collaborative effort to come up with a common platform for collective action towards pathways to sustainability.

In his inaugural address Professor S.K. Sopory, Vice-Chancellor of JNU, emphasised the need for such collaborative engagements at the national and international level in the context of debates around development, sustainability and climate change.

Professor Melissa Leach, Director of the STEPS Centre, said that the event was a great opportunity to take forward the collective effort to engage with the challenges of uncertainty, inequality and injustice while recasting the sustainability issues.

The session *pathways to environmental health and urban transition*, taking the case studies from waste management in Delhi, unpacked the different meanings and understandings of health, environmental and socio-economic risks and uncertainties associated to urban and peri-urban spaces. Prof. Fiona Marshall, STEPS centre, emphasised on exploring the hidden links between local and national problems in relation to global challenges.

Uncertainty from Below, explored the case studies from Yamuna flood plains, Mumbai rifts, Kutch in Gujarat and the Sunderbans in order to reflect on the challenges of climate change not from the top-down, expert-led, technocratic, reductionist and control seeking

understanding from above but from the perspectives of people who are living with these problems and challenges on a daily basis. Prof. Mike Hulme, Kings College, London said that rather than thinking about climate change in the conventional ways which project singular rationale, it is important to think about climate and its changes to bring in multiple meanings, decentralised expertise and survival strategies.

In the unique format of *World Cafe*, participants from different parts of the world gathered at round-tables to discuss the themes of contemporary relevance such as international dimensions of transformative governance, politics of knowledge and citizenship, environmental movements and action and governance of state, market and community.

The theme of *Grassroots Innovation* engaged the participants to look critically at the social context and political economy while defining the parameters of grassroots innovation and movements and their role as alternative pathways to engage with the politics of mainstream domination and exclusion. Dinesh Abrol, visiting Professor at CSSP, JNU while focussing on the inequalities in the power relations between various actors asked for a focus on building capacities to appraise the right to innovate. By bringing in the examples of copy-left as opposed to patenting, people science movement, honey bee network from India, social technology movement from Brazil and community innovations from UK, the panel proposed the need to scale-up the values, ideologies and lessons from these initiatives to approach reflexive, inclusive and sustainable pathways to innovation.

The session on *Securitization* dealt critically with various aspects and implications of nexus thinking in relation to food, water and energy security. The presenters comparing case studies from India-Nepal and Thailand-Laos in reference to water sharing and building of large hydroelectric dams debated the need to open up the narratives of crises and security in order to appraise plural paths for sustainable water use facilitated with plural choices and uses. Dipak Gayawali, former minister of water resources, Nepal argued that the nexus thinking needs to be deconstructed in order to visualise how different types of political economies are at work simultaneously, beyond their meaning as hydrological entities. Ramaswamy R Iyer, from Centre for Policy Research, Delhi in concluding the session argued for need to disengage with the delusion of growth paradigms and reassert the ideals of justice and harmony.

The last session of the event *Cross-cutting panel discussion*, while joining common strands from the two day symposium argued for increasing diversity of pathways while approaching the issues of sustainability in order to increase the robustness and resilience of the socio-technical systems. The panel comprising Dr. Suman Sahai, Gene Campaign, Ashish Kothari, Kalpvriksh, Prof. Jayanta Bandhopadhyay, formerly at IIMC Kolkata, Prof. Brian Wynne, Lancaster University, UK, Prof. Mellissa Leach and Prof. Andy Stirling from STEPS centre, UK argued for a rethinking and redefining of technocratic models of growth and development, scarcity and security, consumption and exploitation in order to recast sustainability by keeping the ideals of environmental and social justice at its core.

Prof. Pranav Desai, Chairperson, CSSP, JNU in summing up the whole event projected the need for a continuous, collective and self-reflexive engagement with these issues in order to aim for trajectories of change for sustainable future for people and planet.

