Development in Practice Books

Participatory Research and Gender Analysis

New Approaches

Edited by Nina Lilja, John Dixon, and Deborah Eade





Participatory Research and Gender Analysis

Agricultural development research aims to generate new knowledge or to retrieve and apply existing forms of knowledge in ways that can be used to improve the welfare of people who are living in poverty or are otherwise excluded, for instance by gender-based discrimination. Its effective application therefore requires ongoing dialogue with and the strong engagement of men and women from poor marginal farming communities.

This edited volume discusses opportunities afforded by effective knowledge pathways linking researchers and farmers, underpinned by participatory research and gender analysis. It sets out practices and debates in gender-sensitive participatory research and technology development, concentrating on the empirical issues of implementation, impact assessment, and institutionalisation of approaches for the wider development and research community. It includes six full-length chapters and eight brief practical notes as well as an annotated resources list of relevant publications, organisations, and websites adding to the portfolio of approaches and tools discussed. Most of the 33 contributors work in the specialised agencies that form part of the Consultative Group on International Agricultural Research (CGIAR).

This book is based on a special issue of *Development in Practice*, Volume 18, Numbers 4 & 5 (August 2008).

Nina Lilja is Director of International Agricultural Programs in the College of Agriculture K-State Research and Extension, Kansas State University. She was previously Impact Assessment Economist at the CGIAR Systemwide Program on Participatory Research and Gender Analysis for Technology Development and Institutional Innovation (PRGA Program) in Colombia.

John Dixon is Senior Advisor for the Cropping Systems and Economics (CSE) program and Regional Coordinator, South Asia, at the Australian Centre for International Agricultural Research (ACIAR). He was previously Director of Impacts Targeting and Assessment at the International Wheat and Maize Improvement Center (CIMMYT) in Mexico.

Deborah Eade is a freelance writer and editor on international development and humanitarian issues, based near Geneva. She was Editor-in-Chief of *Development in Practice* from 1991 to 2010, prior to which she spent 10 years working for various NGOs in Mexico and Central America.

Development in Practice Books

Series Editor: Deborah Eade

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Participatory Research and Gender Analysis

New Approaches Edited by Nina Lilja, John Dixon, and Deborah Eade

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Participatory Research and Gender Analysis

New Approaches

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Nina Lilja, John Dixon, and Deborah Eade



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Contributors

- **Arega Alene** is an agricultural impact economist at the International Institute of Tropical Agriculture (IITA) in Malawi.
- **Aden A. Aw-Hassan** is a senior agricultural economist at the International Center for Agricultural Research in the Dry Areas (ICARDA) in Syria.
- **Andrew Bartlett** has 25 years' development experience in Asia and is currently employed by Helvetas as the Chief Technical Adviser for the Laos Extension for Agriculture Project.
- **Stephen Biggs** is a Research Fellow in the School of Development Studies at the University of East Anglia, and although mainly retired remains professionally active in fair/ethical trade, participatory rural research and development, and science and technology policy and practice.
- **Mauricio Bellon** is Director of the Diversity for Livelihoods Programme at Bioversity International in Italy. He was formerly Human Ecologist at CIMMYT in Mexico.
- **Robert Delve** is a Senior Scientist with the Tropical Soil Biology and Fertility Institute of CIAT, based in Zimbabwe.
- John Dixon is Senior Adviser to the Cropping Systems and Economics (CSE) programme and Regional Coordinator for South Asia at the Australian Centre for International Agricultural Research ICIAR). He was previously Director of Impacts Targeting and Assessment at the International Wheat and Maize Improvement Center (CIMMYT) in Mexico.
- Morenike Dipelou is a professor in the Department of Veterinary Public Health and Reproduction and Deputy Dean of the College of Veterinary Medicine at the University of Agriculture, Abeoku, Nigeria.
- **Deborah Eade** has 30 years' experience in the international development and humanitarian sector, including 10 years working with various NGOs in Mexico and Central America. She was Editor-in-Chief of *Development in Practice* from 1991 to 2010 and is now working as a freelance writer and editor for international agencies. She has been based in the Geneva area since 1994.
- **Esbert Friis-Hansen** is an economic geographer and senior research fellow at the Danish Institute for International Studies with 25 years' experience as a development researcher and consultant in East and Southern Africa.

