

# ADVANCING PARTICIPATORY TECHNOLOGY DEVELOPMENT

## Background

In the wake of the Farmer First workshop and publications in the mid-1980s, participatory approaches to agricultural research and extension were promoted across all continents and groups of development actors. Many of these approaches, together often known under the generic term of Participatory Technology Development (PTD), put small-scale farmers and their concerns at the centre of the development agenda. The goal invariably emphasized the strengthening of farmers' capacities to develop, assess and adapt technologies. Joint learning by farmers, extension workers and researchers was the main vehicle for the development of ecologically-oriented agriculture and natural resource management.

By the 1990s, an increasing number of organizations and projects had started implementing PTD in various settings. Often, partnerships were forged between non-governmental and governmental organizations involved in research and development in rural areas. Earlier attempts have been made to capture some of the lessons learned in field applications. These publications include *Joining Farmers' Experiments: Experiences in Participatory Technology* (1991), *Farmer Participatory Research: Rhetoric or Reality* (1994), and *Farmers' Research in Practice* (1997). Those studies were based mainly on evidence going back to the late 1980s and/or focused on a selection of well-known and well-documented pioneering cases. A workshop organized by IIRR, Philippines in September 17-21, 2001, under the auspices of the NGO Committee of the CGIAR reviewed cases where research institutions and NGOs, independent of each other often sought direct partnerships with farmers.(1999)

The field of participatory technology development is wide and the range of experiences diverse. This is largely so because a broader range of actors are involved. Often the nature of the activity is influenced by which agency initiates the activity (e.g. research, extension, civil society, institution, etc.) or if it is a multi-stakeholder initiative. There is a need to look beyond oft-quoted cases and to learn from the experience of projects and organizations that have tried to advance the approach and methods of PTD by incorporating these into a larger institutional framework. These organizations have encountered many practical constraints in implementing PTD on a larger scale (than with just a few experimenting farmers). They have modified approaches, making methodological innovations. It is now time to take stock of all these developments and to draw lessons for improving and scaling up PTD efforts.

This report compares and analyzes some of these experiences in institutionalizing PTD. It is based on a study initiated by the International Institute of Rural Reconstruction (IIRR) in the Philippines and ETC Ecoculture in the Netherlands with CIIFAD (Cornell) and tINNOVATEc. A total of 19 organizations active in the field of FPR and PTD participated (Box 1). A total of 25 senior GO and NGO practitioners were involved.

These cases, critically reviewed during a one-week workshop in September 2001, became the basis for this report.

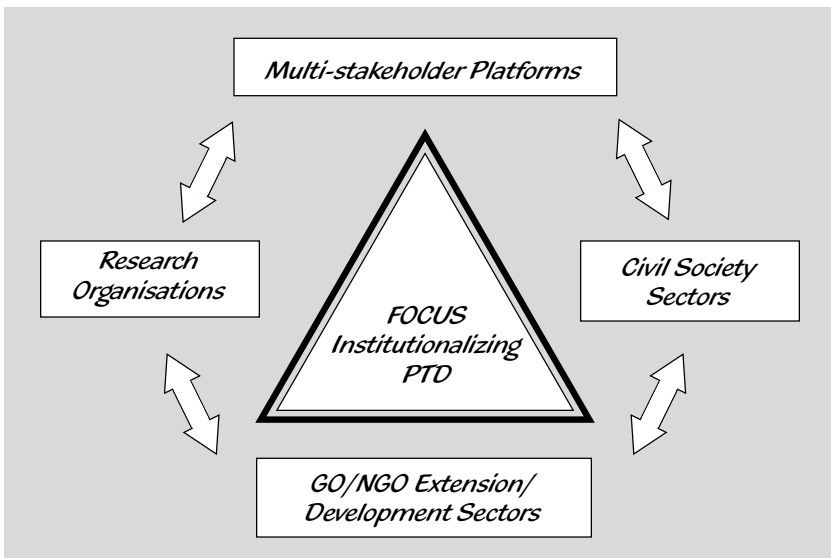
## Workshop Cases

1. **J.K.O. Ampofo, U. Hollenweger, and S.M. Massomo.** Participatory IPM development and extension: The case of bean foliage beetles in Hai, Northern Tanzania. International Centre for Tropical Agriculture (CIAT), Tanzania
2. **Roland Bunch and Mateo Canas.** Farmer Experimenters: The Technology They Develop on Their Own. Association of Advisors for a Sustainable, Ecological and People-Centered Agriculture (COSECHA), Honduras
3. **Hoang Hui Cai, Ruedi Felber, and Vo Hung.** PTD in Community-Based Forest Land Management and as a Contribution to Building up a Farmer-led Extension System in Social Forestry: Case Study of Vietnam. Social Forestry Support Programme (SFSP), Vietnam.
4. **Dindo Campilan, Carlos Basilio, Lilibeth Laranang, Clarita Aguilar, Clarita Aganon and Irene Indion.** PTD for Improving Sweet Potato