By **Poonam Pandey**

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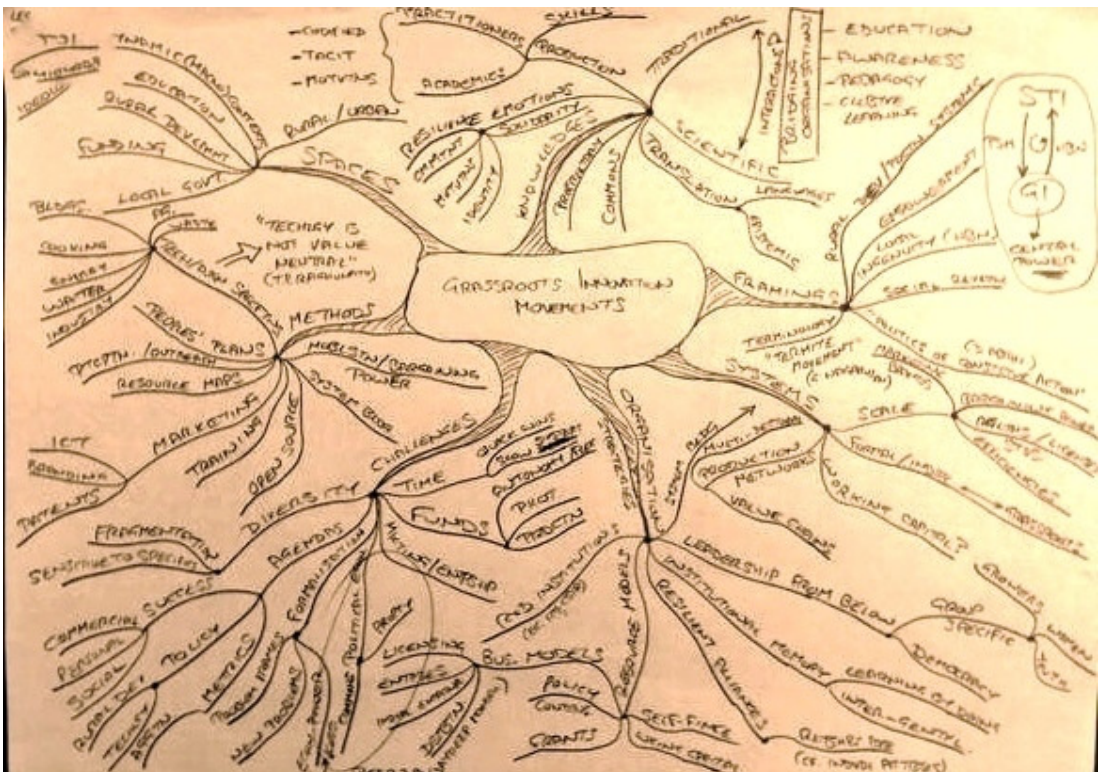


Every Case is Its Own Study? Every Movement has Its Own Goals?

@ STEPS Centre-JNU Symposium

By Adrian Smith, Researcher, STEPS Centre / SPRU

Blog Posted on 11 February 2014 by Julia Day



Learning with and across diverse grassroots innovation movements

Here in Delhi, first at the Grassroots Innovation Movements Workshop, and then at the STEPS-JNU Symposium, participants were interested in the commitments and positions taken in STEPS Centre research projects. Our project on Grassroots Innovation Movements in Historical and Comparative Perspectives is investigating six grassroots innovation

movements whose diverse histories arise in very different geographies, and whose activities, participants and sectors are similarly varied:

- Honey Bee Network in India
- Peoples Science Movement in India
- Social Technology Network / Technologies for Social Inclusion in South America
- Appropriate Technology Movement in South America
- Movement for Socially Useful Production in the UK
- Grassroots Digital Fabrication in Europe

Not only does this raise questions about research methodology, but also what the project expects to achieve practically in engaging with these movements. At root, this is a question of motivations for the research: why study such a collection of disparate movements? I tried providing my own, personal answers to this question when introducing both the workshop and the session on grassroots innovation at the symposium.

My answer had three aspects to it: each engaging with different communities. The first relates to activists and practitioners. The second relates to the research community. And the third aspect relates to the world of policy-making.

At any time, in many places around the world, if we look carefully enough we can find networks of activists and communities generating bottom up solutions to the challenges, opportunities and aspirations for development as they view it. Ingenious grassroots activity produces a variety of innovations, and which activists, engineers, scientists, and others (including investors and entrepreneurs) sometimes try to develop further and help scale-up and spread in some form. This activity can involve improvisation as well as knowledge, and both of which can be elusive for formalisation and dissemination. Conversely, activists concerned for the problems of often marginal or disadvantaged communities, and overlooked by many innovation institutions, try to bring science, engineering, and project development into dialogue with the grassroots, and to develop solutions in which communities are empowered to shape the design and execution of projects that make use of appropriate innovations (even if they did not originate within the particular grassroots setting).

What we see repeatedly over time is participants in these varied grassroots innovation initiatives looking to those involved in similar activities elsewhere. Networks are formed, experiences shared, reflections are made, and discourses and practices emerge around how to help deepen and spread this mix of grassroots innovation activity and grassroots activism making use of innovations. We call these developments grassroots innovation movements.