CONTRIBUTORS

- **Delia Grace** is a veterinary epidemiologist on joint appointment with the International Livestock Research Institute in Kenya and Cornell University in the USA.
- **Chanda Gurung Goodrich** is the Senior Fellow–Research at the South Asia Consortium for Interdisciplinary Water Resources Studies works on projects related to gender, sustainable livelihoods, and participatory research and development in India and Nepal.
- **Elisabeth Gotschi** works for UNDP in Nicaragua and was previously a research fellow with CIAT and Universität für Bodenkultur (BOKU) in Mozambique.
- Jon Hellin works at the International Maize and Wheat Improvement Center (CIMMYT) in Mexico. He has 17 years' research and rural development experience in Latin America, South Asia, and East Africa and previously worked for Practical Action.
- **Janice Jiggins** is a visiting scholar at the Communication and Innovation Studies Group at Wageningen University in The Netherlands.
- **Scott Justice** is an adviser and consultant with the National Agricultural and Environmental Forum of Nepal.
- **Susan Kaaria** is a resource economist and senior scientist at the International Centre for Tropical Agriculture in Uganda.
- **Erastus Kiambi Kang'ethe** is a lecturer in the Department of Public Health, Pharmacology and Toxicology at the University of Nairobi in Kenya.
- Nina Lilja is Director of International Agricultural Programs in the College of Agriculture K-State Research and Extension, Kansas State University, and was previously Impact Assessment Economist at the CGIAR Systemwide Program on Participatory Research and Gender Analysis for Technology Development and Institutional Innovation (PRGA Program) in Colombia.
- **Li Xiaoyun** is Professor of Development Studies and Dean of College of Humanities and Development at China Agricultural University.
- **Noel P. Magor** is Head of the International Rice Research Institute (IRRI) Training Centre and visiting fellow in the School of Politics and History at Adelaide University. He was previously PETRRA Project Manager and IRRI Representative in Bangladesh.
- **Francesca Mancini** is a tropical agronomist and works with the FAO on promoting good agricultural practices in Asia. She is also vice-chair of the international Expert Panel on the Social, Environmental and Economic Performance (SEEP) of the world cotton industry, constituted by the International Cotton Advisory Committee (ICAC).
- **Guy Manners** is a science writer and editor with experience in francophone West Africa. He has worked with several of the CGIAR member organisations in Africa and the Middle East.

CONTRIBUTORS

- Mariam Mapila is a regional research fellow and an agricultural economist at the Chitedze Research Station of the International Centre for Tropical Agriculture (CIAT) in Malawi.
- **Tennyson Magombo** is a graduate student at the University of Malawi's Bunda College of Agriculture, working on agro-enterprise development and linking small farmers to markets.
- Andreas Neef is a research coordinator and senior scientist with the Thai–Vietnamese–German Collaborative Research Program on 'Sustainable Land Use and Rural Development in Mountainous Regions of Southeast Asia'.
- **Jemimah Njuki** is a senior research fellow at the International Centre for Tropical Agriculture (CIAT) in Zimbabwe.
- **Janice Olawoye** is a professor of rural sociology in the Department of Agricultural Extension and Rural Development, at the University of Ibadan, Nigeria.
- **Tom Randolph** is an agricultural economist and leader of the 'Livestock keeping and human health' project at the International Livestock Research Institute in Kenya.
- **Joe Remenyi** is Visiting Professor at China Agricultural University, having retired from Deakin University and serving until 2007 as the International Director of Research at the International Poverty Reduction Centre in China.
- **Ganesh Sah** is a Senior Scientist agricultural engineer in the Nepal Agricultural Research Council working in research, development, and dissemination of the conservation of resources and agricultural machinery.
- **Ahmad Salahuddin** is a consultant of the International Rice Research Institute (IRRI) in Bangladesh and was previously manager of the PETRRA research programme.
- **Annita Tipilda** is a sociologist at the International Institute of Tropical Agriculture (IITA), where she works on the gender-disaggregated impact of technology adoption on farmers' livelihoods in northern Nigeria.
- **Victor M. Manyong** is an agricultural economist and currently officer in charge at the International Institute of Tropical Agriculture (IITA) in Tanzania, where he has also served on its research for development council.
- **Paul Van Mele** is Program leader for Partnerships, Learning and Innovation Systems at the Africa Rice Center (WARDA), where he works on scaling up farmer-education approaches, including the use of video.

