

Enhancing the Effectiveness of Sustainability Partnerships: *Linking knowledge with action*

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Goals for the session

- To what extent can partnerships across sectors (business, government, NGOs, academy,...) provide an effective means for overcoming barriers to harnessing S&T for sustainability?
- What are the key characteristics of partnerships that most effectively link knowledge with action?
- What further action by the Roundtable or its members might most promote more effective partnerships for linking knowledge with action for sustainability?

Approach to the Session

- Background (this presentation)
 - Motivations and definitions
 - The challenges of linking knowledge with action for sustainability (from earlier work of the Roundtable)
 - The characteristics of successful partnerships in other arenas... (from review of the literature by Vollmer, Clark)
- Case explorations of partnerships (today @ ½ + ½ +1 hr)
 - Agriculture (Emmy Simmons, Bill Sugrue, Derek Vollmer)
 - Public Health (Jerry Keusch, Dennis Carroll, Nicole Szlezak)
 - Chemical manuf. (Bill Clark, David Constable, Kira Matus)
- Cross-cutting themes from case discussions (Thurs am)
- Action items for the Roundtable (Friday morning)

Motivations and Definitions

- “Partnerships” are everywhere as part of a growing recognition of limitations of single-sector (particularly government) action
 - *description* of how we do get things done
 - *prescription* of how we should...
- Defined as “a means of ‘producing together’ important things that we cannot produce, or produce as well, on our own...”
- Proliferation of multi-sector “partnerships” to promote sustainability at WSSD (2002)... Little understanding of whether, and how, such partnerships can help with sustainability challenges requiring harnessing of S&T
- Charge by Roundtable (May 2006) to hold this session

Linking knowledge with action for sustainability: Prior work drawn on, carried out by, Roundtable

- NRC study (1999) “Our common journey: A transition toward sustainability”
 - International perspectives on what sustainable development wants – and gets – from S&T [*Mexico City, 2001*]
 - Scholarship on international research systems (agriculture, health, energy, manufacturing) [*Harvard workshops*]
 - University approaches to sustainability science [*Temazon; forthcoming event at AAAS 2007*]
 - User-producer interactions in decision support systems: experience with climate forecasts around world [*Irvine**]
 - Managing the linkage – learning from innovative cases in the federal agencies [*Washington**]
- ➔ “Green book”: *Linking knowledge with action for sustainability*

Findings from RT's previous work

- A persistent gap between knowledge and action
 - Gap between what decision makers want from S&T and what S&T is offering
 - Available knowledge is often not put to use and political support falters
 - ⇒ Need to understand why this gap persists and what changes in institutions, procedures, and program design can help to bridge it
- Great but untapped potential for learning from experience
 - Substantial world experience with knowledge systems
 - Lessons learned rarely developed as input into contemporary systems
 - ⇒ Need to systematically and critically compare experience with knowledge systems across a wide range of sectors and regions
- 5 key challenges met by most successful efforts at linking knowledge with action for sustainability...

1) Support user-producer interactions

- In effective knowledge systems, the problem to be solved is defined in a collaborative but ultimately user-driven manner.
 - The collaborative dialogue of knowledge co-production must continue throughout the project, with both users' goals and scientists' R&D agendas changing in the process.
- ⇒ Need to support institutions and procedures for initiating and sustaining user-producer dialogues

2) Forge end-to-end systems linking knowledge with action

- Successful programs involve end-to-end, integrated systems that connect basic scientific predictions or observations through several steps to outputs directly relevant for decision making.
- ⇒ Need “supply chain” perspectives on the design of decision support systems that assure no missing or mismatched links

3) Foster “bridging” or “boundary-spanning” capabilities

- User-producer dialogues can be strained along the supply chain from basic research to decision making
- Dialogues within science-based organizations often do not mesh with dialogues within operations or policy contexts
- ⇒ Need for boundary-spanning organizations and individuals to promote effective dialogues, with recognition of their value and vulnerability

4) Create “safe spaces” for innovative risk taking

- Efforts to link knowledge to action in support of sustainable development often involve radical institutional innovations.
- ⇒ Need “safe spaces” in which experimental innovations can be carried out and that protect innovators from hostile takeovers, encourage experimentation, and embrace error as a learning device

5) Establish appropriate targets and metrics

- Successfully targeting and sustaining programs linking knowledge to action for sustainability generally require a clear and readily understood statement of the beneficial outcomes that successful completion of the project would deliver
- ⇒ Need approaches that specify goals, outcomes, deliverables and metrics, while encouraging the sort of innovative, experimental, high risk work that is central to mobilizing S&T for sustainability.

Summary: Challenges of linking knowledge with action for sustainable development

1. Support user-producer interactions
 2. Forge end-to-end systems perspective
 3. Foster “boundary spanning” capacity
 4. Create “safe-spaces” for innovation
 5. Establish appropriate targets and metrics
- ➔ What kind of multi-sector partnerships, under what conditions, provide effective and efficient “means of producing together” these key functions?

Meeting the Challenges?

Successful partnerships in other arenas...

- Specify goals, targets and indicators
 - Strategic approach to “What’s in it for me?”
 - Goals explicit, for partnership and partners
 - Progress transparently measured, reported
- Have strategy for financing, resource mobilization
 - Full range of resource needs identified, partner responsibilities for providing clear
 - Sustainable financial plan central to strategy
- Build capacity for planning and management
 - Need for, provision of, such capacity treated seriously
 - “How close the partnership?” addressed
 - Special need for partnership “brokers” recognized

On with the Session...

- What kind of multi-sector partnerships, under what conditions, provide effective and efficient “means of producing together” responses to the challenges of linking knowledge with action for sustainability?
- Case explorations of partnerships (today @ ½ + ½ +1 hr)
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- Questions? Comments?