The first aspect to our research motivation is to engage with these movement processes, and to try and contribute to the dialogues involved by making connections with other movements elsewhere. Even where movements appear to have little in common at face value, such as the Honey Bee Network in India today and the movement for socially useful production in the UK in the 1970s, bringing them together and contrasting them can still have its uses. Looking carefully at a contrasting case can help activists step outside their day to day activity, and in thinking about grassroots innovation experiences in very different times and places, reflection can help reveal, recast, and rethink the processes they are engaged in, and which daily pressures may obscure. Just as foreign travel can enrich how we think about our home countries, so we hope dialogue between contrasting grassroots movements will enrich the reflections of activists in each. Contact such as these may even

help processes of international solidarity. As we'll see below, policy for inclusive innovation has an international dimension, and so it might make sense for movements to engage internationally too.

The second aspect to our research motivation relates to how we study these movements, and how we engage others in our analysis. There exists already considerable research into grassroots movements. However, much of this research attends to either protest movements, movements for rights, or movements for cultural identification. Studies of grassroots movements that innovate, and that are doing alternative development, are fewer. Some exist, such as the work of David Hess. But few have looked across a diversity of grassroots innovation movements in the way we are trying in our project. Elsewhere, we have also argued how the field of innovation studies gives insufficient attention to the particularities of grassroots innovation. Innovation studies have tended to focus on systems of innovation based around firms, markets and research institutes, and if they turn to questions of alternative innovation, then they tend to apply the same conceptual apparatus developed for market-oriented settings. So a second motivation for the project is to contribute an empirically-grounded, theoretically-informed understanding of grassroots movements involved in innovative solutions for alternative developments.

The third and final motivation for our project is to engage with renewed policy interest in grassroots innovation. The activities of grassroots innovation movements are attracting attention in the context of elite policy interest in inclusive innovation. The OECD and other international bodies are interested in inclusive innovation. They are conducting studies and developing programmes. A common feature for the discussions is the search for models of inclusive innovation, and how to scale-up the use of these models. Understandably, these discussions often draw on conventional innovation terms and concepts familiar to these organisations. So, for example, grassroots innovation is seen in terms of the development of innovative devices, which can be developed into products through processes for cultivating entrepreneurship and marketing. These approaches do make sense to some in grassroots innovation movements. But they do not make sense for all participants. Terms like inclusion, scaling-up, and even innovation itself, need to be interrogated in the context of grassroots attempts to democratise innovations for alternative modes of production and consumption.

There is much more to grassroots innovation than an overlooked reservoir of appropriable ideas and devices, open for selection, inclusion, and commercialisation. Grassroots innovation movements are also about mobilisation around different visions for development and alternative ways of innovating. In the process of developing solutions for alternative development problem frames, grassroots innovation movements generate new subjectivities, discourses, agendas, and visions for innovation in development, and not just devices, capabilities, and infrastructure. Some grassroots innovators become protagonists in a different kind of development. Some even present alternative innovation as a tool to resist being included, or subsumed as they might term it, into conventional innovation agendas. This is a position that asserts a right to innovation in a way that poses discomfiting challenges to the fundamental notions held by elite innovation institutions. It is a position that speaks to knowledge politics and relations of political and economic power. It is a position we were reminded about in the discussions in our workshop and Symposium in Delhi. It is important to pressure policy-makers also to recognise this more radical and transformational aspect in grassroots innovation movement.

Source: http://steps-centre.org/2014/blog/stepsinu_grassroots_smith/

Making Climate Change Visible

@ STEPS Centre-JNU Symposium

By Ian Scoones, Co-Director, STEPS Centre

Blog Posted on 11 February 2014 by Julia Day

The second session at the JNU-STEPS Symposium focused on how uncertainties generated by climate change are appreciated both 'from above' and 'from below' – and indeed by those in the middle. Three highly contrasting rural and urban case studies from Delhi and Mumbai, presented by Alankar of Sarai, Kutch in Gujarat, presented by V. Vijay Kumar of the Gujarat Institute of Desert Ecology (GUIDE), Bhuj, and the Sunderbans in West Bengal, presented by Uvasona Ghosh, Indian Institute of Health Management Research (IIHMR), Kolkata, were discussed. Each showed how local understandings of uncertainties are attuned to “the contexts of the lived practices and rhythms of everyday life”, as Sheila Jasanoff has put it.

A particularly evocative 'Photo-Voice' story, offered by project team member Shibaji Bose from IIHMR, combined words and images from the three sites. Uncertainties are deeply embedded in the struggles of daily life, often in the contexts of extreme marginality and poverty. Perceptions, emotions, personal experiences, social relations were brought to the fore. This helped move our understandings beyond more technical perspectives on uncertainty, and made the invisible visible in an immensely powerful way. The next step in the research involves providing cameras to research participants to document their own visual narratives about uncertainty and the challenges they face. As a route to exposing alternative pathways from a local perspectives this is potentially a fascinating and powerful response, one that simultaneously allows voice and representation, as well as the ability to translate and communicate with those in power, very often imposing a view 'from above'.

