

DRAFT FOR INTERNAL USE

**Integrating “Participatory Innovation Development”
into education and training: modules and materials**

developed by PROLINNOVA partners in 2005–2011



*edited by Jean-Marie Diop, Laurens van Veldhuizen and Ann Waters-Bayer
ETC AgriCulture, The Netherlands*

December 2011

Table of contents

page

Acknowledgements

List of acronyms

- 1. Introduction**
- 2. Full-course PTD/PID modules**
 - 2.1 BSc level
 - 2.2 MSc level
- 3. PTD/PID components in other courses**
 - 3.1 BSc level
 - 3.2 MSc level
- 4. PID course framework**
- 5. Working with universities toward integration of PID**

Annex 1: Bibliography

Cover photo: Participants in workshop held in Uganda in March 2009 on integrating PID into university curricula

Acknowledgements (to be completed)

Acronyms (to be completed)

1. Introduction

As part of the PROLINNOVA Global Partnership Programme, partners in various countries decided to give specific attention to integrating Participatory Innovation Development (PID) approaches into higher education. This commitment was first emphasised during the International Partners Workshop in Cambodia in March 2006. They called this component of PROLINNOVA's activities "curriculum development" (CD). These activities were coordinated by the PROLINNOVA International Support Team (IST) members in the Centre for International Cooperation (CIS) at the Vrije Universiteit Amsterdam (VUA) until this institution had to leave the IST at the end of 2010 for budgetary reasons. Another institution in the IST – ETC AgriCulture (formerly ETC EcoCulture) – then continued the support to CD activities conducted by the country-level partners.

The aim of the CD component is to address a critical weakness in the curricula of institutions of higher education in agriculture and natural resource management (NRM): current teaching fails to provide students with the necessary skills and sensitivities to contribute creatively to farmers' and resource user's own innovation processes and systems. They do not address people's own creativity and ability to play a major role in finding their own solutions in partnership with other stakeholders. The "CD"-related activities of PROLINNOVA partners try to address these issues by influencing higher education policies and practices and by facilitating processes through which university teachers and curriculum developers can meet, reflect on their experiences in integrating PID into higher education and learn from each other.

The PROLINNOVA International Secretariat has tried to compile the materials that PROLINNOVA partners at country level have developed, based on a review of materials used in training workshops, reports from workshops focused on CD and annual reports from the country platforms. Additional information was also gathered through direct contact with country-level partners about how they are trying to integration concepts and practices of promoting local innovation and PID into university learning. The materials have been edited and categorised, and are presented here in an easily accessible collection of modules and ideas for "CD".

Section 2 presents examples of full course modules on PID and PTD (Participatory Technology Development) that PROLINNOVA partners have developed in the period 2005–11. Section 3 brings a collection of sub-modules on PID/PTD that were developed for integration into full courses with another main focus. Section 4 contains the PID course framework as designed by PROLINNOVA partners during a workshop held in Uganda in March 2009¹. Finally, Section 5 offer some ideas and suggestions for integrating PID into higher education, based on partners' experience over the past few years.

¹ A summary report on the March 2009 workshop can be found under www.prolinnova.net/node/350 and a statement of foundation of a Community of Practice on "PID in Education" under www.prolinnova.net/educ/pid-education-community-practice-statement-foundation

2. Full course PID/PTD modules

2.1 BSc level

Country Platform: PROLINNOVA–Nepal	
February 2009	
Institution	Tribhuvan University, Institute of Agriculture and Animal Science, Dept of Environmental Science
Name of course in which PID is integrated	Participatory Innovation Development Studies
Level	BSc (elective course)
Diploma / degree programme in which participatory approaches / PID modules in agriculture and NRM are offered	Initially approved but, after new regulations, a formal bid-based curriculum revision is now needed to attain formal approval by Faculty Board and University Council
Course focus	Local innovations, PID, promotional initiatives, networking
Targeted students	BSc Agriculture
Academic prerequisites for course	Intermediate Science for BSc Agriculture
Since when has the course been offered?	Not offered yet
How many times a year is it offered?	Once a year
Average no. of students in course each year	About 150 students expected
Proportion of course dedicated to participatory approaches / PID	Entire course
Topics covered in participatory approaches / PID modules	<ul style="list-style-type: none"> • Farmer innovation • Participatory innovation development • Networking • Policy and laws
Practicals / fieldwork included in course	Fieldwork included, weighted 15 classes, 2 hr/class (for details, see Box 2)
Teaching modalities	Interactive lecture cum class discussion, PowerPoint
Assessment	Theory: Full mark 50: Quiz 10 and 40 Final exam Practical: Full mark 25: Written report, oral presentation, assignments, records of practical.
References used	Selected from bibliography in Annex 1
Name of lecturer/s for participatory approaches / PID modules	Dharma Raj Dangol (course coordinator), faculty staff, guest lecturers including farmer innovators and staff from PROLINNOVA–Nepal partners
Contact person	Dharma Raj Dangol (dharmadangol@hotmail.com / drdangol@gmail.com)

Box 1: Participatory Innovation Development Studies: details of the theory

- Introduction
- Concepts of Innovations, Local knowledge and Innovators; Understanding vision, mission and working modality of PROLINNOVA–Nepal and International Partners; Challenges and opportunities of PID.
- Local Innovation
- Types of local innovations; Status, trend and prospects of local innovations in Nepal
- Guiding principles and modality of field documentation; Field documentation process; Data editing, entry and analysis, and reporting; Database preparation, Publication of local innovations
- Guiding principles and modality of field documentation; Field documentation process; Data editing, entry and analysis, and reporting; Database preparation, Publication of local innovations
- Participatory Innovation Development
- Understanding different models of promotion; PROLINNOVA approach for promoting local innovation in Nepal, LISF; Constrains and opportunities of participatory promotion mechanisms
- PID Initiatives
- Overview of PID initiatives of National and international partner organisations; Understanding PID initiatives (eg LISF) design, implementation and institutionalisation
- Networking and Partnerships Development
- Importance of networking and partnership development for PID; Ways of networking and partnership
- Ethics, Laws and Policy Advocacy
- Overview, Review and analysis of existing policies related to PID (innovative research and development), intellectual property rights, patent rights, farmers' rights.
- Organisations on the crossroads of Local Innovation Development
- Organisations and their contribution and role for promoting local innovations through education, research and development; Sharing success stories on local innovations development and promotion
- Value addition in PID
- Concept and process of value addition; Linking local innovations and knowledge with enterprises for the enhancement of livelihood and conservation of ecological agriculture and NRM

Box 2: Participatory Innovation Development Studies: details of the practicum

- Orientation to practical classes
- Study of documentation format and guidelines
- Identify local innovators and their innovations
- Conduct field documentation in participatory approach
- Collect field data, edit, entry in database, analyze, and prepare report
- Conduct experiment to test efficacy of local innovation (e.g. *Gitimal, Jhol mal*) on crop productivity or ecological pest management
- Organise PID Awareness Camps or seminar/workshop and present findings of the practical exercises