Livelihood in the Philippines. Users' Perspectives with Agricultural Research and Development (CIP-UPWARD), Philippines

5. **Mohammed Majzoub Fidiel**. The Experience of the Intermediate Technology Development Group in Participatory Development of the Donkey-drawn Plough in North Darfur, Western Sudan. Intermediate Technology Development Group (ITDG) Animal Traction Project, Sudan
6. **Tim Hart and Joyene Isaacs**. Transforming the Agricultural Research Council Focus from only supporting commercial farmers to supporting black smallholder farmers by means of PTD: A case study from the deciduous fruit sector of South Africa. Agricultural Research Centre-Infruitec-Nietvoorbeij, South Africa
7. **Henri Hocde and David Meneses**. The Reunion of Two Worlds: Experience of the Heuter Region, North Costa Rica, in the Construction Process of Participatory Technology Development. Regional Program for Reinforcing Agronomic Research on Basic Grains in Central America (PRIAG), Costa Rica
8. **Stefan Joss and Kachkynbaev Nadyrbek**. Participatory Technology Development in the Kyrgyz Republic with Special Reference to rural Advisory and Development Service in Jalal Abad Oblast 1999-2000. Kyrgyz Swiss Agricultural Project (KSAP) Kyrgystan
9. **Ejigu Jonfa, Barry Pound, Endreas Geta, Ousman Surur and Furgassa Bedada**. Institutionalization of Farmer Participatory Research in Southern Ethiopia: A Joint Learning Experience. Farmers' Research Project, FARM-Africa, Ethiopia
10. **Agustin R. Mercado, Dennis P. Garrity and Julian Gonsalves**. Participatory Technology Development and Dissemination: The Landcare Experience in the Philippines. International Center for Research in AgroForestry (ICRAF)/Landcare, Philippines
11. **Evison Moyo and Jurgen Hagmann**. Facilitating Competence Development to Put Learning Process Approaches into Practice in Rural Extension. Agricultural, Technical and Extension Services (AGRITEX), Ministry of Lands and Agriculture, Zimbabwe
12. **Y.D. Naidu and Edith van Walsum**. PTD for Sustainable Dryland Agriculture in South India: Balancing our Way to Scale. Agriculture Man Ecology (AME), India
13. **Ashraf Naseh and Semeh Seif**. Case Study on Agro-Environmental Pilot Project 1996-1998. The Coptic Evangelical Organization for Social Services (CEOSS), Egypt

14. **C. Opondo and A. Stroud.** Mapping Outcomes in Participatory Research: Researchers' Experiences in the Highlands of East Africa. African Highlands Initiative (AHI), Uganda
15. **G.D. Perera and Bert Sennema.** Towards Sustainable Development in Mahaweli Settlements through Farmer Participation. Mahaweli Authority, Sri Lanka
16. **Eric Sobourin, Pablo R. Sidersky and Luciano Marcal da Silveira.** Farmer Experimentation in Northeast Brazil: The Story of a partnership between smallholders' organizations and an NGO Seeking to enhance agricultural innovation in the Agreste area of Paraiba State. Assessoria e Servicos a Projetos en Agricultura Alternativa (AS-PTA), Brazil
17. **Yiching Song.** Exploring the Potential for Crop Development and Biodiversity Enhancement: Fostering Synergy between the Formal and the Farmers' Seed Systems in China. Centre for Chinese Agricultural Policy (CCAP), China
18. **Piroge Suvanjinnda.** Lessons Learned. Sustainable Agriculture Development Project (SADP), Thailand
19. **Paul Tchawa, Felix Nkapemin and Jean-Marie Diop.** Participatory Technology Development in Cameroon: The Route and Milestones in the Process of Its Institutionalization. National Program for Agricultural Extension and Research (PNVRA), Cameroon.