While the simple heuristic contrasting 'above' with 'below' offered a good hook, discussion also focused on how such a dichotomisation is also too simplistic. A greater theorisation of the networks of power that exist in such different spaces was urged. This of course recalls the older debate about 'indigenous knowledge', and how 'modern' and 'local' knowledges should not be seen as distinct, but more significant are the relations of power that exist in the constructions of knowledge, and the encounters that exist between different knowledges. When negotiating climate change responses, encounters take place between formalised, accredited knowledge in the form of climate models that often tame uncertainties through statistical procedures and informal, often hidden, knowledges rooted in field practices and embedded experiences.

Too often knowledges are not negotiated and the encounters are wholly one-sided. Yet as the presentations pointed out there is increasingly a role for mediation by a variety of 'brokers', intermediaries might include front line, field-level bureaucrats, researcher-activists, projects and community organisations. However such roles are often not recognised, nor rewarded, as discussed in the advocacy of the idea of 'sustainability brokers' in the Slow Race.

How can such conversations emerge? Mike Hulme from King's College London argued that we need to abandon some of the baggage associated with the policy debate on 'climate

change’, and “develop a new narrative on climate change, focusing climate and its changes”. Sue Hartley from York University argued that scientific practice needs to change too, commenting that “natural scientists need to get more relaxed about variability... outliers are often the more interesting data points”. But such shifts need political pressure. Mariano Fressoli from the Institute of Studies on Science and Technology – National University of Quilmes (IESCT_UNQ), Buenos Aires, asked how does invisible, decentred expertise, rooted in place-based citizens’ knowledge get articulated politically – what is the role of social movements in creating bridges, fostering translation, and building alternatives?

As highlighted by Lyla Mehta from the STEPS Centre observed, if perspectives ‘from below’ are to generate truly sustainable pathways, they must move beyond simply reification of poverty driven coping strategies to ones that challenge power relations, and provide space for subaltern alternatives. This means challenging power relations and shifting patterns of control. For those living in the flood-prone Sunderbans, a wider political economy must be made central – it is not just a matter of how embankments are constructed, but also who has control of these, and how wider patterns of global consumption influence flooding through climate change.

Thus sustainability must encompass a politics that is both local and global, bringing perspectives from above to engage with those from below, mediated and facilitated by new players and new methods and media such as the photo story that allow new conversations to emerge, new actions to unfold and a new politics of sustainability to flourish.

Source: http://steps-centre.org/2014/blog/stepsjnu_climate-change/

Transformative Innovation from the Grassroots

@ STEPS Centre-JNU Symposium

By Ian Scoones, Co-Director, STEPS Centre

Blog Posted on 11 February 2014 by Julia Day

Session three at the JNU-STEPS Symposium focused on ‘grassroots innovation’. The panel emphasised the transformative possibilities of innovation, and the need to go beyond a narrow definition of innovation as focused only on technology. Rooted in movements, Adrian Smith from the STEPS Centre, argued that innovation is also about inventing new subjectivities as innovators, developing new social relations, linking technology to services, and fostering interconnections with conventional innovation systems.

The session confronted some major challenges in building new pathways. Can you scale up without losing sight of the origins of and contexts for innovation? How can incumbent systems be confronted, even disrupted? How can wider structural changes be challenged, without cooptation by the mainstream be resisted? What forms of accountability are required so that transformative innovation is made possible?

During the session cases from Brazil and India were presented; two of six cases in the project that have looked across geography and over time to draw comparative insights into the link between grassroots innovation and social movements. The case studies presented took an historical perspective showing how movements that link to technological innovation have longer histories, rooted in particular social, political and historical contexts.

As Mariano Fressoli from the Institute of Studies on Science and Technology – National University of Quilmes (IESCT_UNQ) showed, for the social technologies network in Brazil that had roots in the democratic struggles in Latin America has spawned a range of activities. Yet they have failed to negotiate a relationship with incumbent institutions and policies. Mariano pointed to a massive gap between elite policies focused on neoliberal modes of growth and grassroots visions, imaginations and frames.

Reflecting on movements in India, Dinesh Abrol from the Centre for Studies in Science Policy (CSSP) at JNU argued that a greater accommodation has been possible, as the Gandhian Khadi movement, as well as the Nehruvian vision of autonomous transformation with small-scale enterprise, both allowed for local level innovation. Through various forms of institutionalisation in the post-Independence period, such activities have persisted.