Chapter summaries

Introduction

NINA LILJA AND JOHN DIXON

Participatory research approaches are increasingly popular with scientists working for poverty alleviation, sustainable rural development, and social change. This introduction offers an overview of the special issue of Development in Practice on the theme of 'operationalising participatory research and gender analysis'. The purpose of this special issue is to add value to the discussion of methodological, practical, philosophical, political, and institutional issues involved in using gender-sensitive participatory methods. Drawing on 16 articles, we place some of the main issues, empirical experiences, and debates in participatory research and participatory technology development in the context of implementation, evaluation, and institutionalisation of participatory research and evaluation approaches.

Some common questions about participatory research: a review of the literature NINA LILJA AND MAURICIO BELLON

This article reviews, through reference to the published literature, some key questions about participatory research. When should participatory research be used? How should participatory research be applied? What about quality of science in participatory research? Are there any institutional issues associated with the use of participatory research? And what are the benefits and costs of participatory research? The article is not a comprehensive literature review on participatory research, it is not meant to set standards for participatory research, nor to define what constitutes 'good' participatory research, but rather it seeks to summarise the realities of implementing participatory research, as discussed and debated by several published authors, and to provide some useful background for this special issue.

The lost 1990s? Personal reflections on a history of participatory technology development STEPHEN BIGGS

This article traces a history of agricultural participatory research, largely from the author's personal experience. Participatory research in the 1970s was mostly led by disciplinary scientists, and characterised by innovative activities and open academic debate, with some recognition that policy and development practice was a political process. The 1980s saw a shift to learning from past experience, and a participatory

mainstream developed, seeking methods for scaling up. Meanwhile, others sought to understand and influence policy and institutional change in their political and cultural contexts, and to keep open the academic debates. The author considers the 1990s as 'lost years', during which mainstream participatory practitioners became inward-looking development generalists, not so interested in learning from others outside their paradigm. The late 2000s provide a chance to re-recognise the political and cultural embeddedness of science and technology; re-introduce strong, widely based disciplines; and learn from past activities that resulted in positive development outcomes (planned or unplanned).

Impact assessment of farmer institutional development and agricultural change: Soroti district, Uganda

ESBERN FRIIS-HANSEN

This article is based on participatory development research conducted in Soroti district of Uganda with the aim of assessing the impact of agricultural development among poor farmers. The central argument is that a combination of farmer empowerment and innovation through experiential learning in farmer field school (FFS) groups, changes in the opportunity structure through transformation of local government staff, establishment of new farmer-governed local institutions, and emergence of a private service provider has been successful in reducing rural poverty. Based on an empirical study of successful adaptation and spread of pro-poor technologies, the study assesses the well-being impact of agricultural technology development in Soroti district. The study concludes that market-based spread of pro-poor agricultural technologies requires an institutional setting that combines farmer empowerment with an enabling policy environment.

No more adoption rates! Looking for empowerment in agricultural development programmes

ANDREW BARTLETT

The debate on empowerment encompasses an older discourse about the intrinsic value of empowerment, and a newer discourse about the instrumental benefits of empowerment; the concept of agency is useful in understanding this distinction. In agricultural development, empowerment efforts are often instrumentalist, viewed as an advanced form of participation that will improve project effectiveness, with adoption rates that promote compliance rather than intrinsic empowerment. Nevertheless, it is possible for projects to enhance the means for – and facilitate the process of – intrinsic empowerment. With regard to process, research and extension can make use of a constructivist rather than the behaviourist approach to support changes in knowledge, behaviour, and social relationships. In assessing empowerment, both developers and 'developees' need to look for evidence that people are taking control of their lives. Case studies – such as those used by the Indonesian Integrated Pest Management (IPM) Programme – will help to capture context and chronology, with unplanned behaviours being particularly useful indicators.

Appraisal of methods to evaluate farmer field schools

FRANCESCA MANCINI AND JANICE JIGGINS

The need to increase agricultural sustainability has induced the government of India to promote the adoption of integrated pest management (IPM). An evaluation of cotton-based conventional and IPM farming systems was conducted in India (2002–2004). The farmers managing the IPM farms had participated in discovery-based ecological training, namely Farmer Field Schools (FFS). The evaluation included five impact areas: (1) the ecological footprint and (2) occupational hazard of cotton production; and the effects of IPM adoption on (3) labour allocation; (4) management practices; and (5) livelihoods. The analysis showed that a mix of approaches increased the depth and the relevance of the findings. Participatory and conventional methods were complementary. The study also revealed different impacts on the livelihoods of women and men, and wealthy and poor farmers, and demonstrated that the value of the experience can be captured also in terms of the farmers' own frames of reference. The evaluation process consumed considerable resources, indicating that proper budgetary allocations need to be made.

Engaging with cultural practices in ways that benefit women in northern Nigeria Annita tipilda, arega alene, and victor M. Manyong

This study explores the intra-household impact of improved dual-purpose cowpea (IDPC) from a gender perspective, in terms of productivity and food, fodder, and income availability, the impact of which is linked to the income thus placed in the women's hands. Surplus income is important in providing food and nutritional benefits to the home, particularly during periods of risk. More importantly, income generated through the adoption of improved cowpea varieties has entered a largely female domain, where transfers of income reserves were passed on between women of different ages, with significant impact in terms of social and economic development. However, the technology has strengthened the separation of working spheres between men and women. Future technologies should, from the outset, explore provisions existing within the local rubric, to focus on women with the aim of expanding their participation in agriculture with the associated benefits to their families.

Strategies for out-scaling participatory research approaches for sustaining agricultural research impacts

ADEN A. AW-HASSAN

The popularity of participatory research approaches is largely driven by the expected benefits from bridging the gap between formal agricultural science institutions and local farm communities, making agricultural research more relevant and effective. There is, however, no certainty that this approach, which has been mainly project-based, will succeed in transforming agricultural research in developing countries towards more client-responsive, impact-oriented institutions. Research managers must consider appropriate strategies for such an institutional transformation, including: (1) careful planning of social processes and interactions among different players, and documenting how that might have brought about success or failure; (2) clear objectives, which influence the participation methods used; (3) clear impact pathway and impact

hypotheses at the outset, specifying expected outputs, outcomes, impacts, and beneficiaries; (4) willingness to adopt institutional learning, where existing culture and practices can be changed; and (5) long-term funding commitment to sustain the learning and change process.

Integrating participatory elements into conventional research projects: measuring the costs and benefits

ANDREAS NEEF

Until recently, participatory and conventional approaches to agricultural research have been regarded as more or less antagonistic. This article presents evidence from three sub-projects of a Thai–Vietnamese–German collaborative research programme on 'Sustainable Land Use and Rural Development in Mountainous Regions of Southeast Asia', in which participatory elements were successfully integrated into conventional agricultural research as add-on activities. In all three sub-projects the costs of studying local knowledge or enhancing farmers' experimentation consisted of additional local personnel, opportunity costs of participating farmers' time, and travel costs. However, these participatory elements of the research projects constituted only a small fraction of the total costs. It may be concluded that conventional agricultural research can be complemented by participatory components in a cost-effective way, while producing meaningful benefits in terms of creating synergies by blending scientific and local knowledge, scaling up micro-level data, and highlighting farmers' constraints affecting technology adoption.

Participatory research practice at the International Maize and Wheat Improvement Center (CIMMYT)

NINA LILJA AND MAURICIO BELLON

This study assessed the extent to which participatory methods had been used by CIMMYT, and how the scientists perceived them. Results suggest that participatory approaches at the Center were largely 'functional' – that is, aimed at improving the efficiency and relevance of research – and had in fact added value to the research efforts. The majority of projects surveyed also placed emphasis on building farmers' awareness. This is understandable if we think that the limiting factor in scientist–farmer exchange is the farmers' limited knowledge base. Thus, in situations such as marginal areas and in smallholder farming, exposure to new genotypes and best-bet management options would be a first requirement for effective interactions and implementation of participatory approaches.

Making poverty mapping and monitoring participatory

LI XIAOYUN AND JOE REMENYI

The real experts on poverty are poor people, yet the incidence and trends in poverty are usually measured by the use of official economic indicators assumed by researchers to be relevant. Poor householders themselves distinguish between subsistence and cash income. In a 'self-assessed poverty' exercise, poor villagers in rural China specified and weighted key poverty indicators. Eight key indicators describing three basic types of poverty were isolated and used to construct a participatory poverty index (PPI), the

components of which provide insights into core causes of poverty. Moreover, the PPI allows direct comparison of the incidence of poverty between villages – differences in social, cultural, and environmental characteristics of each village notwithstanding. As a result, the PPI offers an objective method of conducting poverty monitoring independently of physical and social features. This article provides a brief description of the PPI and the data needed to construct a village-specific PPI.