2.2 MSc level

Country Platform: PROLINNOVA–Nepal	
February 2009	
Institution	Tribhuvan University, Institute of Agriculture and Animal Science, Dept of Environmental Science
Name of course in which PID is integrated	Participatory Innovation Research and Development Studies
Level	MSc Agriculture
Diploma / degree programme in which participatory approaches / PID modules in agriculture and NRM are offered	Degree programme in agriculture
Course focus	Local innovation, PID, promotional initiatives, networking
Targeted students	MSc Agriculture
Academic prerequisites for course	BSc Agriculture
Since when has course been offered?	2010
How many times a year is it offered?	Once a year
Average no. of students in course each year	MSc course in 2010 was enrolled by 3 students
Proportion of course dedicated to participatory approaches / PID	Entire course
Topics covered in participatory approaches / PID modules	<ul style="list-style-type: none"> • Local innovation • Concepts and rationale of participatory research in innovation development • Joint experimentation • Experimental design • Role of statistics in experimentation and data analysis Summary overview of theory content in Box 3
Practicals / fieldwork included in course	Fieldwork included, weighted 15 classes, 3 hr/class; details of design of practicals in Box 4
Teaching modalities	Interactive lecture and discussion followed by practicum work by students
Assessment of students	Theory (full mark: 100): term paper writing (25), quiz (25), final exam (50) Practical (full mark: 50): written report, oral presentation, records of practical
References used	<ul style="list-style-type: none"> • Publications of PROLINNOVA International and PROLINNOVA–Nepal programme (www.prolinnova.net) • Bibliography on local innovation & PID/PTD (Annex 1)
Name of lecturer/s for participatory approaches / PID modules	Dharma Raj Dangol (course coordinator) Guest lecturers (national and international) Farmer innovators and focal persons from PROLINNOVA–Nepal partners
Contact person	Dharma Raj Dangol (dharmadangol@hotmail.com / drdangol@gmail.com)

Box 3: Participatory Innovation Research & Development Studies: details of the theory

- Introduction
- Background, history and role of farmers and local community in participatory research and development; perception and rationale of local knowledge and innovation; farmers research and innovation
- Local innovation
- Concepts, characteristic feature, and typology of local innovation; local vs scientific knowledge and innovation; scope and relevance of local innovation in research and development; overview of local innovations of Nepal and global
- PROLINNOVA International and PROLINNOVA–Nepal Initiatives
- Evolution, vision, mission and objectives and programme structure of PROLINNOVA International programme; countries, partners; working modality and interaction fora. PROLINNOVA–Nepal and its scope and status
- Documentation and Analysis of Local Innovations
- Locating farmers' innovations, documentation methods of local innovation; data handling and analysis; developing, maintaining and managing database.
- Participatory Innovation Research and Development
- Concepts and rationale of participatory research in innovation development; joint experimentation, experimental design, role of statistics in experimentation and data analysis.
- Participatory Monitoring and Evaluation and Impact Assessment
- Concepts, principles and methods of PM&E and impact assessment, data collection and analysis and reporting
- Local Innovation Support Fund (LISF)
- Concepts, significance, historical development, establishment and management of LISF, LISF granting process; capacity building and fund management and reporting.
- Awareness, Recognition and Institutionalisation
- Importance and methods of raising awareness about and recognition of local innovation and innovators; institutionalising PID and LISF at farming community level and building their capacity for self-managing and sustaining at local level
- Partnership, Networking and Wide Dissemination
- Importance of partnership and networking for the promotion, joint implementation and dissemination; modalities of partnership; ways of networking; local innovation network and for exchanging expertise and experiences and lobbying.
- Ethics, Policy, Laws and Advocacy
- Ethics of documentation and sharing local innovations; policy and legal support of local innovation; production, promotion and marketing, IPR protection; importance and means of advocacy

Box 4: Participatory Innovation Research & Development Studies: details of practicum

- Prepare typology of local innovations provided/
- Search literature and prepare bibliography on local innovation
- Prepare action plan for documentation of local innovations on a selected topic to be chosen by student
- Study format, procedure and guidelines for documentation of local innovations
- Collect, edit and analyze field data on local innovations
- Make a documentary film or take digital photographs and prepare slide documentation as appropriate
- Prepare educational material on local innovation
- Write feature article on PID for publishing in newsletters, newspapers, magazines or journals
- Organise travelling seminar/mobile camp to raise awareness among farmers and rural communities on PID
- Organise talk programmes or participate in seminar/workshop/conference and present paper

3. PTD/PID components in other courses

3.1 BSc level

Country Platform: PROLINNOVA–Cambodia	
February 2009	
Institution	International University, Faculty of Agriculture and Rural Development
Name of course in which PID is integrated	Participatory Action Research (PAR)
Diploma / degree programme in which participatory approaches / PID modules in agriculture and NRM are offered	Major course in BSc programmes in Community-Based NRM, Community Participation and Empowerment, Soil Fertility Management
Course focus	Action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to further the goals of social science simultaneously. Thus, there is a dual commitment in action research to study a system and concurrently to collaborate with members of the system in changing it in what is together regarded as a desirable direction.
Targeted students	Students seeking to use this type of research as part of general professional work, consulting or problem-solving
Academic prerequisites for course	Bachelor's degree in relevant subject
Since when has the course been offered?	2007 (developed from a pilot in 2005)
How many times a year is it offered?	Once per group; two groups per year
Average no. of students in course each year	About 20 students
Proportion of course dedicated to participatory approaches / PID	48 hr out of 64 hr specifically, though participatory approaches constitute a cross-cutting theme
Topics covered in participatory approaches / PID modules	<ul style="list-style-type: none"> • Participatory Learning and Action (PLA) • Indigenous knowledge (IK) • Local innovation / Farmer innovation Box 5 shows course content.
Practicals / fieldwork included in course	Groupwork in class as well as fieldwork on participatory methodologies. Students stay one week in a village to study an existing project or farmer innovation and write their essay. Essay is presented.
Teaching modalities	Teaching is through interactive lectures in 12 weeks (see Box 5) with illustrated case studies from Cambodia and some other countries. Each lecture is structured in two parts: 2 hr 45 min teaching by the main lecturer with some interval presentation by a guest speaker on a related topic. Fieldwork as above

Assessment of students	Paper (50% of mark); student involvement in the group, essay preparation and presentation per group Final written closed-book examination (50% of mark)
References used	<ul style="list-style-type: none"> • Compulsory reading: <i>Participatory Action Research Part I and II</i> • Additional reading: list of selected articles and Reij & Waters-Bayer (eds), <i>Farmer Innovation in Africa</i>, 2001
Name of lecturer/s for participatory approaches / PID modules	Sam Vitou and Yang Saing Koma
Contact person	Sam Vitou (samvitou@cedac.org.kh)

Box 5: PAR course content

1. Introduction: Terminology – evolution of an approach

- Research/researcher/participation.
- Green Revolution concept
- Green Revolution versus Farming Systems approach
- Why failure of farmers to adopt new technologies

2. Main component and characteristic of PAR (1)

- The problem originates in the community itself and is defined, analysed and solved by the community
- The ultimate goal of the research
- Participatory research involves full and active participation

3. Main component and characteristic of PAR (2)

- PAR involves a whole range of powerless groups of people
- Process of PAR can create a greater awareness of people
- Researcher is a committed participant

4. Types of participation in development programme

- Passive participation
- Participation in information giving
- Participation by consultation
- Participation for material incentives
- Functional participation
- Interactive participation
- Self-mobilisation

5. Theory of social change and participatory action research: (1) PAR and theory

- Participatory action research in community development
- Main component and characteristic
- Theories of social change in relation to the focus of research and the nature of change

6. Theory of social change and participatory action research: (2) Some participatory approaches

- Summary of assumption of participatory research
- Some participatory approaches

7. Participatory research in agriculture (1)

- Applied research
- Adaptive research

8. Participatory research in agriculture (2)

- Farming system research (& R-D)
- Farmer participatory (A-R)