Dinesh in turn highlighted two grassroots innovation initiatives. First the People's Science Movement that helped generate "new social careers of innovation, new relations between primary, secondary production, new socio-technical systems and new brokerage institutions link that have helped scale up beyond the ties and trust of the locality towards wider political alliances between workers, peasants, product-makers". Examples of tanners, biogas, stove making, vegetable production and more were discussed. This, he argued, is one of transformation, and scaling up happens through wider structural change. This experience was contrasted with a second case: the Honey Bee Network that emerged in the 1980s, at a moment when concerns around intellectual property, market development and social entrepreneurship were more dominant. As an innovation network this has scaled up through entering the mainstream, with support from government, linking a movement, with a network to a formal institution as Anil Gupta has described.

How do these cases relate to wider debates about 'inclusive' or 'responsible' innovation? Here the rhetoric identifies grassroots innovation as an opportunity for 'insertion' into the innovation system, and therefore to 'roll out' and 'scale up'. Some saw this as cooptation, others as a route towards greater impact. Through this marketised approach, it was argued, the origins and politics of innovation may be lost, and the principles of protecting a knowledge commons, generating open source technologies, as well as commitments to sharing, inclusivity and democratisation. And in turn the wider challenge to visions of development that these suggest. As Suhas Paranjape from the Society for Promoting Participative Ecosystem Management (SOPPECOM), Pune, argued in discussion, grassroots innovation movements must not aim for inclusion and incorporation, but movements need to be "challenging, disruptive and subversive", fundamentally focusing on "a resistance to subversion to capital". There exists an uneasy coexistence between these strands that suggest very different pathways.

Deliberation and reflection on different options for innovation pathways was seen as an important challenge. The session reflected in particular on how researchers, innovators and movements interact. The STEPS project several commented has provided a useful space for reflection by both academics and activists, and the many hybrids that exist between. This allows people to "look up from their locality", encouraging reflection, networking and debate between actors. It will be out of these interactions that pathways to sustainability will emerge.

Source: http://steps-centre.org/2014/blog/stepsjnu_grassroots/

Nexus narratives – water politics in Asia

@ STEPS Centre-JNU Symposium

By **Ian Scoones**, Co-Director, STEPS Centre

Blog Posted on 11 February 2014 by Julia Day

The fourth panel at the STEPS-JNU Symposium focused on the highly contested narratives around how water is stored and accessed in Asia, with cases from Nepal, Laos, and Thailand. As Uttam Sinha from The Institute for Defense Studies and Analyses (IDSA), New Delhi, commented, Asia is facing a “hydrological moment” that is redefining the politics of water and the relations between nation states in the region. New connections between epistemic and policy communities with a regional basis are being forged that suggest a fundamental rethinking of transboundary and riparian policy and politics.

It is in this context that the STEPS project team has set about interrogating and unpacking the increasingly popular idea of the resource ‘nexus’. The intersection of food, water and energy has been popularised in policy discourse, as a focus for intervention in recent years. In the region and internationally the nexus discourse has been building over time to reach fever pitch. As Jeremy Allouche from the STEPS Centre observed, this is accompanied by metaphors such as the ‘perfect storm’, as well as operational frames such as the ‘green economy’. This is very much associated with international donor-led efforts and increasingly framing research. As Carl Middleton from Faculty of Political Science, Chulalongkorn University, Thailand, pondered, is the nexus idea in fact just a rediscovery of what communities already knew? Why is it only now that such integrative ideas are becoming central to a mainstream narrative? Is this the moment that experts emerge from their silos, as they realise that sustainability questions are highly complex?

However, how ideas around the food-water-energy nexus play out is highly dependent on the national and regional political context and is deeply influenced by framing and interest politics, as the case studies showed. In the Laos Mekong case, a detailed analysis of policy documents across different institutions showed how framings of scarcity, security and nexus intersections differ. Carl showed how the Asian Development Bank highlighted economic and physical scarcity and therefore prioritised infrastructure interventions, particularly by the private sector. This contrasted with the International Water Management Institute that highlighted local production practices, and solutions were connected global and local projects, while conservation organisations such as IUCN focused on natural resource scarcity and the need for protection measures. While adopting the nexus discourse, very different perspectives on what is scarce, what needs to be secured, and what to do about it are shown.

The session asked is ‘the nexus’ a useful concept? Currently, as the cases showed vividly, the framing is very top down, often linked to external interests, and outsider-generated managerial solutions. In addition, in identifying a particular crisis at the nexus, a space for appropriation is opened up, often linked to a partial enclosure of previously shared, regional commons (a form of ‘green grabbing’). Investment imperatives linked to notions of food, energy, or water ‘security’ drive such appropriations by the private sector, supported by national political interests. As Jayanta Bandyopadhyay, formerly Indian Institute of Management Calcutta (IIMC), Kolkata, pointed out such a politics of knowledge has dominated by investment intervention and engineering design results in formerly public

goods being captured and sold, resulting in an adaptation of a popular saying: “Rivers should flow uninterrupted, but only through my tunnels”.

As Dipak Gyawali, Nepal Academy of Science and Technology, former Minister of Water Resources, Nepal, pointed out this has resulted in a contested regional politics between ‘landlord’ countries and the ‘battery’ countries that supply the water. As he observed: “Age old questions are coming back to haunt us. Issues of security are being recast”. Whose security are we talking about? What is the most effective locus for resource governance? How do can multiple uses and users be accommodated? What institutions can respond? Is a river a source of energy for hydropower, food through fisheries or water for domestic use and agricultural irrigation? And who is responsible and accountable?

The challenge, as Dipak pointed out, is that each of the potential multiple institutions involved come with their own framings, different definitions of the problem, and particular histories and proclivities. There is, it was argued, a need for space for different providers to provide diverse options, and for negotiation between them across different groups. “The imagination of plural pathways can only become a reality if a diversity of users and their practices are involved”, as Lawrence Surendra, University of Mysore, observed. “Plural pathways and clumsy solutions” are needed, the panel contributors argued. Only a diversity of responses – “many ten percent solutions” – can, Dipak argued, can create pathways to sustainability more effectively and securely.

Source: http://steps-centre.org/2014/blog/stepsjnu_securitisation/

Turning Urban Sustainability on Its Head @ STEPS Centre-JNU Symposium

By Ian Scoones, Co-Director, STEPS Centre

Blog Posted on 11 February 2014 by Julia Day

At the STEPS-JNU Symposium on ‘Exploring Pathways to Sustainability’ organised with the Centre for Studies in Science Policy (CSSP) at Jawaharlal Nehru University in Delhi, the first session explored the contexts and consequences of rapid urban growth in India through some in-depth case studies on urban waste management and agriculture. Rapid economic growth and growing inequality have created a growing informality, where hidden interactions, innovative activity and complex dynamics unfold. As Fiona Marshall from the STEPS Centre explained, this is a context that is poorly understood, and beyond the reach of formal institutions and policy.

Yet informality is central to economy and society in India. As panel discussant Kaveri Gill from Think Tank Initiative, International Development Research Centre, New Delhi, pointed out the ‘stylised fact’ that the informal sector disappears through development is a myth. As she argued: “This is not a transition. The informal sector is here to stay”, and that 80-90% of the economy of India really needs to be taken seriously. Yet most urban planning and policy efforts are focused on attempting to plan, control and regularise such activities – sometimes through state controls, at other times through liberalisation and handing over to the private sector.

The questions posed were: What is sustainability in this context? Should responses involve drawing such areas into the formal system or should such informality be built on? Among

stakeholders the STEPS-JNU team had been engaging with there were clearly very diverse visions and pathways for development. Fiona Marshall urged the “recasting of the urban sustainability agenda, turning it on its head”.

Debates about the future of cities come together, she argued, in certain places: on the urban fringe, in peri-urban spaces – and around particular issues, notably those that cross-cut sectoral concerns, funding flows and policy domains, including issues of environmental health. The team’s research has pointed to what they term ‘flows of risk and opportunity’. Environmental and health issues are displaced from richer to poorer groups and from urban centres to peri-urban areas, yet the impacts often return in unseen and unexpected ways. Thus waste disposal is transferred to the urban fringe in massive landfill sites, yet the pollutants affect milk or vegetables produced in the same areas, imported to feed richer urban dwellers. These are hidden interactions around which there is little formal policy knowledge, and ones that are often invisible as they are carried on outside regulated frameworks, always informal and sometimes illegal. These flows are deeply affected by politics: of space and place, of class and social differences.

This is revealed perhaps most starkly in the case of solid waste management, a massive challenge in growing cities like Delhi. Pritpal Randhawa and Pravin Kushawaha from CSSP at JNU explained how certain powerful political and economic interests had constructed a particular pathway centred on the commercialisation of waste management and linking it energy production, especially through the construction of waste to energy plants. These are constructed as clean, efficient and environmentally sound. Yet these solutions exclude others, not least those who make their livelihoods from waste. Without recognition and official sanction wastepickers in Delhi are not seen as part of the solution. Ravi Agarwal of Toxics Link explained how in Delhi practices of recycling are barely mentioned and municipal authorities control waste management. The parallel informal system is almost completely overlooked. Dharmendra, a representative of wastepickers in Delhi, demanded access to waste in door to door collection, and explained how they are experimenting with collaborating with private sector operators.

As we heard in discussion, innovations in other Indian cities have begun to challenge this pattern, recognising the informal sector in the municipal response, as well as taking recycling seriously. As Chetan Vaidya from the School of Planning and Architecture, New Delhi, pointed out this went to the heart of urban governance challenges, particularly in the context of moves to decentralisation. In Bangalore change was brought about by a crisis, and the mobilisation of diverse actors that challenged the city authorities through the courts. This story is covered in a STEPS film – Bangalore: From Garden City to Garbage City - produced last year and supported by UKIERI.

Pathways to sustainability are thus generated by challenging structural power and interests – whether waste-to-energy investors, municipal authority laws or urban planning schemes – or by generating new discursive frames, bringing in knowledges and experiences of others outside the mainstream formal system. In discussion, Brian Wynne emphasised the importance of both dismantling and destruction of knowledge in creating new pathways, as well as building new knowledge through engagement with informal knowledges from those interstitial spaces outside the mainstream. As Lawrence Surendra, University of Mysore, argued, we need a new way of thinking about sustainability. “Things are happening on the ground, loops and exchanges are happening. Problems are being solved. Long before the formal institutions respond, before research can deliver”.

Source: http://steps-centre.org/2014/blog/stepsjnu_urban/

STEPS-JNU Symposium: Exploring Pathways To Sustainability

STEP Centre's 2014 Annual Symposium, 'Exploring pathways to sustainability', is being co-organised with the Centre for Studies in Science Policy at Jawaharlal Nehru University, New Delhi and will be held on 10-11 February at JNU.

Overview

The 2014 Annual Symposium will focus on the theme of 'pathways to sustainability'. Our participants will consider how particular mainstream, development interventions emerge as part of self-reinforcing trajectories for change, and the implications of these pathways for both environmental integrity and social justice. Together, participants will examine a range of contemporary issues including urbanisation and environmental health, climate change, securitisation and grassroots innovation. Over two days we intend to explore future trajectories of change and possibilities for switching to more sustainable alternative pathways. Due to available space, the event is invitation-only but you can follow along via #stepsJNU on Twitter or via the event Storify.

Symposium audience

The Symposium runs across 10-11 February, with dynamic presentations and full audience participation in discussions. Sessions cover four areas being investigated by STEPS Centre research projects in India: environmental health and urban transitions; living with climate change uncertainty; grassroots innovation; and securitisation. The Resources section below gives more details on the four STEPS Centre sessions. There will also be an audience-led interactive 'World Café' session and an final expert panel.

Symposium Sessions

Session 1: Pathways to environmental health / urban transitions: There are recognised tensions between urban and industrial development and environmental protection, but limited understanding of how emerging environmental challenges associated with rapid economic development, and the responses to them on the ground, impact on human well-being. This session draws on STEPS Centre work in India.

Session 2: Uncertainty from Below: Ecological uncertainty has usually been theorized from 'above' by experts. But the theories and models concerning uncertainty from "above" may have little to do with the way how everyday men and women (poor or rich, urban or rural especially in the global South) live with, understand and cope with uncertainty in their daily lives. This panel draws on ongoing STEPS Centre research in the Sunderbans, Kutch and urban India.

Session 4: Grassroots Innovation: This project examines inclusive innovation and the present-day programmes and social movements which promote it. It looks at possible strategies and approaches to support and harness inclusive and grassroots innovation.

Session 5: Securitisation: The Water-Energy-Food (WEF) nexus is emerging globally as a research agenda and governance framework for understanding the relationship between water resources development and the energy and food sectors. This session will discuss case studies from Nepal-India and Thailand-Laos, countries that each share transboundary rivers (Mekong, Ganga) and that are increasingly tied together by jointly developed water resource development projects and cross-border power trade.

Selected Resources

- Chapter: Pathways to Sustainability: Building Political Strategies by Melissa Leach. State of the World report 2013 http://dx.doi.org/10.5822/978-1-61091-458-1_22
- Book series: Pathways to Sustainability <http://steps-centre.org/publication/pathways-to-sustainability-book-series/>
- Video: Melissa Leach on the pathways approach <http://steps-centre.org/methods/pathways-approach/>
- Paper: Innovation politics post-Rio+20: hybrid pathways to sustainability? Adrian Ely, Adrian Smith, Andy Stirling, Melissa Leach, Ian Scoones Environment and Planning C, 2013. <http://www.envplan.com/abstract.cgi?id=c12285j>
- STEPS Centre 2013 Annual Symposium Credibility across cultures: expertise, uncertainty and the global politics of scientific advice'. <http://steps-centre.org/2012/uncategorized/annual-symposium-2013>
- <http://steps-centre.org/2014/blog/symposium-2014/>



