



Meridian Institute
Connecting People to Solve Problems

Use of Facilitated Stakeholder Dialogues in Resolving Governance Issues

Innovative Approaches to Nanotechnology Environmental Governance

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Meridian Institute helps people solve problems and make informed decisions about complex and controversial societal problems

Services

Multi-Party Problem Solving

Strategy Assessment and Planning

Leadership in the Theory and Practice of Collaboration

Issues

Environment, Energy, Climate Change, Forestry, Natural Resources, Agriculture, Food Security, Biotechnology, Nanotechnology, Science and Technology, and Health

Scale

Local, National, and International



Definitions of Key Terms

Resolve – reach a conclusion after a discussion or deliberation.

Environmental – concerned with the ecological effects of altering the environment

Environment – the totality of surrounding conditions

Nanotechnology – the branch of (science and) engineering that deals with things smaller than 100 nanometers (especially with the manipulation of individual molecules)

Governance – the act of governing; exercising authority

Govern – impose regulations on; direct or strongly influence the behavior of; exercise authority over

(Issues) – an important question that is in dispute and must be settled

...through...



Definitions (continued)

...through...

Facilitated – made easier

Stakeholder – any organization, governmental entity, or individual that has a stake in or may be impacted by a given

Dialogue – a conversation between two (or more) persons; a discussion intended to produce an agreement



Qs Toward a Collaborative Process Typology

Is it a group process or some other type of process?

Structured dialogues / negotiations vs. “traditional” public involvement (i.e., group process to achieve specified objectives vs. process to obtain input from individuals into governmental / corporate decision)

Who is the Convenor?

Government vs. Privately Convened

What is the Objective?

Agreement Seeking (Consensus) or Other Objectives

What is the level of the participants?

CEO involvement vs. Other (if CEO level involvement, multi-tiered)

What is the scale of the decisions to be made?

Local, National, and International

What is the scope of issues to be addressed?

Boundaries and limits to the discussion



Additional Process Design Questions

What are the specific issues to be addressed?

Are the potential participants willing to address the same issues?

Who should be involved (i.e., what organizations should participate and who from those organizations)?

Is there a sufficiently *balanced* and *diverse* group of key stakeholders willing to participate?

Are there sufficient incentives as well as time and resources to accomplish the desired objective?



Meridian Institute Nanotechnology Projects

1. Nanotechnology and U.S. Federal Regulation (2003 – 2004)
2. Rockefeller Foundation Meetings (2003 and 2004)
3. International Dialogue on Responsible Research and Development of Nanotechnology (US, 2004 and Japan, 2006)
4. International Council on Nanotechnology (ICON), Inaugural Meeting (2004)
5. U.S. Environmental Protection Agency, Interim Ad Hoc Work Group on Nanoscale Materials (National Pollution Prevention and Toxics Advisory Committee) (2005)
6. International Risk Governance Council's (IRGC), Nanotechnology Project Workshop (2006)
7. Project on Emerging Nanotechnologies, NanoFrontiers Workshop (2006)
8. OECD Committee on Scientific and Technological Policy (2006)
9. Global Dialogue on Nanotechnology and the Poor: Opportunities and Risks (2004 – Ongoing)



Global Dialogue on Nanotechnology and the Poor: Opportunities and Risks

Need for Awareness and Understanding of Linkages between Nanotechnology and MDGs and Implications for Developing Countries

- Nanotechnology investments continue to rise, and applications proliferate.
- Awareness and understanding regarding the implications for development is still generally limited
 - Few people involved with nanotechnology are considering development issues;
 - Few people involved in the development community are considering the potential role of nanotechnology in addressing humanitarian needs.

Meridian established the GDNP in 2004 with the following goals:

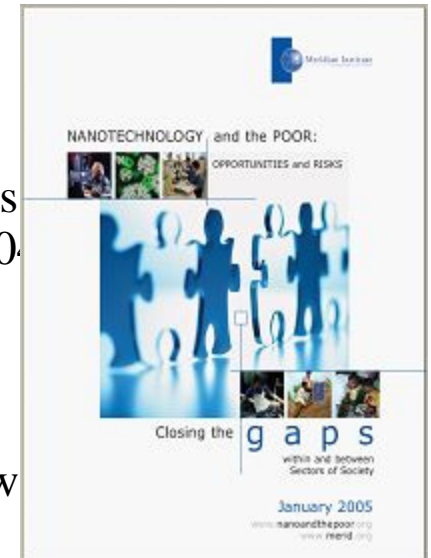
- **Raise awareness** about the implications of nanotechnology for the poor.
- **Catalyze actions** that address specific opportunities and risks.
- Identify ways that science and technology can play an **appropriate role** in the development process.



GDNP

Raising awareness and generating information:

- A **paper** about the implications of nanotechnology for developing countries (January 2005)
- An **online consultation** for people to share their own views and questions (January – March 2005)
- **In-depth consultations** with experts in a range of disciplines ranging from nanoscience to rural development (October 2004 – Ongoing)
- **Presentations** at meetings and conferences (October 2004 – Ongoing)
- **Nanotechnology and Development News**. A free daily new service, <http://www.merid.org/ndn> (December 2005 - Ongoing)
- **Papers and background information** on specific substantive areas – e.g., **water, agricultural commodities, other...**





GDNP

Activities to catalyze actions on specific opportunities and risks

- **Steering Group meeting** to advise Meridian about the specific future activities (June 2005)
- Workshop on nanotechnology, **water**, and development (October 2006; India) Info at: www.merid.org/nano/waterworkshop.
- Workshop on nanotechnology, **commodities**, and development (May 2007; Brazil) Info at: www.merid.org/nano/commoditiesworkshop.
- Workshop on nanotechnology, **energy**, and development (TBD)
- Workshop on nanotechnology, **health**, and development (TBD)
- Global-level group focused on **governance** (TBD)

Building **linkages** with national and regional activities, including:

- **Andean region**
- **Brazil**
- **India**
- **South Africa**



Societal and Cross-Cutting Issues

Product Research and Development

Systematic activities to increase knowledge and apply it to the (further) development of new applications.

Environmental, Human Health, and Safety Risks

Potential harm that may arise from a material, combined with probability of an event (e.g., exposure).

Socio-Economic Issues

Impacts on individuals, institutions, or society resulting from a policy or project (e.g., the introduction of a product, of a market intervention) such as price changes, welfare changes, and employment changes.

Ethics

For instance, applications related to human enhancement and performance, privacy questions resulting from research into nanotechnology monitoring systems, and questions about possible malevolent or military uses of nanotechnologies.

Intellectual Property Rights and Access

IPRs are intended to spur innovation and commercialization, but may limit the ability of individuals and institutions to access technology.



Cross-Cutting Issues

Public Participation and Engagement

Processes that affect whether and how individuals participate in societal discourse, including public information, public education, and public discussion and dialogue regarding nanotechnology.

Governance

Processes, conventions, and institutions that determine how power is exercised to manage resources and societal interests, how important decisions are made and conflicts resolved, how interactions among and between the key actors in society are organized and structured, and how resources, skills and capabilities are developed and mobilized for reaching desired outcomes.

Capacity Building

Assistance provided to develop a certain skill or competence, including policy and legal assistance, institutional development, human resources development, and strengthening of managerial systems.

International Collaboration and Cooperation

Collaborative partnerships between individuals, and institutions from developed and developing countries at a local, national, regional level on any aspect of nanotechnology.

Scalability, Delivery, and Sustainability

The ability to scale-up production and distribution of products so they reach large numbers of people (i.e., success not limited to pilot projects) and the sustainability of product



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Additional Resources

www.merid.org/nano

- Materials from all Meridian Institute nanotechnology projects

www.merid.org/nano/waterworkshop

- Materials from the Workshop on Nanotechnology, Water, and Development

www.merid.org/nano/commoditiesworkshop

- Materials from the Workshop on Nanotechnology, **Commodities**, and Development

www.merid.org/ndn

- Nanotechnology and Development News