9. Agriculture project approach according to project function

- Research project
- Extension oriented project
- Community-development-oriented project

10. Methods of PAR: six phases of PAR methodology (1–3)

- Problem identification
- Problem analysis (of possible causes)
- Formulation of (action) hypothesis

11. Methods of PAR: six phases of PAR methodology (4–6)

- Design and implementation of the plan of action
- Data collection and analysis
- Evaluation

12. Rapid Rural Appraisal and Participatory Rural Appraisal

- RRA
- PRA

Country Platform: PROLINNOVA–Ethiopia

March 2009

Institution	Mekelle University, College of Dryland Agriculture & Natural Resources
Name of course in which PID is integrated	Plant Breeding (PB)
Diploma / degree programme in which participatory approaches / PID modules in agriculture and NRM are offered	PB is a major course for the BSc in two programmes: Crop Sciences and Horticultural Sciences
Course focus	Main focus on principles of PB to improve crops but also on participatory plant breeding (PPB)
Targeted students	3 rd year students in crop and horticultural fields
Academic prerequisites for course	One prerequisite course
Since when has the course been offered?	2004
How many times a year is it offered?	Once a year; when summer programme for MSc is running, the course is also given in summer
Average no. of students in course each year	n.d.
Proportion of course dedicated to participatory approaches / PID	Module 1: Principles of PB; Module 2: Breeding strategies; each with 1 credit hour including some case studies practices
Topics covered in participatory approaches / PID modules	<ul style="list-style-type: none"> • Participatory vs conventional plant breeding • Participatory varietal selection • Farmer innovation and varietal selection and its importance for PPB • PPB and decentralised plant breeding
Practicals / fieldwork included in course	Students do practical case studies and some exercises in participatory tools and techniques in field
Teaching modalities	Lecture, PowerPoint, audiovisual aids, lab work, group assignments, discussions & consultation
Assessment of students	Combination of continuous assessment and final summative exam: <ul style="list-style-type: none"> • Formative assessment (50%) • Quizzes • Practical • Mid-term exam • Assignments • Report on field visit & presentation • Summative assessment • Final exam (50%)
Name of lecturer in participatory approaches / PID modules	Fetien Abay
Contact person	Fetien Abay (fetien.abay@yahoo.com)

Box 6: Plant breeding course content

Section I: Introduction & plant breeding objectives

1. Introduction to plant breeding
 - 1.1. A brief history of plant breeding in Ethiopia
 - 1.2. Branches of science related to plant breeding
 - 1.3. Objectives of plant breeding
 - 1.4. Some important achievements
 - 1.5. Challenges ahead
 - 1.6. International Agricultural Research Centres involved in plant breeding

Section II: Principles: self-pollinated crops

- 2 Selection in self-pollinated crops
 - 2.1 History of selection
 - 2.2 The progeny test
 - 2.3 Pure-line theory
 - 2.4 Origin of variation in pure lines
 - 2.5 Genetic advance under selection
3. Hybridisation: techniques & consequences
 - 3.1 History and objective of hybridisation
 - 3.2 Types and procedures of hybridisation
 - 3.3 Consequences of hybridisation

Section III: Methods: self-breeding crops

4. Breeding methods self breeding crops
 - 4.1 Mass selection
 - 4.2 Pure line
 - 4.3 Pedigree
 - 4.4 Bulk method
 - 4.5 Back-cross method

Section IV: Principles: cross-pollinated crops

5. Genetic composition of cross-pollinated crops
 - 5.1 The Hardy-Weinberg law and factors disturbing the equilibrium in population
 - 5.2 Systems of mating
6. Selection in cross-pollinated crops
7. Heterosis and inbreeding depression
 - 7.1 Effects & degrees of inbreeding depression
 - 7.2 Manifestation of heterosis
 - 7.3 Genetic basis of heterosis and inbreeding depression
 - 7.4 Commercial applications

Section V: Methods: cross-pollinated crops

8. Breeding methods for outbreeders (cross-pollinated crops)
9. Polyploidy and molecular breeding
 - 9.1 History and polyploidy applications in plant breeding
 - 9.2 Introduction and applications of marker-assisted selection in plant breeding
10. Participatory plant breeding (PPB)
 - 10.1 Need and rationale for PPB
 - 10.2 Participatory vs conventional plant breeding
 - 10.3 Importance of PPB for specific adaptation
 - 10.4 Conventional plant breeding
 - 10.5 Participatory varietal selection (PVS): experiences and applications
 - 10.6 PPB: experiences and applications
 - 10.7 Practical cases of PVS and PPB
 - 10.8 Indigenous knowledge and farmer breeders
 - 10.9 Role of women in crop selection and seed management

Country Platform: PROLINNOVA–Ethiopia

March 2009

Institution	Mekelle University, College of Dryland Agriculture & Natural Resources, Dept of Dryland Crop & Horticultural Sciences; Dept of Cooperative Studies
Name of course in which PID is integrated	Participatory Approaches in Cooperatives (PAC)
Diploma / degree programme in which participatory approaches / PID modules in agriculture and NRM are offered	PAC is a major course in Cooperative Studies at BSc level
Course focus	Focus on imparting knowledge among students on the application of participatory approaches, tools and techniques in cooperatives
Targeted students	3 rd -year students of crop and horticultural sciences
Academic prerequisites for course	General admission requirement for all programmes, but no course-specific requirement
Since when has the course been offered?	2008
How many times a year is it offered?	Once a year
Average no. of students in course each year	n.d.
Proportion of course dedicated to participatory approaches / PID	Entire course, i.e. 32 hr
Topics covered in participatory approaches / PID modules	<ul style="list-style-type: none"> • Participation in cooperatives • Participatory research approaches • Participatory planning, monitoring & evaluation in cooperatives
Practicals / fieldwork included in course	Students do practical case studies and practice participatory tools and techniques in the field
Teaching modalities	Lecture, PowerPoint, audiovisual aids, lab work, group assignments, discussions & consultation
Assessment of students	<p>Combination of continuous assessment and final summative exam:</p> <ul style="list-style-type: none"> • Formative assessment (50%) • Quizzes • Practical • Mid-term exam • Assignments • Report on field visit & presentation • Summative assessment • Final exam 50%
References used	n.d.
Name of lecturer for participatory approaches / PID modules	Gebrecherkos Gebregiorgis
Contact person	Gebrecherkos Gebregiorgis

Box 7: Participatory Approaches in Cooperatives course content

Chapter One: Introduction to participation

- Meaning of participation
- Definition of participation
- Typology of participation
- Types of participatory approaches
- Main features of participatory approaches
- Challenges in adopting participatory approaches

Chapter Two: Participatory rural appraisal (PRA)

- Approaches to development intervention
 - ✓ Community-development approach
 - ✓ Sector approach
 - ✓ Target approach
 - ✓ Area approach
 - ✓ Minimum-needs approach
 - ✓ Integrated approach
- Sources of PRA
- What is PRA?
- Assumptions and principles of PRA

Chapter Three: Participation in cooperatives

- Meaning of participation in cooperatives
- Importance of participation in cooperative
- Members' participation in cooperatives
- Participation of Board of Management
- Problems in administration of cooperatives
- Participation of employees of cooperatives
- Participation of cooperative officials

Chapter Four: Identification of participation problems in cooperatives

- Problems in constitution of cooperatives
- Problems in management of cooperatives
- Problems in administration of cooperatives
- Problems in the services of cooperatives

Chapter Five: Participatory approaches: tools and techniques as applicable to cooperatives

- Survey method
- Case studies
- Focus-group discussions
- Venn diagrams
- Ranking exercises
- Problem identification and prioritisation

Chapter Six: Participatory planning, monitoring & evaluation in cooperatives

- Participatory planning in cooperatives
- Monitoring & evaluation of cooperatives

Country Platform: PROLINNOVA–Ghana

February 2009

Institution	Faculty of Agriculture, Department of Agricultural Economics and Extension
Name of course in which PID is integrated	Agricultural Extension
Diploma / degree programme in which participatory approaches / PID modules in agriculture and NRM are offered	BSc in Agricultural Technology with options in Agronomy, Biotechnology, Horticulture, Soil Science, Mechanisation & Irrigation Technology, Agricultural Economics & Extension, Renewable Natural Resources
Course focus	Equipping students with practical knowledge and skills in communicating (creating and sharing information between farmers and extension staff/change agents in commonly understandable ways); and helping students appreciate different ways in engaging farmers and assessing their current circumstances
Targeted students	3 rd -year course; preparatory course for students intending to specialise in agricultural economics and extension
Academic prerequisites for course	None
Since when has the course been offered?	1994
How many times a year is it offered?	Once (1 st trimester)
Average no. of students in course each year	About 450 students
Proportion of course dedicated to participatory approaches / PID	50%
Topics covered in participatory approaches / PID modules	<ul style="list-style-type: none"> • PTD approach • Community-based development approach • Participatory Rural Appraisal (PRA) approaches • PRA tools in practice
Practicals / fieldwork included in course	Students sent to the field to practise approaches taught; Field Practical Training Programme, Farming for the Future project, excursions and groupwork
Teaching modalities	One hour lecture, one hour practical once a week
Assessment of students	Mid-trimester paper/assessment (25%) Final examination (75%)
Name of lecturer/s for participatory approaches / PID modules	Alhaji Seidu Iddi and Victor Lolig (but changes based on lecturer engagements or availability)

Box 8: Agricultural Extension course content

1. Introduction
2. Agricultural extension methods
3. Participatory Technology Development (PTD) approach
4. Community-Based Development approach
5. Problem identification using different PRA tools (e.g. transect walks, flow diagrams, problem tree and ranking methods)
6. Practicals: PRA tools in practice
7. Special subjects
 - a. The rural farmer and his/her attitudes
 - b. Gender issues and agricultural extension
8. Designing an extension project
9. Course evaluation

Country Platform: PROLINNOVA–Ghana

February 2009

Institution	Faculty of Agriculture, School of Medicine and Health Sciences, Faculty of Integrated Development Studies and Faculty of Applied Sciences
Name of course in which PID is integrated	Third Trimester Field Practical Programme (TTFPP)
Diploma / degree programme in which participatory approaches / PID modules in agriculture and NRM are offered	BSc
Course focus	Build in students essential skills for community work relying on an integrated approach and make students appreciate challenges of rural life and work and through the process, analyse and assess issues in rural areas and offer solutions that aim at addressing identified programmes in rural communities
Targeted students	Students in all year groups and all programmes offered by the University at undergraduate level
Academic prerequisites for course	None, but must pass previous year's practical programme to enrol in new programme, otherwise repeat with new batch of students for that year group
Since when has the course been offered?	1993
How many times a year is it offered?	Once, during the third trimester
Average no. of students in course each year	The whole student population at undergraduate level but at least 3000 students yearly
Proportion of course dedicated to participatory approaches / PID	All, but course has a sort of 'free-wheeling' focus and is not targeted at any particular areas; community decides where focus of practical programme lies
Topics covered in participatory approaches / PID modules	<ul style="list-style-type: none"> • Problems and potentials analysis using ranking • Qualitative data collection and analysis (including use of semi-structured interviews, focus-group discussions, trend lines etc) • Basic data-analysis tools • Preparing a community project proposal using ideas on objective setting; Logical Framework • Proposal writing and presentation techniques
Practicals / fieldwork included in course	Stay in community for 6 weeks every year from 1 st to 3 rd year each trimester, and application of participatory approaches to analysis and assessment of issues at community level

Teaching modalities	2 hr/week every trimester to teach students modules
Assessment of students	Field notebook 5 marks Peer assessment 10 marks Report on fieldwork (group mark) 20 marks Mark of final assessment for individual students by assessment team (one representative/lecturer from participating faculties/schools) 65 marks Total credit hours for the training: 6
References used	The practical training programme presents the topical areas and assigns different lecturers each year. List of reference materials therefore depends on who teaches the course and the sources contacted.
Name of lecturer/s for participatory approaches / PID modules	All staff of various faculties, year-group coordinators, management team for programme
Contact person	Francis Obeng (francisobeng@yahoo.com)

Box 9: TTFPP course content

<ol style="list-style-type: none"> 1. Introductory remarks and caution on health and other issues 2. Specific year TTFPP objectives and tasks 3. Community entry and exit skills and guidelines 4. Qualitative data collection and analysis (including use of semi-structured Interviews, focus-group discussions, trend lines etc) 5. Quantitative data collection methods and analysis (e.g. use of questionnaires, use of Lorenz curves, population pyramids etc) 6. Problems and potentials analysis using basic statistical computations, simple testing, ranking, problem tree, SWOT and focus on gender, participation and agro-ecological systems 7. Report writing and presentation techniques and skills 8. Review of problems and potentials using problem tree analysis, stakeholder analysis, participatory analysis, gender analysis 9. Basic data-analysis tools 10. Preparing a community project proposal using ideas on objective setting and Logical Framework 11. Proposal writing and presentation techniques

Country Platform: PROLINNOVA–Ghana

February 2011

Institution	Faculty of Agriculture, Department of Agricultural Extension, Rural Development and Gender Studies
Name of course in which PID is integrated	Participatory Processes
Diploma / degree programme in which participatory approaches / PID modules in agriculture and NRM are offered	BSc in agriculture
Course focus	Introducing students to various participatory processes and how they are related to technology/ innovation generation and dissemination
Targeted students	3 rd -year course for agribusiness students
Academic prerequisites for course	Background in science or agriculture
Since when has the course been offered?	To be taught to 1 st batch of students in agribusiness programme next year
How many times a year is it offered?	Once a year in 1 st trimester
Average no. of students in course each year	About 70 students
Proportion of course dedicated to participatory approaches / PID	PTD and PID together cover about 40% of the course; PID alone covers about 15%
Topics covered in participatory approaches / PID modules	Concept of participation; types of participatory approaches; community intervention processes: change negotiations, plug-in principle; concept of sustainability in agriculture; low- and high-external-input agriculture (LEIA, HEIA), low- and high-external-input and sustainable agriculture (LEISA, HEISA); Participatory Technology Development concept, PTD and plug-in principle, PTD vs conventional research, steps in PTD, field experiences; Participatory Innovation Development: concepts, principles, steps in PID; Roles of farmers, researchers and extension; Behaviour Change Communication: concept, BCC and plug-in principle, field experiences
Practicals / fieldwork included in course	Link with ACDEP (Association of Church Development Projects) for field visits to farmers involved in PROLINNOVA activities
Teaching modalities	Lecture, field visits, discussion with farmer innovators
Assessment of students	Written exam (75%) Continuous assessment (25%)
References used	<ul style="list-style-type: none"> • Veldhuizen L van <i>et al.</i> 1997. <i>Developing</i>

	<p><i>technology with farmers: a trainer's guide for participatory learning</i>. London: Zed Books.</p> <ul style="list-style-type: none"> • Coninck J de <i>et al</i> (eds). 2006. A dictionary of participatory tools and techniques for Uganda. Kampala: Community Development Resource Network. • Pretty JN <i>et al</i>. 1995. <i>Participatory Learning and Action: a trainer's guide</i>. London: IIED. • Pretty JN & Vodouhé SD. 1997. Using Rapid or Participatory Rural Appraisal (FAO online)
Name of lecturer for participatory approaches / PID modules	Francis Obeng
Contact person	Francis Obeng (francisobeng@yahoo.com)

Country Platform: PROLINNOVA–South Africa

March 2009

Institution	Limpopo University
Name of course in which PID is integrated	Introduction to Agricultural Extension (3 rd year course)
Degree in which PID is offered	Bachelor of Agricultural Science (Soil Science, Plant Production) and Bachelor Agricultural Economics
Academic prerequisites for course	None
Since when has the course been offered?	n.d.
Average no. of students in course each year	About 40 students
Programmes that students undertaking the course belong to	Soil Science Plant Production Agricultural Economics <u>NB</u> : Agricultural extension course is given as a service course for all undergraduate BSc Agriculture students
Level at which material is offered	Undergraduate and postgraduate degree specifically for students doing internship with Centre for Rural Community Empowerment (CRCE)
School, Department/Section in which course is offered	School of Agricultural and Environmental Sciences; CRCE
Proportion of course dedicated to participatory approaches / PID	One week out of semester course
Topics covered in participatory approaches / PID modules	<ul style="list-style-type: none"> • Basics about PID • Identifying farmer innovations • Role players in PID • PID as a methodology • Importance of PID
Teaching modalities	Lecturing, class discussions, role plays and assignments for students to identify innovations
Practicals / fieldwork included in course	No time for practicals for undergraduates; for fulltime postgraduate students mainly in workshops arranged by PROLINNOVA–South Africa Provincial Task Team

<p>Methods used for assessing students' understanding of concepts</p>	<p>Sharing of innovations/indigenous knowledge known to be useful in their areas (during class discussions) Tests, group assignment and individual assignments Test and assignment plus exam for undergraduates Test (60%) Assignments (40%) Final exam only if a student qualifies to write For postgraduate students doing internship, detailed report is required by CRCE on PID activities undertaken with extension officers and researcher lessons learned</p>
<p>References used</p>	<ul style="list-style-type: none"> • Scheuermeier U, Katz E & Heiland S. 2004. <i>Finding new things and ways that work: a manual for Introducing Participatory Innovation Development (PID)</i>. Lindau: Swiss Centre for Agricultural Extension. • Hagmann J et al. 1998. <i>Learning together through Participatory Extension: a guide to an approach developed in Zimbabwe prepared by AGRITEX</i>. • AGRITEX & Novafrica. 2007. <i>A people-centered development approach for small farmers in Limpopo Province</i>. Polokwane: GTZ & LDA.
<p>Name of lecturer for participatory approaches / PID modules</p>	<p>Ernest Letsoalo</p>
<p>Contact person</p>	<p>Ernest Letsoalo (ernest.letsoalo@ul.ac.za)</p>

Country Platform: PROLINNOVA–South Africa

March 2009

Institution	Limpopo University
Department/Section in which course is offered	School of Environmental Sciences; Centre for Environment, Agriculture & Development
Name of course in which PID is integrated	Extension Methods (Communication and Innovation)
Degree in which PID material is offered	BSc Agriculture (Rural Resource Management)
Academic prerequisites for the course	None
Since when has the course been offered?	n.d.
Average no. of students in course each year	About 35 students
Proportion of course dedicated to participatory approaches / PID	One hour out of 36 hours
Topics covered in participatory approaches / PID modules	<ul style="list-style-type: none"> • Local innovation(s) • Farmer innovations
Teaching modalities	n.d.
Practicals / fieldwork included in course	Students go on a field trip where they can look at the different innovations that farmers use and how such innovations have been developed. Students interview a few farmers to get insight into the innovations and factors motivating their development. They compile a report on the field trip.
Assessment of students	Examination, journal (15%) Individual presentation (20%) Test (15%) 3-hour examination (25%) Field report (25%)
References used	n.d.
Name of lecturer for participatory approaches / PID modules	Ernest Letsoalo
Contact person	Ernest Letsoalo (ernest.letsoalo@ul.ac.za)

Country Platform: PROLINNOVA–Tanzania

March 2009

Institution	Sokoine University of Agriculture, Faculty of Agriculture, Dept of Agricultural Education and Extension
Name of course in which PID is integrated	Comparative Extension Systems
Diploma / degree programme in which participatory approaches / PID modules in agriculture and NRM are offered	BSc Agricultural Education & Extension
Course focus	Intended to expose students to different extension systems in terms of approaches, methodologies, delivery and funding mechanisms
Targeted students	3 rd -year BSc Agricultural Education & Extension, a programme meant for mid-career extension staff wanting to acquire university qualification
Academic prerequisites for course	No specific requirements but students are expected to have completed basic course on principles of extension
Since when has the course been offered?	1976
How many times a year is it offered?	Once every year
Average no. of students in course each year	About 100 students
Proportion of course dedicated to participatory approaches / PID	About 10%
Topics covered in participatory approaches / PID modules	<ul style="list-style-type: none"> • Definition of and rationale for PTD • Role of indigenous knowledge in PTD • Techniques of involving farmers in PTD • Challenges in implementing PTD
Practicals / fieldwork included in course	None
Teaching modalities	Mostly through lectures and class discussions in which students analyse and share experiences on various extension projects and programmes implemented in the country in terms of approaches and methodologies used
Assessment of students	Written tests and assignments during semester account for 40% of final score and end-of-semester examination accounts for 60% of final score
References used	<ul style="list-style-type: none"> • Chambers R. 1983. <i>Rural development: putting the last first</i> • Chambers R et al. 1989. <i>Farmer First</i> • Various other publications by IDS & ILEIA
Lecturer/s	Dismas Mwaseba, Head of Agricultural Education and Extension Department
Contact person	Dismas Mwaseba (dilmwase@yahoo.com / dilmwase@suanet.ac.tz)

Box 10: Comparative Extension Systems course content

- Organisational structure for agricultural extension
- Conditions for effective extension organisation
- Ministry-based extension
- Commodity-based extension
- University-based extension
- District-based extension
- Issues in extension organisation
- Major extension approaches/systems
 - Conventional approach
 - Training approach
 - Farming Systems approach
 - Integrated approach
 - Participatory Technology Development approach
 - Farmer Field School approach
- Delivery mechanisms
 - Ministry of Agriculture
 - Local government authorities
 - NGOs
 - Private agribusinesses
 - Farmers' organisations
- Funding mechanisms
 - Public funding
 - Private funding
 - Mixed funding

3.2 MSc level

Country Platform: PROLINNOVA–Ethiopia	
March 2009	
Institution	Mekelle University, College of Dryland Agriculture & Natural Resources
Name of course in which PID is integrated	Plant Breeding (PB)
Diploma / degree programme in which participatory approaches / PID modules in agriculture and NRM are offered	Major course in two MSc programmes: Crop Sciences and Horticultural Sciences
Course focus	Main focus is on principles of plant breeding and how this knowledge can be used to improve crops, but also on importance and function of PPB
Targeted students	1 st -year MSc students
Academic prerequisites for course	One pre-requisite course
Since when has the course been offered?	2004
How many times a year is it offered?	Once a year; when summer programme for MSc is running, course is also given in summer
Average no. of students in course each year	n.d.
Proportion of course dedicated to participatory approaches / PID	Module 1: Principles of plant breeding; Module 2: Breeding strategies; each module has 1 credit hour including some case-study practice
Topics covered in participatory approaches / PID modules	<ul style="list-style-type: none"> • Participatory vs conventional plant breeding • Participatory varietal selection • Positive exploitation of G x E through specific adaptation and PPB • Farmer innovation and varietal selection and its important for PPB • PPB and decentralised plant breeding
Practicals / fieldwork included in course	Students do practical case studies and some exercises of participatory tools and techniques in the field
Teaching modalities	Lecture, PowerPoint, audiovisual aids, lab work, group assignments, discussions & consultation
Assessment of students	Combination of continuous assessment and final summative exam: <ul style="list-style-type: none"> • Formative assessment (50%) • Quizzes • Practical • Mid-term exam • Assignments • Report on field visit & presentation • Summative assessment • Final exam 50%
Name of lecturer for participatory approaches / PID modules	Fetien Abay
Contact person	Fetien Abay (fetien.abay@yahoo.com)

Country Platform: PROLINNOVA–Ethiopia

March 2009

Institution	Mekelle University, College of Dryland Agriculture & Natural Resources, Dept of Land Resources Management and Environmental Protection
Name of course in which PID is integrated	Advanced Approaches to Sustainable Land Management
Diploma / degree programme in which participatory approaches / PID modules in agriculture and NRM are offered	Incorporates PTD and Indigenous Soil and Water Conservation (ISWC) at MSc level
Course focus	To ensure that students are able to understand and use the theoretical knowledge of IK and PTD to identify, analyse and characterise land degradation problems in different land-use systems, communal resources management approaches and socio-economic implications
Targeted students	Postgraduate students of Tropical Land Resources Management
Academic prerequisites for course	BSc in agriculture
Since when has the course been offered?	2006
How many times a year is it offered?	Once
Average no. of students in course each year	10–15 students
Proportion of course dedicated to participatory approaches / PID	One chapter or a module
Topics covered in participatory approaches / PID modules	Theoretical background of PTD and ISWC
Teaching modalities	Lecture, PowerPoint, audiovisual aids, lab work, group assignments, discussions & consultation
Assessment of students	Combination of continuous assessment and final summative exam: <ul style="list-style-type: none"> • Formative assessment: 40% • Exercises/assignments • Report on field visit & presentation • Summative assessment • Final exam: 60%
References used	<ul style="list-style-type: none"> • Mitiku H, Herweg K & Stillhardt B. 2006. <i>Sustainable land management: a new approach to soil and water conservation in Ethiopia</i>. • Reij C & Waters-Bayer A. 2001. <i>Farmer innovation in Africa: a source of inspiration for agricultural development</i>. London: Earthscan.
Lecturer/s	Mitiku Haile, Kindeya GebreHiwot & Girmay Tesfay
Contact person	Kindeya GebreHiwot (kindeya.gebrehiwot@mu.edu.et)

Country Platform: PROLINNOVA–Ghana

February 2011

Institution	University of Development Studies (UDS), Graduate School
Name of course in which PID is integrated	Communication of Innovations
Diploma / degree programme in which participatory approaches / PID modules in agriculture and NRM are offered	Postgraduate degree programme (MPhil)
Course focus	Equipping students with knowledge and skills in communication, facilitation and participatory approaches for development work.
Targeted students	1 st -year course for MPhil Development Studies
Academic prerequisites for course	Bachelors degree (2 nd class lower division)
Since when has the course been offered?	To be taught to 1 st batch of students in Agribusiness Programme next year
How many times a year is it offered?	Once a year
Average no. of students in course each year	About 20 students
Proportion of course dedicated to participatory approaches / PID	50%
Topics covered in participatory approaches / PID modules	Concept and principles of communication; common definitions of communication; theories of communication; models of communication; effective communication and its benefits; barriers to and strategies for effective communication; inter-personal communication; facilitation; participatory development communication; participatory approaches: types of participation, historical trends in approaches – Transfer of Technology, Farming Systems Research, On-Farm Research, Rapid/Participatory Rural Appraisal, Farmer Participatory Research, Participatory Learning and Action, Enabling Rural Innovation, Integrated Agricultural Research for Development, PTD, PID; shifts in development trends – LEIA, HEIA, LEISA, HEISA; variables in behaviour change, behaviour change communication; plug-in principle; open-space technology; PRA tools and techniques
Practicals / fieldwork included in course	Field practicals in use of PRA tools and techniques
Teaching modalities	Lectures, groupwork, oral presentations.
Assessment	Written exam (40%), thematic paper (25%), oral presentation (20%), continuous assessment (15%)
References used	<ul style="list-style-type: none"> • Veldhuizen L van <i>et al.</i> 1997. <i>Developing technology with farmers: a trainer's guide for participatory learning</i>. London: Zed Books.

	<ul style="list-style-type: none"> • De Coninck J <i>et al</i> (eds). 2006. <i>A dictionary of participatory tools and techniques for Uganda</i>. Kampala: Community Development Resource Network. • Pretty JN <i>et al</i>. 1995. <i>Participatory Learning and Action: a trainer's guide</i>. London: IIED. • Pretty JN & Vodouhé SD. 1997. Using Rapid or Participatory Rural Appraisal (FAO online)
Lecturer/s	Francis Obeng & ABT Zacharia
Contact person	Francis Obeng (francisobeng@yahoo.com)

Country Platform: PROLINNOVA–South Africa

March 2009

Institution	University of Limpopo, School of Environmental Sciences, Centre for Environment Agriculture and Development
Name of course in which PID is integrated	Advanced Communication and Innovation
Degree in which PID material is offered	Postgraduate Diploma in Rural Resource Management (RRM)
Academic prerequisites for course	None
Average no. of students in course each year	About 10
Since when has the course been offered?	n.d.
Programmes that students undertaking the course belong to	Postgraduate Diploma in RRM Honours – BSc Agriculture
Proportion of course dedicated to participatory approaches / PID	One week out of 12-week module
Topics covered in participatory approaches / PID module	<ul style="list-style-type: none"> • Promoting farmer innovations • Partnering for innovation • Screening innovations
Practicals / fieldwork included in course	<p>Video is shown to illustrate promotion of innovation</p> <p>As part of course project, practical session on screening innovations is held; a set of criteria are identified and used to screen innovations; results of screening are presented in plenary.</p>
Methods used for assessing students' understanding of concepts	<p>Students undertake a project in which they interact with a rural community. Students select a focus topic based on the issues in the rural community. PRA tools are used for understanding issues and solutions are developed jointly with communities.</p> <p>Paper (40%), project plan (10%), final project paper (40%), presentation (10%).</p>
Lecturer/s	Ernest Letsoalo
Contact person	Ernest Letsoalo (ernest.letsoalo@ul.ac.za)

Country Platform: PROLINNOVA–Sudan

March 2009

Institution	Sudan University of Science and Technology, College of Forestry and Range Science
Name of course in which PID is integrated	Indigenous Knowledge and Natural Resource Management
Diploma / degree programme in which participatory approaches / PID modules in agriculture and NRM are offered	MSc Community Forestry
Course focus	Course aims to create strong conceptual and workable knowledge related to understanding and application of IK in NRM, and to ensure involvement of local communities through validation and enhancement of their IK in community-oriented NRM
Targeted students	Students working in departments related to NRM or in NGOs working in related aspects in addition to research work
Academic prerequisites for course	Bachelor's degree in relevant subject, but mostly agric, forestry, rangeland management
Since when has the course been offered?	2005
How many times a year is it offered?	Once a year within the second semester of one year course followed by preparation of dissertation
Average no. of students in course each year	About 20 students
Topics covered in participatory approaches / PID modules	<ul style="list-style-type: none"> • Indigenous knowledge • Community innovation
Practicals / fieldwork included in course	Class discussion Presentations
Teaching modalities	Teaching depends mainly on initiating issues for discussion, based on the common understanding of the conceptual aspects and relates case studies and stories
Assessment of students	Groupwork discussion and presentation in addition to writing an essay: 30%. Final written examination: 70%
Lecturer/s	Various
Contact person	Abdelaziz Karamalla Gaiballa

Box 11: IK and NRM course content

Indigenous knowledge (IK)

- The concept of IK
- Importance of IK
- Types of IK

IK features related to communities

- IK features
- Peculiarities

IK and development

- IK and development process
- IK and poverty

IK and gender

- Gender and NRM
- Gender and IK

Participatory NRM

- Sustainable NRM
- Elements of successful natural resources management
- Community-based NRM
- IK and development process

IK and NRM

- Indigenous practices
- IK and awareness-raising

Applications of IK

- NRM
- Agriculture
- Livestock raising
- Related livelihood aspects
- Participatory research

Exchange of IK

- Gap identification
- Transfer and adoption
- Barriers

Enhancement of IK

- Intellectual property rights
- National policies and IK
- Validation
- Documentation

Controversial aspects of IK




Country Platform: PROLINNOVA–Tanzania

March 2009

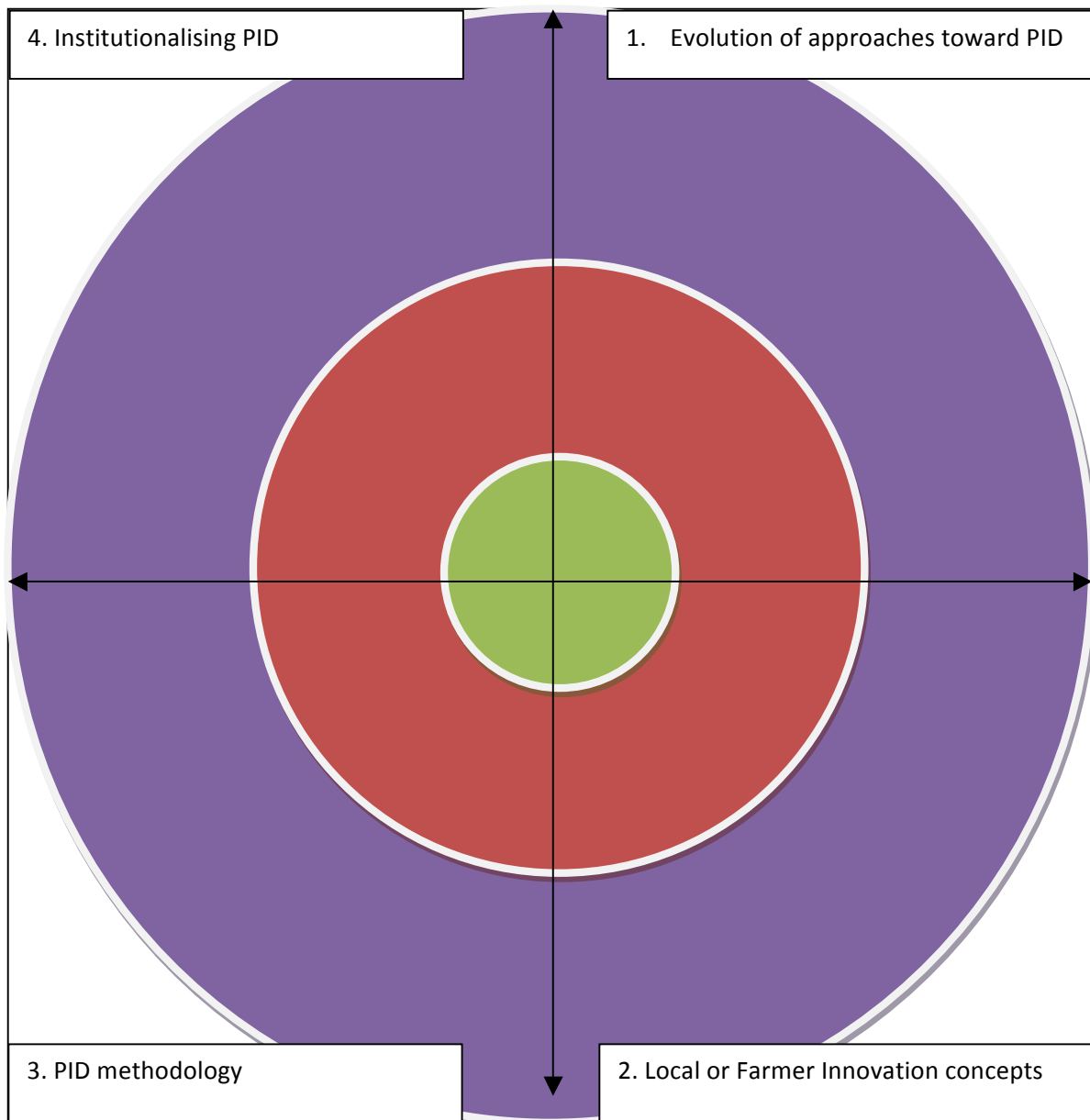
Institution	Sokoine University of Agriculture, Faculty of Agriculture, Dept of Agricultural Education & Extension
Name of course in which PID is integrated	Comparative Extension Systems
Diploma / degree programme in which participatory approaches / PID modules in agriculture and NRM are offered	MSc Agricultural Education and Extension
Course focus	The courses intend to expose students to different extension systems in terms of approaches, methodologies, delivery and funding mechanisms
Targeted students	1 st -year MSc students; MSc programme is meant for extension professionals who want to improve their professional competence
Academic prerequisites for course	No specific requirements but students are expected to have completed basic course on principles of extension
Since when has the course been offered?	1976
How many times a year is it offered?	Once every year
Average no. of students in course each year	About 100 students
Proportion of course dedicated to participatory approaches / PID	About 10%
Topics covered in participatory approaches / PID modules	<ul style="list-style-type: none"> • Definition of and rationale for PTD • Role of indigenous knowledge in PTD • Techniques of involving farmers in PTD • Challenges in implementing PTD
Practicals / fieldwork included in course	None
Teaching modalities	Mostly through lectures and class discussions in which students analyse and share experiences on various extension projects and programme implemented in the country in terms of approaches & methodologies used
Assessment of students	Assessment for course involves written tests and assignments during semester that account for 40% of final score and end-of-semester examination that accounts for 60% of final score
References used	<ul style="list-style-type: none"> • Chambers R. 1983. <i>Rural development: putting the last first</i> • Chambers R <i>et al.</i> 1989. <i>Farmer First</i> • Various other publications by IDS and ILEIA
Lecturer/s	Dismas Mwaseba, Head of Agricultural Education and Extension Department
Contact person	Dismas Mwaseba (dilmwase@yahoo.com / dilmwase@suanet.ac.tz)

4. PID course framework

During the international workshop in Uganda (March 2009) on integrating PID into university curricula, three types of PID courses were designed as follows:

- Introductory PID course 
- Expanded PID course (BSc level) 
- Specialised PID course (MSc level) 

These are shown in the figure below.



The introductory PID course refers to an introductory course of 1–4 hours; it may be a chapter in another course. The expanded PID course refers to 1–2 credit course, generally over one semester; alternatively, the content of such a course could be given in a full-time course over 1–2 weeks. The specialised PID course refers to full course and a potentially associated research programme.

Four content components will be present in all the three types of courses:

- 1. Evolution of approaches toward PID knowledge and attitude:** from Transfer of Technology (TOT) to participatory approaches including PID
- 2. Local or farmer innovation concepts:** comparison with IK / traditional knowledge; long history of farmers' own research, exchange and dissemination; comparison of local innovation (LI) / IK with introduced technologies; comparison with scientific research process; need for hybrid between LI and science
- 3. Methodology**
 - Identification and documentation of farmer innovation and farmer innovators
 - Joint experimentation (roles of different actors)
 - Participatory monitoring and evaluation (PM&E)
 - Spread/dissemination of LI and joint experimentation results
 - Skills in community facilitation
- 4. Institutionalising and scaling up PID**

Specific topics to be lengthened /included in longer courses:

Expanded PID course:

- Compare PID with PRA, Farmer Field School and other participatory approaches
- Values/principles in PID
- Intellectual Property Rights (IPR)
- Farmer-led documentation (FLD)
- Limitations of PID
- From PID to innovation systems
- PID/LI and adaptation to climate change
- Institutionalisation processes

Specialised PID course:

- Incentives for PID and funding mechanisms (e.g. LISF)
- Methodology part: research project part
- IPR policy/laws
- PID in value chains and marketing

Delivery approach and methodologies:

- Use of case studies and their analysis
- Use of examples / visuals / farmer-led documents at all levels
- PPTs / lectures / notes

- Write a summary paper
- Stimulate attitudinal changes through a/o:
 - Interaction with farmers (innovators)
 - Guest resource persons/peers with PID experiences (provide inspiration)
 - Role plays
 - Field visits to farmer innovators and experienced PID farmers

Assessment:

Prevent only subjective assessment through:

- Multiple-choice examination
- Paper review by two supervisors

How to assess attitudinal changes:

- Use simple evaluation/assessment forms at the end of the course;
- Use indirect means, observation

Suggestions:

- Include communication and facilitation skills within the course
- Participatory methodologies to be included in all three course types (A, B and C)
- This framework can be used for BSc and MSc with flexibility
- Facilitators/lecturers need grounding in PID
- Flexibility necessary in the course contents
- Should we consider the framework also for non-formal education?
- Need to emphasise PID methodology when training in-service students

5. Working with universities toward integrating PID

The workshop in Uganda revealed that the initiatives in the various countries to integrate PID into regular university curricula or into other educational activities are very diverse. These include:

- **Training students in PID.** Integration of PID training in academic institutions is one of the regular activities aiming to develop human resources for long-term sustainability.
- **MSc thesis support.** This initiative has different steps: Publication of notice of “Call for proposals”; Students submit proposals on a local innovation; Proposals sent to National Working Groups members, international backstoppers and Country Platform (CP) coordinator for review and further improvement; Discussion of proposals at university committee level and decision taken to send formal proposals to CP coordinator.
- **Study visits.** Study visits for students and lecturers to learn about indigenous farming systems of local communities.
- **Field exercises.** Field exercises are organised for students to build their capacity in project development.
- **Field study.** Lecturers from institutions of higher education are invited to join field study to meet experimenting farmers. This permits sharing of points of view on local innovation and also the results of formal and informal experimentation.
- **Funding support.** Funding support for joint experimentation involving faculty staff, students and farmers and/or funding support to MSc students to study and document farmer innovation.
- **Internships** for students.
- **Awareness workshop.** Awareness workshop on PID/PTD for lecturers, students, farmers and NGO staff.
- **Capacity building.** Capacity building of faculty members; training in integrating PID into university or college curricula could also be organised for lecturers.
- **Networking.** Connecting the education institution with the village for experimentation or pilot village of the institutions.
- **Topical presentations.** Topical presentations done with involvement of PROLINNOVA International Support Team (IST) staff.
- **Involvement in membership of PROLINNOVA NSC and in M&E.** Involvement of university staff in PROLINNOVA National Steering Committee (NSC) and in monitoring and evaluation (M&E) activities.
- **Information about most promising local innovations.** Agreement to send in annually to universities a list of most promising local innovations that emerged from LISF funding as possible topics for MSc thesis work.
- **Visits and meetings.** Visits and meetings with university managers and staff to discuss PID and its role in university teaching and to discuss collaboration.
- **Platform for farmer innovators.** Establishing a platform for farmer innovators within the university where academics are encouraged to join the platform on a periodic basis, listen to the farmer innovators and identify areas that students can do research on.

- **Production of books.** Encouraging production of a book by one or more of the university institutes involved in the CP; the book could be produced within the university's publishing system.
- **Opportunity of reviewing curriculum offered by universities.** Making use of the opportunity that some universities are already reviewing their curriculum, so more room to endorse PID within related subjects or as stand-alone subject.
- **Creation of resource centre for local innovation.** Creation of resource centre for local innovation for academic purposes.
- **Curriculum development workshop.** This is a gathering of representatives of institutions of higher learning. The programme of the workshop may include topical presentations, sharing experiences and lessons from more advanced partners about integration of PID into formal education, including participatory curriculum development, joint conceptualisation of integration of PID into formal education and action plans to integrate PID into formal education.

Annex 1

A Teaching Material for the Course “Participatory Innovation Research and Development Studies”

Annex 1:

Bibliography of PROLINNOVA publications on local innovation and PID

by Dharma Raj Dangol, Ph.D.
PROLINNOVA–Nepal National Working Group Member
Tribhuvan University
Institute of Agriculture and Animal Science
Rampur, Chitwan, Nepal

May 2011

This bibliography attempts to include all published works and working papers (and some unpublished reports and theses) referring to local innovation and PID initiated by the PROLINNOVA network. This work will be useful to scholars, students, teachers, researchers, development workers and organisations working in the promotion of farmer innovation and joint experimentation in agriculture and NRM in any part of the world. I intend to update the bibliography regularly and welcome additions and corrections. Please send these to dharmadangol@hotmail.com

1. Almotolib Ibrahim, Sara Pantuliano, John Plastow, Wolfgang Bayer & Ann Waters-Bayer. 2002. Participatory evaluation with pastoralists in Eastern Sudan. Leusden: PROLINNOVA Working Paper 8. PROLINNOVA International Secretariat c/o ETC EcoCulture.
2. Amanuel Assefa & Tesfahun Fenta 2006. Harnessing local and outsiders' knowledge: Experiences of multi-stakeholder partnership to promote farmer innovation in Ethiopia. PROLINNOVA Working Paper 12. Leusden: PROLINNOVA International Secretariat c/o ETC EcCulture.
3. Amanuel Assefa *et al* (eds). 2004. *National Workshop Proceedings on Promotion of Farmer Innovation and Experimentation in Ethiopia*. ASE, Addis Ababa, Ethiopia, 173pp.
4. Amgai Sujan. 2009. *Local innovation documentation and economics of production and marketing of apple in Mustang District of Nepal*. M.Sc thesis. Institute of Agriculture and Animal Science, