

Summaries

Introduction: How Participation Relates to Science and Technology and How Science and Technology Shapes Participation

Harro Maat and Linda Waldman

This *IDS Bulletin* brings together insights from Science and Technology Studies and Development Studies – two academic and applied fields in which questions and issues about participation, science and technology are taken up and investigated. Cases, concepts and analyses emerging from studies in developing and developed countries show much similarity and prove to be fruitful terrain for collaboration. The overall argument emerging from this *IDS Bulletin*, is that bringing together Science and Technology Studies and Development Studies contributes to the participation debate. In addition to advancing the theoretical understanding of participation, this *IDS Bulletin* argues that processes of participation can be enhanced when centred around issues of science and technology.

European Scientific Governance in a Global Context: Resonances, Implications and Reflections

Maja Horst, Alan Irwin, Peter Healey and Rob Hagendijk

Drawing on case studies from the STAGE research network, this article explores a possible new 'European mode' of scientific governance associated with participation and deliberation. The article presents a typology of governance styles: discretionary, corporatist, educational, market, agonistic and deliberative. Despite a widespread interest in deliberative forms of governance, the article argues that there are no clear patterns of convergence. Rather, European scientific governance is characterised by a coexistence of diverse forms. The article subsequently explores the deliberative mode in European practice and identifies a number of differences in relation to the purpose, the actual conduct and the outcome of deliberative engagement. A crucial conclusion is that deliberation is not a shortcut to the creation of social consensus.

The case studies instead suggest a partiality within the conduct of deliberation across Europe, a persisting conflict in the case stories, and a fragility in the institutionalisation of initiatives.

How Does Participation Work? Deliberation and Performance in African Food Security

Paul Richards

Participation is considered an important tool of development. Two mechanisms of participation are distinguished – deliberative and performative. Deliberative participation is vulnerable to capture by elites. A postwar agricultural reconstruction project in Sierra Leone experimented with a performative approach to participation. Technological dynamics served to focus attention on alternatives to patrimonial value systems. The article advocates further experiments in linking deliberative and performative participation.

Evaluating Science and Risk: Living With and Dying From Asbestos

Linda Waldman

This article examines contrasting discourses and interpretations of risk and harm. In the Northern Cape, South Africa, widespread asbestos pollution and the risk of contracting asbestos-related disease (ARDs) gives rise to medical, scientific discourses about the probability of technical risks which coexist with local cultural perceptions of danger and exposure. In subjecting the concept of 'risk' to a social science perspective, the article reveals the multi-layered complexity of how scientists (and associated bureaucracy) and communities differently construct realities around asbestos pollution and its dangers, yet with both failing to identify the 'really serious' dangers, but nonetheless helping to make everyday life possible. Drawing on a knowledge-as-action approach, this article suggests that local cultural understandings and scientific approaches of asbestos issues interweave and support each other at times, but can also present contradictory and divergent interpretations of danger. The article

further argues that understanding scientific knowledge is linked to activities and is skill-based. As demonstrated in the case of asbestos pollution and related diseases, when agencies and local communities take concerted action, a broadened understanding of risk is established which draws on both scientific understandings and community perspectives of risk.

Is Participation Rooted in Colonialism? Agricultural Innovation Systems and Participation in the Netherlands Indies

Harro Maat

Participation is connected to technology through the notion of innovation systems. To make the connection work, it is argued, the focus has to shift from a framing of participation in terms of democratic entitlement to a framing in terms of the settlement of issues (i.e. politics from below). The innovation system is an appropriate notion to see where issues are likely to lock on to processes of technological change. Drawing on material from colonial history (the Netherlands Indies) it is shown that much of the (seemingly) technical discussions about the organisation of research and extension, as well as concrete technical alternatives, were attempts to respond to growing economic uncertainty and social unrest among the rural population.

Farmer Participation in Private Sector Agricultural Extension

Dominic Glover

Private sector organisations are increasingly important players in the provision of agricultural extension services, as well as crop research, in the global South. It is almost two decades since a group of social science scholars and development practitioners called for a new, participatory approach to agricultural research and extension that would put

the 'farmer first'. Since then, farmer participatory approaches have been refined, developed, evaluated and critiqued, and can be seen to have influenced the practice and rhetoric of research and extension. This article examines how far these developments have shaped the behaviour of the private sector. Drawing on evidence from a case study, the article argues that the advances of the last quarter of a century of thinking and experience with farmer participatory approaches have largely failed to influence the delivery of agricultural extension services to smallholder farmers by a major transnational company.

Participation, Communication and Innovation: Thinking About the International AIDS Vaccine Initiative

Joanna Chataway and James Smith

This article is an attempt to think about participation not as an event but rather as part of an effort to build systems and institutions in science, technology and innovation in developing countries. It uses two notions of participation, one as a mechanism to facilitate democracy and broader control and another as a means to achieve development goals. The article looks at the International AIDS Vaccine Initiative (IAVI) and in particular considers the way in which more grassroots participation is linked to communications strategy in the IAVI's case. It argues that examining the extent to which participation efforts are embedded in broader communication strategies may be important in distinguishing between ways in which participation is deployed and used, and it distinguishes between 'communication for participation' and 'participation for communication'. The article also explores Hirschman's ideas around 'exit', 'voice' and 'loyalty' and innovation systems as frameworks, which help to situate participation in the broader context of institutional development.