

# PTD/PID CIRCULAR

## Periodic Update on Participatory Technology/Innovation Development

No. 13, March 2004

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### INTRODUCTION

#### **The PTD Circular is back!!**

Welcome to Issue 13 of the PTD Circular. After an interval of nearly 3.5 years, we are now able to revive the Circular, which has found a new home within the PROLINNOVA programme (see below). The main part of the Circular will continue to be the annotated bibliography of publications, including “grey” reports on work in progress, but we will also report on past and upcoming events (workshops, training activities, exchange meetings etc.), on-going programmes and networking activities. This issue of the Circular will be slightly different in that it will provide a selection of readings and web links to enable newcomers to this type of work orient themselves with the available resources.

As access to electronic communication grows and more people get connected through the wires, we feel more comfortable in distributing the Circular electronically – as an e-mail message or attachment in PDF form. But for those of you who do not have electronic access, we will certainly arrange to send you a printout or photocopy.

Just in case you want to pick up some of the old threads and refresh your mind, the back issues of the Circular are now accessible at PROLINNOVA’s website [www.prolinnova.net](http://www.prolinnova.net) under “Readings and Resources”. You can also find them on ILEIA’s website [www.ileia.org](http://www.ileia.org)

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#### **PTD gains ground**

Over the past two decades, PTD has gained more ground as an approach to agricultural research and extension that leads to sustaining livelihoods of rural people, ensuring food security and safeguarding the environment. This success can be attributed to several key factors:

- training and coaching in participatory approaches, particularly PTD, that has increased the capacity of farmers, researchers and extensionists to undertake joint learning and experimentation;
- documentation of PTD experiences in written and audio-visual form, that has been a source of inspiration to others;
- networking of like-minded people and organisations, particularly NGOs, that has catalysed a change of thinking about the approach at national level;
- lobbying by PTD advocates at regional and international level, that has opened doors for policy dialogue and funding support.

## **From PTD to PID**

As PTD advances, farmers are gradually gaining recognition as movers of agricultural research, and local innovation is beginning to drive the formal research agenda. However, a closer look at local innovation – new and better ways of managing resources devised by the local people – reveals that it goes beyond technical solutions to socio-organisational arrangements such as new ways of gaining access to or regulating the use of resources, new ways of community organisation and action, new ways of stakeholder interaction etc. Participatory Innovation Development (PID) embraces this broader understanding of joint research that builds on local innovation, and is now being used alongside, or in place of, Participatory Technology Development (PTD). This development will also be reflected in the Circular by taking on the title PTD/PID Circular and gradually moving on to PID Circular.

## **PROLINNOVA**

Participatory Innovation Development is at the heart of PROLINNOVA – PROMoting Local INNOVation in ecologically-oriented agriculture and natural resource management. This is an NGO-led initiative to scale up participatory research and development approaches – many pioneered by NGOs – in managing natural resources for sustainable agriculture. The focus is on promoting local innovation – on discovering how farmers test and develop their own ideas to make better use of natural resources, supporting these initiatives by entering into a process of joint experimentation, and paving the way for farmers to play the central role in research and development.

When, in June 2002, we mentioned PROLINNOVA in PTD Circular 12, it was still a concept that was being developed by NGOs from North and South within the framework of the GFAR (Global Forum for Agricultural Research). These NGOs asked ETC-Ecoculture to develop the concept into a proposal and to seek funding support. A lot has happened since then, and the idea has grown to be a fully-fledged Global Partnership Programme strongly backed by the GFAR. With initial funding from IFAD (International Fund for Agricultural Development) in 2003, NGOs in Ethiopia (Agri-Service, Ethiopia), Ghana (ACDEP - Ecumenical Association for Sustainable Agriculture and Rural Development) and Uganda (Environmental Alert) were able to design their country programmes through multi-stakeholder consultations, inventories of relevant experiences and workshops for self-assessment and planning. Funding support from the Netherlands Directorate for Development Cooperation (DGIS) since January 2004, together with further support from IFAD, now allows for start up of the programme in Cambodia, Nepal, Niger, South Africa, Sudan and Tanzania, and implementation of the plans made by the stakeholder organisations in Ethiopia, Ghana and Uganda.

The PROLINNOVA country-level activities are supported in terms of international coordination, capacity building, advocacy, networking and publications by ETC-Ecoculture (The Netherlands), the International Institute for Rural Reconstruction (The Philippines), the Centre for International Cooperation at the Free University of Amsterdam (The Netherlands) and the Swiss Centre for Agricultural Extension (LBL).

The major international events of PROLINNOVA planned for 2004 are:

- the international workshop in March 2004 in Ethiopia, to share experiences in developing country-level partnerships for PROLINNOVA and to decide on international learning mechanisms and programme governance;
- a training-of-trainers course in June 2004 in the Philippines to build capacities of key trainers from the country-level programmes.

More information on PROLINNOVA can be found on [www.prolinnova.net](http://www.prolinnova.net)

## FARMER INNOVATION AND PARTICIPATORY INNOVATION DEVELOPMENT: RECOMMENDED READINGS FOR DEVELOPMENT PRACTITIONERS

*With the start-up of the PROLINNOVA programme, several new organisations and individuals are asking for documentation about Farmer Innovation and Participatory Innovation Development (FI/PID). Based on suggestions from members of the PTD-Forum (see box), we compiled a list of 44 titles of publications useful for people wanting to become engaged in this type of work. We sent this list to the PTD-Forum and asked the members to mark the publications that they regard as the “Top Twenty” on FI/PID for development practitioners in the field. Below are the 20 publications that were mentioned most frequently. The list is given here in alphabetical order but the five most frequently mentioned are marked with three stars (\*\*\*). All 44 publications are included under “Resources” on the PROLINNOVA website ([www.prolinnova.net](http://www.prolinnova.net)).*

*Many of these books are several years old – they have stood the test of time. However, some of them may no longer be in print. We did not check this out – we are simply presenting the Top Twenty publications recommended by PTD practitioners. Wherever possible, we have tried to indicate where they can be downloaded from the Web. Many useful newer publications are posted on the PROLINNOVA website and, as they appear, new ones will be included in upcoming issues of the PTD/PID Circular, which will likewise be posted on the website.*

### St Ulrich Group – a PTD learning forum

The St Ulrich Group was formed in September 1993 in the village of St Ulrich in the Black Forest of southern Germany. The members are all practitioners and trainers in Participatory Technology Development (PTD). Most of them are working in the “South” (Africa, Asia, Central and South America) but some are now applying the same approach in development (rural renewal) work in Europe. The Group meets once a year to discuss a particular topic related to PTD. Otherwise, the members communicate by electronic means via the listserver “PTD-Forum”.

Roland Bunch. 1982. 3<sup>rd</sup> ed. 1995. ***Two ears of corn: a guide to people-centered agricultural improvement.*** World Neighbors, 4127 NW 122 St, Oklahoma City, OK 73120, USA ([info@wn.org](mailto:info@wn.org)). ISBN 0 942716 03 05. 250pp.

**Key words:** *appropriate technology, community development, farmer experimentation, participatory planning, farmer-to-farmer extension, training, upscaling*

Based on experience of World Neighbors in Central America, this book describes how people-centred NGO programmes can help rural communities improve agricultural production by planning, organising and managing activities so that two ears of corn grow where only one grew before. The approach builds on the principles of starting slowly and on a small scale with simple, low-cost, appropriate technologies that show promise of success according to the criteria of poor farmers. Extensionists and farmers engage in small-scale experimentation, and villagers learn to train others in this approach. Attention is given to markets, supporting services, evaluation, strengthening local institutions and phasing out of the support of the NGO. A clearly written and easy-to-read book that has inspired many people to practise PTD. As one member of the St Ulrich Group wrote: “If I had to choose one [book for people starting PTD], I would go for Bunch.” The book is also available in French and Indonesian.

\*\*\* Robert Chambers, Arnold Pacey & Lori Ann Thrupp (eds). 1989. ***Farmer first: farmer innovation and agricultural research.*** Intermediate Technology Publications, 103–105 Southampton Row, London WC1B 4HH, UK. ([marketing@itpubs.org.uk](mailto:marketing@itpubs.org.uk)) ISBN 1 85339 007 0. 218pp.

**Key words:** *farmer experimentation, farmer groups, indigenous knowledge, institutional change, local innovation, methodology, on-farm research, participatory research, participatory rural appraisal*

In contrast to the conventional transfer-of-technology approach to agricultural research and extension that served the “Green Revolution”, the farmer-first approach focuses on the capacities of resource-poor farmers to experiment, adapt and innovate in a process facilitated by outside professionals. Contributors from the agricultural and social sciences, ecology, economics and geography present concepts, methods and cases of participatory agricultural research that starts with farmer innovation. They make the case for the complementary use of conventional and participatory methods.

Will Critchley, Roshan Cooke, Tijan Jallow, Sophie Lafleur, Mineke Laman, Janet Njoroge, Verity Nyagah & Emmanuelle Saint-Firmin (eds). 1999. **Promoting farmer innovation: harnessing local environmental knowledge in East Africa**. RELMA Workshop Report 2. Nairobi: RELMA / UNDP. Regional Land Management Unit, POB 63403, Nairobi, Kenya (relma@cgiar.org). ISBN 9966 896 45 7. 131pp.

**Key words:** *gender, indigenous knowledge, local innovation, methodology, monitoring and evaluation, natural resource management, partnership*

Report on a workshop of stakeholders (ranging from government decision-makers to farmer innovators) organised by the Promoting Farmer Innovation in Rainfed Agriculture (PFI) programme in 1999 in Tanzania. It introduces both the theoretical and the practical aspects of “harnessing” local knowledge and experience, validating farmers’ innovations and conducting experiments in collaboration with farmer innovators. Methods of identifying and analysing innovators and innovations are described. Attention is given to ways of stimulating partnership between research, extension, NGOs and farmers; gender concerns; monitoring and evaluating farmer innovations and innovations; and scaling up farmer-innovation programmes. The booklet includes recommended procedures and formats for M&E of such programmes.

\*\*\* Department of Agriculture and Rural Development (DARD) and Extension Centre, Cao Bang Province. 2002. **PTD field manual for extensionists: find new things ... try new things ... spread new things ....** Cao Bang: Helvetas Vietnam. DARD, Be Van Dan St, Hop Giang Ward, Cao Bang / Extension Centre, Cao Bang Province, Kim Dong St, Hop Giang Ward, Cao Bang, Vietnam. ([helvetas@helvetas.org.vn](mailto:helvetas@helvetas.org.vn)) 60pp.

**Key words:** *agricultural extension, farmer experimentation methodology, training manual*

Very easy-to-follow guide to PTD for field-level extension workers, with an introduction to key PTD concepts, clear descriptions of different steps in PTD, sample formats for “idea sheet”, “experiment sheet”, “result sheet” and suggestions for reporting on PTD experiments and for handling money matters in PTD. Good attention is given to planning and evaluation. Well illustrated, with locally appropriate examples and expressed in simple English (translated from Vietnamese).

Boru Douthwaite. 2002. **Enabling innovation: a practical guide to understanding and fostering technological change**. ZED Books, 7 Cynthia St, London N1 9JF, UK ([zed@zedbooks.demon.co.uk](mailto:zed@zedbooks.demon.co.uk)). ISBN 1 85649 972 3. 266pp.

**Key words:** *agriculture, appropriate technology, economy, information technology, industry, innovation, knowledge systems*

An agricultural engineer takes a critical look at his research work in Asia in designing technologies for and with small-scale rice farmers, and reflects on the many failures in developing “appropriate technology” when there is no awareness of the social processes involved in innovation and technology diffusion. Using not only these experiences but also examples from industry, economy and information technology in both industrialised and developing countries, he argues that successful innovation is based on opening up to diversity, grasping opportunities and mobilising creativity among people. Innovations emerge out of a complex process of multi-agent interaction and adaptation, as different agents learn and select improvements. The final chapter is a guide to launching a “learning selection” approach to understanding and catalysing technological change.

Jürgen Hagmann, Edward Chuma, Kudakwashe Murwira & Michael Connolly. 1998. **Learning together through participatory extension: a guide to an approach developed in Zimbabwe**. Harare: AGRITEX / GTZ / ITDG-Zimbabwe. Available through Universum Verlag, Taunusstr. 54, D-65183 Wiesbaden, Germany ([email@universum.de](mailto:email@universum.de)). 59pp

**Key words:** *community-level planning, extension, farmer experimentation, organisational development, participatory learning*

This booklet, written for field staff and middle-level extension managers, describes a community-oriented approach to rural extension based on farmer experimentation and learning. The action-learning cycle integrates four main phases: social mobilisation through a situation analysis done jointly by insiders and outsiders, community-level action planning, implementation of activities and farmer experimentation, and monitoring and evaluation through sharing experiences and ideas. A major focus is on local institutional development. The process in practice with all its steps is described and clarified through examples from the field. A 42-min video film showing this process is also available through Media for Development Trust, POB 6755, Harare, Zimbabwe, Fax +263-4-729066 (MFD@mango.zw). A trainer's guide (210 pp) on the topic is available from AGRITEX, ITDG-Zimbabwe and GTZ.

Jürgen Hagmann. 1999. ***Learning together for change: facilitating innovation in natural resource management through learning process approaches in rural livelihoods in Zimbabwe***. Margraf Verlag, POB 1205, D-97985 Weikersheim, Germany (info@margraf-verlag.de). ISBN 3 8236 1314 6. 310pp.

**Key words:** *action learning, farmer-led extension, farmer experimentation, knowledge systems, natural resource management, rural development, social change*

Detailed analysis of the process that led to „Kuturaya“ (Let's try), an approach to farmer-led extension and PTD developed by AGRITEX (agency for agricultural research and extension in Zimbabwe), the NGO Intermediate Technology Development Group (ITDG) and German development cooperation (GTZ), and of the experience in applying this approach in Masvingo Province. *Kuturaya* combines participatory extension methods with the social change approach, Training for Transformation. This doctoral thesis examines the experience within the framework of social science theory about agricultural knowledge and information systems. Changes in natural resource management are often the result of interactions between various interest groups with different sets of knowledge. Facilitating joint experimentation and learning by these different groups can encourage change processes.

Bertus Haverkort & Wim Hiemstra (eds). 1999. ***Food for thought: ancient visions and new experiments of rural people***. ZED Books, 7 Cynthia St, London N1 9JF, UK (zed@zedbooks.demon.co.uk). ISBN 1 85649 723 2. 237pp.

**Key words:** *cosmovision, culture, endogenous development, farmer experimentation, health, local knowledge, spirituality, sustainable agriculture*

Understanding of indigenous knowledge is taken in a new direction, beyond the usual technical dimensions to deal with traditional worldviews and the role of traditional, often spiritual, leaders. The book provides rich case material on how innovative development organisations, often NGOs, support rural people to carry out experiments based on local holistic concepts. It argues that PTD can successfully promote endogenous development only if change agents heed and accept the cultural and spiritual aspects of local people's knowledge.

Bertus Haverkort, Johan van der Kamp & Ann Waters-Bayer (eds). 1991. ***Joining farmers' experiments: experiences in Participatory Technology Development***. Intermediate Technology Publications, 103-105 Southampton Row, London WC1B 4HH, UK. (marketing@itpubs.org.uk) ISBN 1 85339 101 8. 270pp.

**Key words:** *agricultural research, extension, farmer experimentation, indigenous knowledge, sustainable agriculture*

Collection of reports from researchers and development fieldworkers who are supporting the efforts of small-scale farmers in diverse and risk-prone areas to improve their farming systems. Emphasis is given to linking farmers who are experimenting – whether formally or informally – so that they can learn from each other. After an introduction to farmer experimentation and PTD and a discussion of Intellectual Property Rights related to indigenous knowledge, 19 experiences of NGOs and both national and international research and extension organisations are presented. One chapter brings a summary of the book by Roland Bunch also mentioned in this “Top Twenty” list. Also in Spanish and Portuguese.

Peter Horne & Werner Stür. 2003. **Developing agricultural solutions with smallholder farmers: how to get started with participatory approaches**. ACIAR Monograph 99. Australian Centre for International Agricultural Research, GPO Box 1571, Canberra, ACT 2601, Australia (aciara@aciara.gov.au) / CIAT Forages for Smallholders Project, POB 783, Vientiane, Lao PDR (ciat-asia@cgiar.org). ISBN 1 86320 368 0. 119pp. Downloadable at: [www.ciat.cgiar.org/asia/pdf/aciara\\_monograph99\\_contents.pdf](http://www.ciat.cgiar.org/asia/pdf/aciara_monograph99_contents.pdf)

**Key words:** *agricultural research, communication, extension, facilitation, farmer groups, methodology, participatory diagnosis, partnership, visualisation techniques*

Based on experiences of researchers, development workers and smallholder farmers working in Southeast Asia to develop locally appropriate forage technologies, this is a systematic collection of ideas, practical tips and basic tools for getting started with participatory approaches to research and extension. The booklet brings simply formulated and well illustrated descriptions of various stages in the participatory process: selecting villages, agreeing on issues, seeking technology options with focus groups, testing options, reporting back to the village, integrating promising solutions on farms, reaching other farmers in the village, and sharing successful technologies with other villages.

ILEIA. 1991. **Participatory Technology Development in sustainable agriculture: an introduction**. Information Centre for Low External Input and Sustainable Agriculture (ILEIA), POB 2067, NL-3800 CB Amersfoort, Netherlands. 40pp. Downloadable at: [www.prolinnova.net](http://www.prolinnova.net)

**Key words:** *capacity building, case studies, farmer experimentation, indigenous knowledge, methodology, organisational development*

Compilation of selected articles published in the *ILEIA Newsletter* and in the proceedings of the 1988 ILEIA workshop "Operational approaches for PTD in sustainable agriculture". Robert Chambers sets the scene "to make the flip" in approaches to agricultural development. Two articles lay out the basic principles and key concepts of PTD and a framework for analysing PTD experiences. In further articles, cases from West Africa, the Philippines and India are presented, and a "minimalist" approach to PTD by field-level extension agents in Thailand is described. Institutional issues are raised in an article describing PTD in Indonesia. The booklet includes a "selected" bibliography of over 200 publications on PTD.

\*\*\* ILEIA. 2000. **Grassroots innovation**. *ILEIA Newsletter* 16 (2). ILEIA, POB 2067, NL-3800 CB Amersfoort, Netherlands. 40pp. Downloadable at: [www.ileia.org](http://www.ileia.org)

**Key words:** *communication, farmer experimentation, farmer-to-farmer extension, indigenous knowledge, local innovation, natural resource management*

Special issue of the *ILEIA Newsletter* (now *LEISA Magazine*) devoted to indigenous experimentation and innovation in agriculture and natural resource management, including local innovation in communication about farmers' innovations. Based primarily on experiences of the Indigenous Soil and Water Conservation (ISWC) and Promoting Farmer Innovation (PFI) programmes in several anglophone and francophone countries in Africa (Burkina Faso, Cameroon, Ethiopia, Kenya, Tanzania, Tunisia, Uganda) but includes also articles from India, the South Pacific and Latin America. Key readings on farmer innovation are annotated. Available also in French and Spanish.

Janice Jiggins & Henk de Zeeuw. 1992. **Participatory Technology Development in practice: process and methods**. In: Coen Reijntjes, Ann Waters-Bayer & Bertus Haverkort, *Farming for the future* (London: Macmillan, mdl@macmillan.co.uk), pp 135–162. ISBN 0 333 57011 1.

**Key words:** *capacity building, communication, farmer experimentation, indigenous knowledge, local innovation, methodology, networking, organisational development, participatory rural appraisal*

Systematic description of six basic types of activities in PTD, based on an analysis of field experiences and methods used by development agents working with farmers to develop low-external-input systems of sustainable agriculture. Discusses the principles of PTD and the nature and purpose of each type of activity – getting started, looking for things to try, designing experiments, trying things out, sharing the results, and keeping up the process – and gives examples of relevant methods that can be applied.

This is a pivotal chapter in a book devoted to the question: How can development workers assist smallholders in their constant endeavours to adapt their agriculture to changing conditions? This book has been translated into French, Spanish, Portuguese, Chinese, Indonesian and Arabic.

LISTRA. 1997. ***Joint learning for change: development of innovations in livelihood systems around protected tropical forest areas***. Livelihoods Systems and Tropical Forest Areas (LISTRA), German Agency for Technical Cooperation (GTZ), POB 5180, D-65726 Eschborn, Germany (listra@gtz.de). 26pp. Downloadable at: [www.gtz.de/listra/documents/module/innov\\_e.dpf](http://www.gtz.de/listra/documents/module/innov_e.dpf)

**Key words:** bufferzone management, extension, forest, innovation, natural resource management, conservation

The concept of PTD has been developed beyond farm-level experimentation to the participatory development of social, organisational and technological innovations in natural resource management. In the approach outlined in this report, resource users, interest groups, researchers and extensionists are involved in analysing visions, options and potentials for improving, compensating for or replacing specific ways of using resources which have been restricted for forest conservation reasons. Options are screened in workshops, and working groups of stakeholders experiment with new ways of ensuring a livelihood for people living around protected forests. Negotiation, monitoring resistance within and outside each group, identifying and addressing newly emerging constraints, and managing conflicts are all part of the process. This report is also available in German, French and Spanish.

\*\*\* Chris Reij & Ann Waters-Bayer (eds). 2001. ***Farmer innovation in Africa: a source of inspiration for agricultural development***. Earthscan, 120 Pentonville Rd, London N1 9BR, UK (earthinfo@earthscan.co.uk). 362pp.

**Key words:** agricultural education, farmer experimentation, indigenous knowledge, institutional change, local innovation, natural resource management, policy

One of Africa's major untapped resources is the creativity of its own farmers. This is the main message of this volume of studies on how, despite adverse conditions and lack of appropriate external support, small-scale farmers – both men and women – have experimented and innovated in order to improve their livelihoods. Numerous lively examples show how a participatory approach to agricultural research and development – one that builds on local knowledge and initiatives – can stimulate the creativity of all involved, not only the farmers. This rich source of case studies has been written primarily by African extensionists, researchers and farmers to document and analyse their experiences and to inspire other development workers, researchers, policymakers, students and teachers.

Ian Scoones & John Thompson (eds). 1994. ***Beyond Farmer First: rural people's knowledge, agricultural research and extension practice***. Intermediate Technology Publications, 103–105 Southampton Row, London WC1B 4HH, UK (marketing@itpubs.org.uk) ISBN 1 85339 250 2. 301pp.

**Key words:** agricultural research, culture, extension, indigenous knowledge, institutional change, methodology, policy influence, power relations

A follow-up to Robert Chambers' Farmer First (see above), this book reveals how agricultural research and extension are part of a political process of coming to terms with conflicting interests and viewpoints. It brings the edited contributions and discussions at an international workshop organised in 1992 by the International Institute for Environment and Development (IIED) at the Institute for Development Studies (IDS), University of Sussex, UK. The participants came from NGOs, and national and international research and development organisations and academia, covering a wide range of disciplines: agricultural science, anthropology, ecology, entomology, forestry, geography, management science, pedagogy, sociology etc. The workshop focused on the interactions between different stakeholder groups in agricultural research: on the processes of forming alliances and making decisions, as well as tendencies to exclude weaker groups and impose worldviews.

Laurens van Veldhuizen, Ann Waters-Bayer, Ricardo Ramirez, Debra Johnson & John Thompson (eds). 1997. ***Farmers' research in practice: lessons from the field***.

Intermediate Technology Publications, 103–105 Southampton Row, London WC1B 4HH, UK (marketing@itpubs.org.uk) ISBN 1 85339 392 4. 285pp.

**Key words:** *case studies, farmer experimentation, farmer innovation, sustainable agriculture*

Collection of 17 innovative cases of farmer-led research from Africa, Asia, Latin America and Europe. Gives evidence of how farmers develop and adapt innovations, try them out in different settings, assess their value for improving farm systems, and spread the new ideas and ways of experimenting to other farmers. With several cases covering a period of more than five years, aspects of institutionalising PTD and longer-term sustainable issues receive ample attention.

\*\*\* Laurens van Veldhuizen, Ann Waters-Bayer & Henk de Zeeuw. 1997. **Developing technology with farmers: a trainer's guide for participatory learning**. ZED Books, 7 Cynthia St, London N1 9JF, UK (zed@zedbooks.demon.co.uk). ISBN 1 85649 490 X. 230pp. Downloadable at: [www.prolinnova.net](http://www.prolinnova.net)

**Key words:** *adult education, agricultural extension, institutional change, sustainable agriculture, training methodology*

Field-tested learning guide for preparing staff of governmental and non-governmental organisations to work together with farmers in developing low-external-input technologies for sustainable agriculture. Stresses interactive learning for organisational development, both in the development agency and in farmers' groups. Each of the four parts – 1) Basic orientation and skills, 2) Towards an agenda for action, 3) Farmers' experimentation, 4) Spreading and consolidating the PTD process – contains learning units with explanation of key concepts, learning modules, sample overheads, cases, games, role-plays etc. Includes details of resource organisations for obtaining further training materials and audio-visual media.

Waters-Bayer, Ann. 1989. **Participatory Technology Development in ecologically-oriented agriculture : some approaches and tools**. AgREN Network Paper 7. Overseas Development Institute (ODI), 111 Westminster Bridge Road, London SE1 7JD, UK. 63pp.

**Key words:** *agricultural research, ecological farming, extension, farmer innovation, indigenous knowledge, methodology, participatory action research, participatory planning, training*

This booklet is an early compilation of concepts, methods and tools for enhancing collaboration between development agents, scientists and farmers in developing locally appropriate farming techniques. It reviews the origin of PTD and explores ways in which conventional and participatory approaches to research and development can complement each other. Case studies are drawn from the Philippines, Peru and Mali. Methods for initial orientation by development agents and researchers and for participatory development and dissemination of technology are described. The booklet also contains lists of institutions and individuals working in PTD (in the late 1980s) and a bibliography of primarily English-language publications on PTD.

Yohannes Gebre Michael & Karl Herweg. 2000. **From indigenous knowledge to Participatory Technology Development**. Berne: Centre for Development and Environment. Centre for Development and environment, University of Berne, Hallerstr. 12, CH–3102 Bern, Switzerland ([cde@qjub.unibe.ch](mailto:cde@qjub.unibe.ch)). 52pp.

**Key words:** *agricultural extension, indigenous knowledge, natural resource management*

This booklet on extension in soil and water conservation (SWC) is based on detailed case studies of indigenous SWC knowledge and techniques carried out by Yohannes GebreMichael in Ethiopia. It seeks to help Development Agents (DAs) in the governmental agricultural extension service to understand and respond to the diverse rural communities and landscapes found in the country. It describes methods to learn about the natural and human settings and to discover and appreciate local knowledge through discussions with male and female farmers, elders and leaders. Particular attention is given to understanding the local SWC practices and recognising the needs of the local resource users related to land husbandry. It encourages the DAs and experts (subject-matter specialists) to trust in and support farmers' ability to innovate by considering the local practices as options and entry points for PTD processes that integrate indigenous and introduced knowledge for more sustainable management of natural resources.



## LINKS TO SOURCES OF INFORMATION ON FARMER INNOVATION AND PARTICIPATORY INNOVATION DEVELOPMENT

*For organisations and individuals interested in promoting farmer innovation and participatory innovation development as well as institutionalisation of this approach, here are some links to related projects, networks, databases and other organisations. On the PROLINNOVA website, there is a larger compilation of useful links. In this issue of the PTD/PID Circular, we have included only a selection of initial links – they will lead you to many more.*

**CAMPESINO A CAMPESINO** <http://www.laneta.apc.org/mexsursur/indexo.htm> The “Campesino a Campesino” (peasant-to-peasant) movement, born in the late 1980s in Central America, is in itself an innovative concept that was developed among Nicaraguan farmers. The programme facilitates the organisation and interaction of smallholder farmers, so that they can learn from each other and exchange knowledge on their productive and social projects. It supports an environmentally and socially responsible agriculture. Its philosophy and work methodologies are nowadays being applied in all of Latin America. The website brings reports on the experiences in several countries, as well as a basic explanation on the project’s guiding principles.

**COMMUNITY IPM** <http://www.communityipm.org/> – **THE FIELD ALLIANCE** <http://www.thefieldalliance.org/>

After more than 20 years of training farmers in Asia, the FAO Programme for Integrated Pest Management in Rice (later known as the Community IPM Programme) ended in 2002. Support continues, however, for farmer empowerment, sustainable rural livelihoods and ecological agriculture through a new regional organisation called The Field Alliance. What began as a pest-control project became an umbrella for farmer-led experimentation, training, organising and advocacy in a range of production issues (pests, soils, seeds, water) and community health, rural education and farmers’ rights. The vision, methods and expertise that drove the Community IPM Programme formed the basis for an independent foundation dedicated to the empowerment of Asian farmers.

**COMPAS** <http://compas-network.org/>

Comparing and Supporting Endogenous Development and Bio-cultural Diversity (COMPAS) is a programme aimed at improving the quality of development support initiatives. As an international network, it supports local organisations that are enhancing biological and cultural diversity and sustainable management of natural resources by building on indigenous knowledge systems and local leadership. Its partners build development activities on the concepts and worldviews of indigenous peoples and seek collaboration with traditional leaders in efforts to improve livelihood systems. COMPAS produces a newsletter (printed and electronic) and books written by members of the network.

**FARMING SOLUTIONS** <http://www.farmingsolutions.org/>

Farming Solutions is a website coordinated by ILEIA, Oxfam, Greenpeace and PAN-Africa, that brings examples of successful, environmentally responsible farming systems to life from all over the world, illustrating how farmers can protect the environment while at the same time increasing food supply where it is most needed.

**HONEY BEE NETWORK** <http://csf.colorado.edu/sristi/honeybee.html>

A global initiative to give voice to creative and innovative people at the grassroots, the Honey Bee Network is run by SRISTI (Society for Research and Initiatives for Sustainable Technologies and Institutions) in India. It aims to build bridges between the environmental grassroots, contemporary innovations, outstanding traditional knowledge and values, and the entrepreneurial spirit of the private sector. It shares people’s knowledge while making sure that, when their knowledge is documented, they will not remain anonymous; that there will be cross-pollination through local-language databases accessible to them; and that they will share in any wealth accumulated through added value or otherwise. Since 1992, the Network has documented more than 12,000 innovations, either based on traditional knowledge or of contemporary origin, primarily from India, but also from other countries.

**IIRR** <http://www.iirr.org/>

The International Institute for Rural Reconstruction is a rural development organisation with 80 years' experience, working in Africa, Asia and Latin America. It promotes people-centred development through capacity building for poor people and their communities, development organisations and agencies. IIRR is a member of the PROLINNOVA International Support Team. It offers numerous publications and courses on participatory methods, technology development and monitoring and evaluation.

**IKWW** <http://www.nuffic.nl/ik-pages/>

The Indigenous Knowledge World Wide Network aims at sharing information among the various stakeholders in development and contributing to the challenge of combining indigenous (local) knowledge with similar experiences from around the world and with elements from the world of science and technology. It highlights initiatives and activities that promote integration of IK in development. The website is a gateway to several relevant publications, resource pages and organisations.

**ILEIA** <http://www.ileia.org/>

The Centre for Information on Low-External-Input and Sustainable Agriculture is an independent organisation that seeks to contribute to alleviating poverty by promoting agro-ecological approaches. The major activities are documentation, analysis and publication of successful experiences in low-external input and sustainable agriculture (LEISA). The web site provides access to large, searchable databases on LEISA and PTD. Directly available for viewing and downloading are some articles from 1994–96 issues of the *ILEIA Newsletter* (now called *LEISA Magazine*) and the complete magazine from 1997 onwards.

**ISNAR** <http://www.isnar.cgiar.org/kb/index.htm>

This programme of the Consultative Group on International Agricultural Research (CGIAR) seeks to contribute to the generation and use of knowledge that fosters sustainable and equitable agricultural development. ISNAR's mission is to help bring about innovation in agricultural research institutions in developing countries to increase the contribution of research to agricultural development for the poor. ISNAR identifies and advances new arrangements that promote more effective generation of new knowledge. Their [Knowledge Base Search Page](http://www.isnar.cgiar.org/kb/kbsearch.cfm) ([www.isnar.cgiar.org/kb/kbsearch.cfm](http://www.isnar.cgiar.org/kb/kbsearch.cfm)) offers a range of selected references, links and full-text documents. Highlights include leadership, distance learning, managing human talent, case studies on institutional innovation, impact assessment and evaluation.

**ISWC** <http://www-old.vu.nl/cdcs/iswc/>

The "Indigenous Soil and Water Conservation in Africa" programme was implemented by the Centre for International Development at the Free University of Amsterdam and ETC Ecoculture in The Netherlands and by IIED (International Institute for Environment and Development) and IDS (Institute for Development Studies) in the UK, in collaboration with organisations in Burkina Faso, Cameroon, Ethiopia, Tanzania, Tunisia and Zimbabwe. Operating from 1997 to 2001, the programme sought to improve the effectiveness of indigenous and modern soil and water conservation practices through a process of joint experimentation involving farmers, researchers, extension and NGO staff. The website brings information on the approach and newsletters with documentation of country-level activities. The *Farmer Innovation in Africa* (see Top Twenty publications) also records these experiences.

**ITDG** <http://www.itdg.org/>

The Intermediate Technology Development Group aims to demonstrate and advocate the sustainable use of technology to reduce poverty in developing countries. It is a charity, founded in 1966 and registered in the UK, which works in Latin America, Eastern and Southern Africa, and South Asia, with particular concentration on Peru, Kenya, Sudan, Zimbabwe, Sri Lanka, Bangladesh and Nepal. ITDG works with poor communities to develop appropriate technologies in food production, agro-processing, energy, transport, small enterprise development, shelter, small-scale mining and disaster mitigation. Many of the ITDG projects take a PTD approach integrated within community-led development.

**LANDCARE** <http://www.landcareresearch.co.nz/research/social/>

Manaaki Whenua – Landcare Research is an environmental research organisation in New Zealand that specialises in sustainable management of land resources to optimise primary production, enhance biodiversity, increase the resource efficiency of businesses, and conserve and restore the natural assets of communities. The website provides information, frameworks and processes that can be used by those wishing to engage more effectively different stakeholders in research and development. A number of online papers and reports are available. Topics covered include: stakeholder participation and partnerships, organisational learning, group processes, and inclusion of local and indigenous knowledge and values.

**PELUM** <http://www.pelum-zambia.net/>

The Participatory Ecological Land-Use Management Association is a network of civil society organisations working with local communities in sustainable agriculture and natural resource management in nine countries in Eastern and Southern Africa: Botswana, Kenya, Lesotho, Malawi, South Africa, Tanzania, Uganda, Zambia and Zimbabwe. Partners came together to forge a strategic alliance and to combine efforts, approaches and experiences so as to build the partners' capacities in training and advocacy and in order to become more effective in influencing how development takes place. The PELUM-Zambia Country Group operates a project together with Agromisa, Netherlands, to strengthen how farmers access, share and manage knowledge.

**PFI-FFS** [http://www.fao.org/ag/aql/aqll/farmspi/ffs\\_pfi.stm](http://www.fao.org/ag/aql/aqll/farmspi/ffs_pfi.stm)

“Farmer Innovation and New Technology Options for Food Production, Income Generation and Combating Desertification” is a UNDP-funded project in FAO that draws on experiences with Farmer Field Schools and PFI (Promoting Farmer Innovation in Rainfed Agriculture), a project piloted in Kenya, Tanzania and Uganda. Its objective is to increase the uptake of farmers' innovations and new technology options at the community level for food production, income generation and combating desertification. A newsletter produced by PFI-FFS in Kenya is on the website. Publications from the earlier PFI project can be found under [www.undp.org/seed/unso/publications/pub-htm/pfi-eng1.htm](http://www.undp.org/seed/unso/publications/pub-htm/pfi-eng1.htm)

**PLEC** <http://www.unu.edu/env/plec/>

The People, Land Management and Environmental Change programme aims to develop sustainable and participatory approaches to conservation, especially of biodiversity, in small-scale farming. It started in 1993 and is now funded by GEF (Global Environmental Facility). The United Nations University (UNU) implements it through a network of locally-based clusters established in West Africa (Ghana, Guinea), East Africa (Kenya, Tanzania, Uganda), Asia-Pacific (China, Thailand, Papua New Guinea) and America (Brazil, Peru, Mexico, Jamaica). About four-fifths of participants are from these countries. Scientists from Australia, Japan, USA and UK are also involved. PLEC publishes a newsletter, also available online, and coordinates PLECserv, an electronic list that calls attention to recent publications and new research methodology, and to developments in agricultural biodiversity, in the study of farmer innovation and technical knowledge, and in development practice and thinking generally.

**PRGA** <http://www.prgaprogram.org/>

Participatory Research and Gender Analysis is a system-wide CGIAR initiative to assess and develop methodologies and organisational innovations for gender-sensitive participatory research and to promote their use in plant breeding and in crop and natural resource management. The website brings a selection of publications, primarily from CGIAR Centres, on plant breeding, natural resource management, gender and stakeholder analysis, impact assessment, and mainstreaming PRGA.

**PROLINNOVA** <http://www.prolinnova.net>

This is an international NGO-led initiative to build a global learning and advocacy network on promoting local innovation in ecologically-oriented agriculture and natural resource management. The focus is on the dynamics of IK, and on how research, extension and other actors in development can strengthen the capacities of farmers to adjust to changing conditions: to develop

and adapt their own site-appropriate systems and institutions of resource management. Country programmes are being built up in Cambodia, Ethiopia, Ghana, Nepal, Niger, South Africa, Sudan, Tanzania and Uganda, supported by IIRR in the Philippines, ETC Ecoculture and the Centre for International Development at the Free University of Amsterdam in the Netherlands, and the Swiss Centre for Agricultural Extension.

**SARL** <http://www.iied.org/sarl/>

The Sustainable Agriculture and Rural Livelihoods Programme aims to promote rural development based on sustainable agricultural and land management practices, strong rural organisations and social enterprises, and dynamic rural economies. It seeks to identify the policies and practices needed to foster forms of rural economic growth that are socially inclusive and that protect diversity. Of special interest are the research projects: [Sustaining Local Food Systems, Agricultural Biodiversity and Local Livelihoods](http://www.iied.org/sarl/research/projects/t5proj01.html) (www.iied.org/sarl/research/projects/t5proj01.html), to analyse under what conditions decentralised governance, farmer participation and capacity building can promote the adaptive management of agricultural biodiversity in local food systems and livelihoods; and [Institutionalising Participatory Approaches and Processes for Natural Resource Management](http://www.iied.org/agri/ipa.html) (www.iied.org/agri/ipa.html), to examine the dynamics of institutionalising people-centred processes and scaling up participatory approaches in large, public bureaucracies for natural resource management.

**WORLD BANK INDIGENOUS KNOWLEDGE PROGRAM** <http://www.worldbank.org/afr/ik/>

The IK Initiative seeks to help World Bank partners learn more about local knowledge and technology, so that they can better adapt global knowledge to local conditions. The programme's website opens a gateway to numerous sources on IK. It aims to facilitate a dialogue between local communities, NGOs, governments, donors, civil society and the private sector, with the ultimate objectives of helping to mainstream IK into the activities of development partners and optimising the benefits of development aid, especially to the poor.

**WORLD NEIGHBORS** <http://www.wn.org/>

WN works with the rural poor in 18 countries in Asia, Africa and Latin America to strengthen the ability of individuals and communities to solve their own problems of hunger, poverty and disease. It seeks to strengthen the capacity of marginalised people to meet their basic needs, and to determine and sustain an equitable and inclusive development process. Its programmes integrate sustainable agriculture, community-based health, reproductive health, environmental conservation, water and sanitation, and livelihood strategies, including savings and credit. A key book on PTD – *Two Ears of Corn* (see Top Twenty publications) – was based on WN's experiences in Central America.

**PTD/PID Circular: Periodic update on Participatory Technology/Innovation Development**

aims to make experiences on farmer innovation, participatory technology and innovation development in ecologically-oriented agriculture and natural resource management more widely known to development practitioners.

**If you have new information about publications, workshops, training activities, events, audio visuals, websites, electronic discussion groups or networks concerned with PTD/PID, please let us know.**

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