Participatory risk assessment: a new approach for safer food in vulnerable African communities

DELIA GRACE, TOM RANDOLPH, JANICE OLAWOYE, MORENIKE DIPELOU, AND ERASTUS KANG'ETHE

Women play the major role in food supply in developing countries, but too often their ability to feed their families properly is compromised; the result is high levels of foodborne disease and consequent limited access to higher-value markets. We argue that risk-based approaches – current best practice for managing food safety in developed countries – require adaptation to the difficult context of informal markets. We suggest participatory research and gender analysis as boundary-spanning mechanisms, bringing communities and food-safety implementers together to analyse food-safety problems and develop workable solutions. Examples show how these methodologies can contribute to operationalising risk-based approaches in urban settings and to the development of a new approach to assessing and managing food safety in poor countries, which we call 'participatory risk analysis'.

Pro-poor values in agricultural research management: PETRRA experiences in practice AHMAD SALAHUDDIN, PAUL VAN MELE, AND NOEL P. MAGOR

PETRRA was an agricultural research-management project which used a values-based approach in project design, planning, and implementation. Through an experiential learning process, agricultural research and development (R&D) institutes, NGOs, private agencies, and community-based organisations rediscovered and improved the understanding of their strengths in meeting development commitments. The project successfully showed how valuesbased research can meaningfully be implemented and a sustainable pro-poor impact achieved.

Operationalising participatory research and farmer-to-farmer extension: the Kamayoq in Peru

JON HELLIN AND JOHN DIXON

While rural poverty is endemic in the Andean region, structural adjustment programmes have led to a dismemberment of agricultural research and extension services so that they are unable to serve the needs of smallholder farmers. The NGO Practical Action has been working in the Andes to address farmers' veterinary and agriculture needs. The work has included the training of farmer-to-farmer extension agents, known locally as Kamayoq. The Kamayoq have encouraged farmer participatory research, and local farmers pay them for their veterinary and crop advisory services in cash or in kind. The Kamayoq model is largely an unsubsidised approach to the provision of appropriate technical services and encouragement of farmer participation. The model

also illustrates that, in the context of encouraging farmer participation and innovation, NGOs have advantages over research organisations because of their long-term presence, ability to establish trust with local farmers, and their emphasis on social and community processes.

Using community indicators for evaluating research and development programmes: experiences from Malawi

JEMIMAH NJUKI, MARIAM MAPILA, SUSAN KAARIA, AND TENNYSON MAGOMBO

Evaluations involving stakeholders include collaborative evaluation, participatory evaluation, development evaluation, and empowerment evaluation – distinguished by the degree and depth of involvement of local stakeholders or programme participants in the evaluation process. In community participatory monitoring and evaluation (PM&E), communities agree programme objectives and develop local indicators for tracking and evaluating change. PM&E is not without limitations, one being that community indicators are highly specific and localised, which limits wide application of common community indicators for evaluating programmes that span social and geographic space. We developed community indicators with six farming communities in Malawi to evaluate a community development project. To apply the indicators across the six communities, we aggregated them and used a Likert scale and scores to assess communities' perceptions of the extent to which the project had achieved its objectives. We analysed the data using a comparison of means to compare indicators across communities and by gender.

Participatory technology development in agricultural mechanisation in Nepal: how it happened and lessons learned

CHANDA GURUNG GOODRICH, SCOTT JUSTICE, STEPHEN BIGGS, AND GANESH SAH

International Wheat and Maize Improvement Center (CIMMYT) projects on new resource-conservation technologies (RCTs) in the Indo-Gangetic Plains of Nepal aimed to strengthen equity of access, poverty reduction, and gender orientation in current rural mechanisation processes – more specifically, to promote machine-based resource conservation and drudgery-reduction technologies among smallholder farmers. These projects, together with other projects and other actors, gave rise to an informal 'coalition' project, which used participatory technology development (PTD) approaches, where farmers, engineers, scientists, and other partners worked towards equitable access to new RCTs. This experience showed that PTD projects need to be flexible, making use of learning and change approaches. Once successful adoption is occurring, then what? Such projects need to ensure that everyone is benefiting in terms of social inclusion and equity; this might necessitate new unforeseen work.

Gender equity and social capital in smallholder farmer groups in central Mozambique ELISABETH GOTSCHI, JEMIMAH NJUKI, AND ROBERT DELVE

This case study from Bu'zi district, Mozambique investigated whether gender equality, in terms of male and female participation in groups, leads to gender equity in sharing of benefits from the social capital created through the group. Exploring the complex connection between gender, groups, and social capital, we found that gender equity is

not necessarily achieved by guaranteeing men and women equal rights through established by-laws, or dealing with groups as a collective entity. While there were no significant differences in the investment patterns of men and women in terms of participation in group activities and contribution of communal work, access to leadership positions and benefits from social capital were unequally distributed. Compared with men, women further found it difficult to transform social relations into improved access to information, access to markets, or help in case of need.

Preface

Deborah Eade

For development and humanitarian aid agencies that are committed to gender equity, it is critical to ensure that those who are most affected by – and particularly those intended to benefit from – their interventions can participate in shaping them. Creating opportunities to achieve such participation is all the more important given that these agencies are unelected, and may even be unknown to the people they aim to serve. Partnership in aid should, then, imply mutual accountability and shared responsibility for the outcomes (Eyben 2006). Evidently this does not mean consulting local 'stakeholders' about decisions that have already been taken, as this would amount to little more than co-option into a predetermined agenda. Rather, a gender-sensitive analytical framework ought to translate into ways of working that are based on social inclusion and are therefore open to adaptation in response to insights and concerns that might otherwise have been overlooked, ignored, or misinterpreted – however inconvenient such changes might be for the logframe or 'project cycle.'

Of course the reality is seldom a smooth process. What level and forms of participation are appropriate, and who decides when 'enough is enough'? What methods will provide the best opportunity for meaningful participation in any given circumstances? Whose views will prevail if there is no consensus? What if some people don't show any interest in active participation? And what if these non-participants are mainly women, or from a scheduled caste or ethnic minority, are elderly, or are stigmatised because of what they do for a living, or are (undocumented) migrants whose survival depends on not getting involved? And what if, despite all best efforts, the intervention doesn't make any difference to prevailing power structures? Or is undermined by incompetence or prejudice on the part of the agency staff? Where do the lines of accountability run in the event of failure to achieve the intended outcomes, or even leaving things worse than they were before?

Though most development agencies would regard participation as a good thing, at least as a means if not as an end in itself, the *practice* of participation has come under considerable fire, not least among contributors to *Development in Practice*. A tiny sample of the 345 search results on articles the journal has published on the subject over the last 20 years include Anacleti 1993; White 1996, Jackson 1997; Ngunjiri 1998; Mompati and Prinsen 2000; Tate 2004; Simon *et al.* 2005; Leal 2007; and Kamruzzaman 2009 (see also the classic critique by Cooke and Kothari 2001 and the counterarguments by Hickey and Mohan 2005). Similarly, and especially with the widespread adoption of a Rights-Based Approach to development, while any serious aid agency by now has some form of gender policy, arguments about how best to achieve equality between women and men continue – and indeed there debates about whether the goal

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is gender equality or gender equity³ and what, if any, relationship the development industry has with any of the many forms of feminism (Smyth 2007; Cornwall et al. 2007). Almost the length of a professional career after the 1975 First World Conference on Women in Mexico City, it is still being asked whether we should really be talking about Women in Development, Women and Development, Gender and Development, or Human Development more broadly – and whether gender equality is more likely to be achieved by 'mainstreaming' versus maintaining a battery of 'gender experts', or whether both are necessary; whether 'femocrats' and women's movements are mutually supportive, antagonistic, or simply occupy different realms; whether women's empowerment is a more likely outcome if aid agencies work with men, focus only on women, work with same-sex groups, or with mixed groups of women and men; and whether, given that they can only mirror their own societies, aid agencies themselves need to have affirmative-action policies, quota systems, etc. so that they unambiguously embody their professed commitment to gender equality. Leaving aside Southern feminist critiques of mainstream development per se, most cogently argued by DAWN⁴ (and echoed by post-development thinkers), despite 35 years of concerted efforts by governments, aid agencies, women's and feminist movements, and NGOs, an enormous body of scholarship and empirical research, many impressive achievements notwithstanding, discrimination against girls and women persists the world over.⁵

This *Development in Practice Book* addresses the iterative linkages between gender analysis and participatory research with a particular focus on agricultural systems. It is based on the August 2008 double issue of the international journal *Development in Practice* that was guest-edited by Nina Lilja, then Impact Assessment Economist at the CGIAR Systemwide Program on Participatory Research and Gender Analysis for Technology Development and Institutional Innovation (PRGA Program) in Colombia and John Dixon, then Director of Impacts Targeting and Assessment at the International Wheat and Maize Improvement Center (CIMMYT) in Mexico.⁶

Their comprehensive introductory chapter sets out the rationale for what they call 'the broad portfolio of approaches, practices, and frameworks' covered by the 16 chapters, which offer 'an operational context for better-quality implementation, evaluation, and institutionalisation of participatory approaches for the development and research community'. The chapters include a literature review, an annotated compilation of further resources and a blend of theoretical and overview papers and empirical studies illustrating experience from a broad range of countries and regions: Bangladesh, China, India, Nepal, and Indonesia; Malawi, Mozambique, Nigeria, and Uganda; Mexico and Peru.

This is the first in the Routledge series *Development in Practice Books*, which will be based on special themed issues of the journal. This replaces the earlier *Development in Practice Readers* series, which was launched in 1996 as a series of thematic anthologies based on articles drawn from the journal, supplemented by an annotated selection of further resources on the chosen topic, combining original and reprinted material in a stand-alone form. Since then, 21 *Readers* have been published on issues ranging from human rights to civil society, from labour unions to learning organisations, from sustainable urban development to women and war. Many of these have been used for university teaching and in training workshops, and six have also been published in Spanish translation. A full listing is given on page vi, and several are available in full-text PDFs at www.developmentinpractice.org. The new *Development in Practice Books* series will be based solely on themed issues of *Development in Practice* and will

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therefore include annotated resources only if these formed part of the original issue. With the wealth of resources now freely available via the Internet, we believe that individual readers are in the best position to develop their own lists of further resources in the language(s) of their choice.

Notes

- 1 Unfortunately, this is not general practice among official donors or NGOs (see for example Mawdsley *et al.* 2005; Wallace *et al.* 2007).
- 2 In the special issue of *Development in Practice* on Active Citizenship, guest editor Matthew Clarke (2009) discusses this in relation to Burmese migrant labourers in Thailand. Their need to 'lie low' poses real operational challenges for an NGO that has been working with such populations for many years. It clearly challenges assumptions about participation. See also Mompati and Prinsen (2000) for an example of self-exclusion by virtue of 'inappropriate' participation.
- 3 Some people hold that gender equality refers to outcomes (absence of discrimination, whether overt or implicit) while gender equity describes opportunities or inputs. In practice the two terms are used interchangeably.
- 4 DAWN (Development Alternatives with Women for a New Era) is a network of women scholars and activists from the economic South who engage in feminist research and analysis of the global environment and are committed to working for economic justice, gender justice, and democracy.
- 5 For example, the UK Women and Work Commission reported in July 2009 that there has been no significant decline in gender stereotyping among children under the age of 14, and that the gap between what men and women are paid is now increasing after a period when it appeared to be closing slightly: women's median hourly earnings are currently 22.6% less than men's (Sparrow 2009). Lower incomes throughout their working lives can all too easily translate into economic hardship when women reach pensionable age.
- 6 Nina Lilja is now Director of International Agricultural Programs in the College of Agriculture K-State Research and Extension, Kansas State University. John Dixon is now Senior Adviser to the Cropping Systems and Economics (CSE) programme and Regional Coordinator for South Asia at the Australian Centre for International Agricultural Research ICIAR).

References

Anacleti, Odhiambo (1993) 'Research into local culture: implications for participatory development', *Development in Practice* 3(1): 44–48.

Clarke, Matthew (2009) 'Over the border and under the radar: can illegal migrants be active citizens?', *Development in Practice* 19(8): 1064–1078.

Cornwall, Andrea, Elizabeth Harrison, and Ann Whitehead (eds.) (2007) Feminisms in Development: Contradictions, Contestations and Challenges, London: Zed Books.

Craig, David and Doug Porter (1997) 'Framing participation: development projects, professionals, and organisations', *Development in Practice* 7(3): 229–236.

Cooke, Bill and Uma Kothari (eds.) (2001) Participation: The New Tyranny?, London: Zed Books.

Eyben, Rosalind (ed.) (2006) Relationships for Aid, London: Earthscan.

Hickey, Samuel and Giles Mohan (eds.) (2005) Participation – From Tyranny to Transformation? Exploring New Approaches to Participation in Development, London: Zed Books.

Howard, Patricia L. (2002) 'Beyond the "grim resisters": towards effective gender mainstreaming through stakeholder participation', *Development in Practice* 12(2):164–176.

Jackson, Cecile (1997) 'Sustainable development at the sharp end: field-worker agency in a participatory project', *Development in Practice* 7(3): 237–247.

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- **Kamruzzaman, Palash** (2009) 'Poverty Reduction Strategy Papers and the rhetoric of participation', *Development in Practice* 19(1): 61–71.
- **Kapoor, Dip** (2005) 'NGO partnerships and the taming of the grassroots in India', *Development in Practice* 15(2): 210–215.
- **Leal, Pablo Alejandro** (2007) 'Participation: the ascendancy of a buzzword in the neo-liberal era', *Development in Practice* 17(4&5): 539–548.
- Mawdsley, Emma, Janet G. Townsend, and Gina Porter (2005) 'Trust, accountability, and face-to-face interaction in North–South NGO relations', *Development in Practice* 15(1): 77–82.
- **Mompati, Tlamelo and Gerard Prinsen** (2000) 'Ethnicity and participatory methods in Botswana: some participants are to be seen and not heard', *Development in Practice* 10(5): 625–637.
- **Ngunjiri, Eliud** (1998) 'Participatory methodologies: double-edged swords', *Development in Practice* 8(4): 466–470.
- **Pickard, Miguel** (2007) 'Reflections on relationships: the nature of *partnership* according to five NGOs in southern Mexico', *Development in Practice* 17(4&5): 575–581.
- Simon, David, Duncan F.M. McGregor, Kwasi Nsiah-Gyabaah, and Donald A. Thompson (2003) 'Poverty elimination, North–South research collaboration, and the politics of participatory development', *Development in Practice* 13(1): 40–56.
- Smyth, Ines (2007) 'Talking of gender: words and meanings in development organisations', *Development in Practice* 17(4&5): 582–588.
- **Sparrow, Andrew** (2009) 'Mind the gap: UK gender pay divide widens', *Guardian*, available at: http://www.guardian.co.uk/society/2009/jul/29/gender-pay-divide-women-inequality (retrieved 11 August 2009).
- **Tate, Janice** (2004) 'Participation and empowerment: reflections on experience with indigenous communities in Amazonas, Brazil', *Development in Practice* 14(3):407–412.
- Wallace, Tina, Lisa Borstein, and Jennifer Chapman (2007) The Aid Chain: Coercion and Commitment in Development NGOs, Rugby: Practical Action Publishing.
- White, Sarah C. (1996) 'Depoliticising development: the uses and abuses of participation', Development in Practice 6(1): 6–15.

Introduction

Nina Lilja and John Dixon

Participatory research approaches are increasingly popular with scientists working for poverty alleviation, sustainable rural development, and social change. This introduction offers an overview of the special issue of Development in Practice on the theme of 'operationalising participatory research and gender analysis'. The purpose of this special issue is to add value to the discussion of methodological, practical, philosophical, political, and institutional issues involved in using gender-sensitive participatory methods. Drawing on 16 articles, we place some of the main issues, empirical experiences, and debates in participatory research and participatory technology development in the context of implementation, evaluation, and institutionalisation of participatory research and evaluation approaches.

The function of development research is to generate new knowledge or apply existing knowledge in new ways that can be used – in the context of the development process – to increase people's welfare and, in doing so, to eradicate poverty. It is widely acknowledged that successful research on agriculture and natural-resource management requires dialogue and co-operation between those who produce knowledge (technology) and the decision makers (end-users, farmers) who use it. This is the rationale for the use of participatory methods and gender analysis in research and development efforts targeting poverty alleviation, social inclusion, and equity. Participatory development arose as a reaction to the failure to involve would-be beneficiaries of 'development' in the process. As such, it was popularised by, for example, Chambers *et al.* (1989), Chambers and Conway (1992), and Chambers (1994, 1995).

Underpinning the rise of participatory research has been a realisation that the poor in general, and poor marginal farmers in particular, are far from being a homogeneous group. Thus, technologies have to be selected and adapted for particular systems, ideally with strong engagement if not full control by women and men farmers (see, for example, Ashby and Sperling 1995; Ceccarelli and Grando 2007; de Jager *et al.* 2004; Witcombe *et al.* 1999). Such interaction constitutes a two-way knowledge pathway between researchers and agricultural communities.