Symposium on Exploring Pathways to Sustainability

10 & 11 February 2014

Committee Hall, Convention Centre, Jawaharlal Nehru University, New Delhi

Programme

February 10, 2014 (Monday)	
9.00 – 9.30	Registration & High Tea
9.30 - 9.40	Welcome Address – Pranav N. Desai , CSSP, JNU
9.40 - 10.00	Inaugural Address – Sudhir Kumar Sopory , Vice Chancellor, JNU
10.00 - 10.30	Introductory Remarks – Melissa Leach , Director, STEPS Centre
10.30 - 11.00	Tea
Session 1 11.00 - 13.00	<p>Pathways to Environmental Health / Urban Transitions</p> <p>11.00-12.00 Presentation and Audience Discussion</p> <p>Chair - Pranav N. Desai, CSSP, JNU Fiona Marshall, STEPS Centre Pritpal Randhawa, CSSP, JNU Pravin Kushawaha, CSSP, JNU Dharmendra, Lokadhikar, Delhi Ravi Agrawal, Toxics Link, New Delhi</p> <p>12.00-1.00 Panel and Audience Discussion</p> <p>Chair - Ravi Agarwal, Toxics Link, New Delhi Chetan Vaidya, School of Planning and Architecture, New Delhi Kaveri Gill, Think Tank Initiative, International Development Research Centre, New Delhi Priyanie Amerasinghe, International Water Management Institute & RUA Foundation, Hyderabad Marie-Helene Zerah, <i>Centre de Sciences Humaines (CSH)</i>, New Delhi</p>
13.00 – 14.00	Lunch
Session 2 14.00 – 16.00	<p>Uncertainty from Below</p> <p>2.00-3.00 Presentation & Audience Discussion</p> <p>Chair - Awadhendra Sharan, Centre for the Study of Developing Societies, Delhi Lyla Mehta, STEPS Centre Alankar, Sarai, Centre for the Study of Developing Societies, Delhi V. Vijay Kumar, Gujarat Institute of Desert Ecology (GUIDE), Bhuj Upasona Ghosh, Indian Institute of Health Management Research (IIHMR), Kolkata Shibaji Bose, Indian Institute of Health Management Research, (IIHMR), Kolkata</p> <p>3.00-4.00 Panel and Audience Discussion</p> <p>Navroz K. Dubash, Centre for Policy Research, New Delhi Krishna Achuta Rao, Indian Institute of Technology, New Delhi Nagraj Adve, Activist, India Climate Justice Mike Hulme, King's College London, UK</p>

16.00 – 16.30	Tea
Session 3 16.30 – 18.30	Theory and Practice Presentations followed by dynamic audience discussion of key questions in a 'World Café' format
19.00 -	Symposium Dinner: Faculty Centre, JNUTA

February 11, 2014 (Tuesday)

8.45 – 9.00	High Tea
Session 4 9.00 – 11.00	Grassroots Innovation 9.00 – 10.00 Presentation and Audience Discussion Chair – Adrian Smith , STEPS Centre Dinesh Abrol , CSSP, JNU Mariano Fressoli , Institute of Studies on the Science and Technology- National University of Quilmes (IESCT- UNQ), Buenos Aires 10.00 – 11.00 Panel and Audience Discussion Suhas Paranjape , Society for Promoting Participative Ecosystem Management (SOPPECOM), Pune G.V. Ramanjenyulu , Centre for Sustainable Agriculture(CSA), Hyderabad Parthiba Basu , University of Calcutta, Kolkata M. Gopakumar , Kerala Sastra Sahitya Parishad, Kottayam
11.00 – 11.30	Tea
Session 5 11.30 – 13.30	Securitisation 11.30 -12.15 Presentation Chair/Discussant – Ramaswamy R Iyer , Centre for Policy Research, New Delhi Jeremy Allouche , STEPS Centre Dipak Gyawali , Nepal Academy of Science and Technology, former Minister of Water Resources, Nepal Carl Middleton , Faculty of Political Science, Chulalongkorn University, Thailand 12.15 - 1.30 Panel and Audience Discussion Moderator - Dipak Gyawali Uttam Sinha , The Institute for Defense Studies and Analyses (IDSA), New Delhi Himanshu Thakkar , South Asia Network on Dams, Rivers & People (SANDRP), New Delhi
13.30 – 14.30	Lunch
Session 6 14.30 – 17.00	Cross-cutting Panel Discussion Part 1 – Presentations by Session Moderators Part 2 - Expert Panel Suman Sahai , Gene Campaign, New Delhi Shiv Visvanathan , Jindal School of Government and Public Policy, Sonapat Ashish Kothari , Kalpavriksh, Pune Jayanta Bandyopadhyay , Formerly Indian Institute of Management Calcutta (IIMC), Kolkata Andy Stirling , STEPS Centre, UK Brian Wynne , Lancaster University, UK
19.00 -	Symposium Dinner: Faculty Centre, JNUTA

Compiled by

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