**Focus of Analysis during Workshop**

## Workshop objectives

The workshop aimed at deriving lessons and practical recommendations on the institutionalisation of participatory technology development (PTD) in the following settings: research institutes, civil society actors such as farmer organizations and NGOs, extension and development agencies and multi-stakeholder platforms. Methods included case presentations, plenary discussions, poster sessions as well as small-group workshops.

Specifically the workshop sought--

- To jointly assess efforts to institutionalize the development and practice of PTD approaches to sustainable agriculture adapted by a wide range of actors (NGOs, government agencies, research institutions, and universities).
- To critically review and draw lessons from on-going initiatives from around the globe, for use in support of policy formulation, capacity building, implementation, scaling up and evaluation of PTD approaches.
- To document key principles drawn from practice for wider dissemination via publications, newsletters, training materials and electronic means.

## Workshop process

Open invitations were issued internationally. Each prospective participant was asked to write a case study describing their experiences. A committee spearheaded by the ETC screened the case abstracts and selected those for inclusion in the workshop. Selected case studies were commented on by the editors and returned to the authors for revision.

The five-day workshop was conducted on September 17-21, 2001 at the International Institute of Rural Reconstruction, World Headquarters located in Silang, Cavite, Philippines.

Region	Participants
Asia	11
Africa	7
Latin America	2
Europe	3

Twenty-three cases and one paper on "Lessons Learnt" were selected. Fourteen were presented and others were featured in poster sessions. All the cases were included in the reader provided to the participants.

Based on an initial review of the cases, the framework in Box 2, was derived and used for discussing basic institutionalisation issues. (*Laurens' brief description of boxes 2 and 3*)

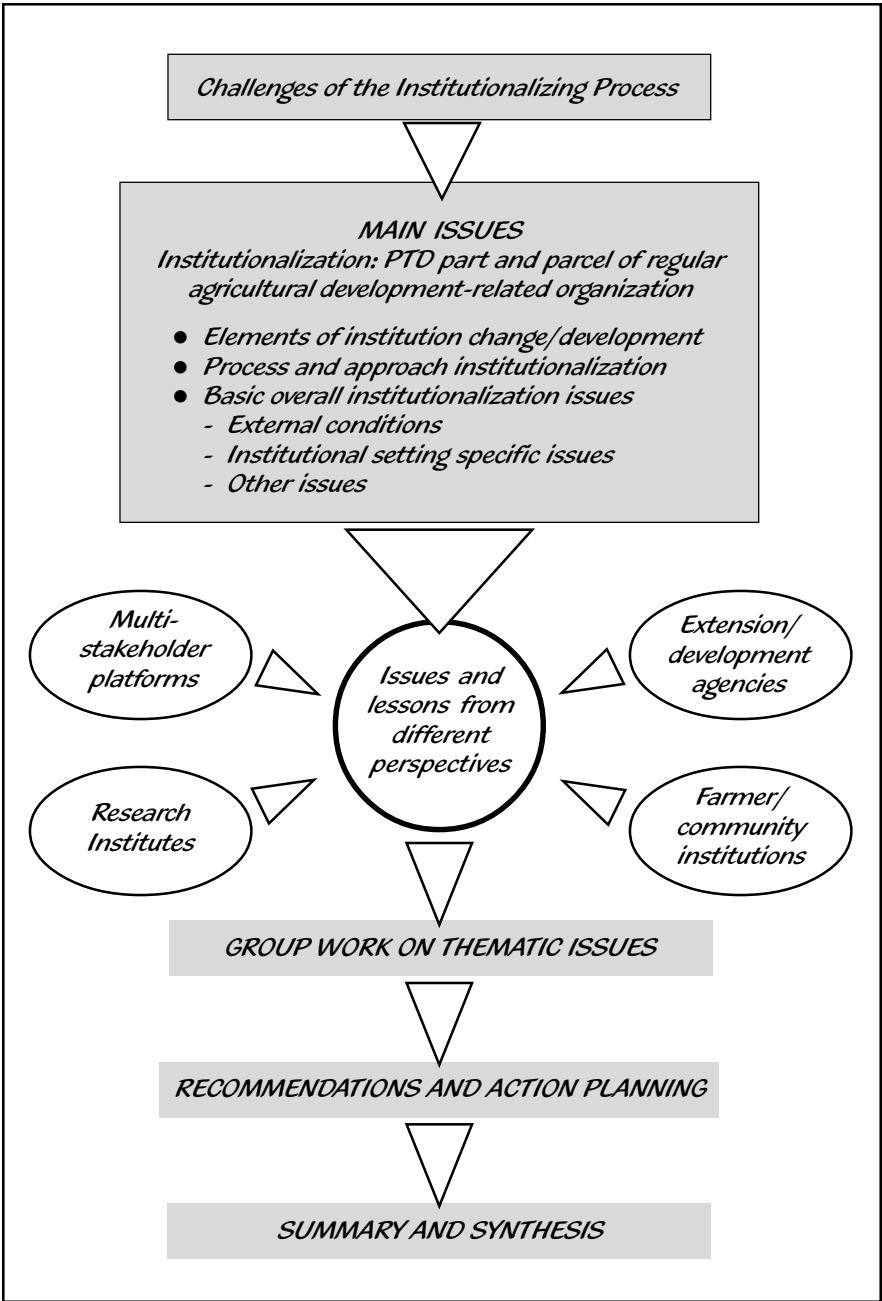
Following the poster sessions and overview sessions, there were case presentations, open fora and small group discussions for each of the "windows" (civil society, extension, research, and multi-stakeholder platforms). Group reports were then presented to the plenary and further discussions ensued.

Workshop outputs were then synthesized to show gaps in PTD efforts, issues, and lessons that participants wanted to work on and draft follow-up plans. Participants listed various issues into 16 themes, and then consolidated them into 13 areas for further analysis. Small self-selected groups proceeded to work on ten themes. The themes identified by participants for deeper analysis were:

1. Stronger and long-term multi-actor partnership/platforms, how to achieve?
2. Accountability of research organizations/extension organizations/NGOs in PTD towards farmers (civil society). What mechanisms are needed?\*

	<i>Mission/ mandate</i>	<i>Structure</i>	<i>Human Resources</i>
<i>Administrative</i>	<i>Operations</i>	<i>Tasks and responsibilities</i>	<i>Expertise</i>
<i>Political</i>	<i>Policy making</i>	<i>Decision-making</i>	<i>Room for maneuver</i>
<i>Socio-cultural</i>	<i>Organizational culture</i>	<i>Cooperation and learning</i>	<i>Attitudes</i>

**Discussion framework**



**A schematic overview of the workshop process.**

3. Internal environment (research institutes, extension organizations, NGOs?) conducive to PTD: What is it? How to achieve?
4. Analyze institutionalization (setting?) more systematically using the matrix
5. What could constitute convincing evidence on PTD? How can this be collected? How to package motivation to adopt PTD?
6. Curriculum development for PTD in universities
7. Across windows, what key competencies are needed to incorporate training/HRD approaches including attitudinal change? How do we organize ourselves to continue to learn PTD?
8. Implications for donors? PTD-supportive funding mechanisms\*
9. New institutions for PTD in the absence of strong farmer organizations?
10. Key competencies across windows for incorporating PTD
11. Implications for donors?
12. Influencing macro-level policy and planning\*
13. Strategies for exit? Links with institutionalisation?
14. Changing roles of different partners as institutionalisation continues
15. How do we organize ourselves to continue to learn on PTD?
16. Gender and PTD

Starting with the above listing of themes, participants finally decided, for purposes of the workshop, to focus primarily on the following:

- How to build strong and longer term sustainable multi-actor partnership/platforms.
- Internal environment (research institutes, extension organizations, NGOs?) conducive to PTD: What is it? How to achieve?
- Analyze institutionalisation (setting?) more systematically using the matrix.
- What could constitute convincing evidence on PTD? How this can be collected? How to package motivation to adopt PTD?
- Curriculum development for PTD in universities.
- New institution for PTD? What to do in the absence of strong farmer organizations?
- Across windows, what key competencies are needed to incorporate training/HRD approaches including attitudinal change? How do we organize ourselves to continue to learn PTD?

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\* *not discussed*



- Strategies for exit? Linked with institutionalization
- Changing roles of different partners as institutionalization continues.
- Gender and PTD.

This publication focuses on the insights, lessons and recommendations from the field derived from the formal presentations, analysis of cases, poster sessions, small group discussions, and individual contributions.

Although this report includes only abstracts of the cases, the full studies were used heavily during the workshop and subsequently in the preparation of this document. The initial framework (Box 2) was developed further by participants and appears in the last chapter of this book.

Efforts are being undertaken to make possible the publication of the full papers in a book. In the meantime, draft papers will be made accessible electronically ([www.etcint.org](http://www.etcint.org)). A synthesis document is being prepared, aimed primarily to sensitize managers and policy makers.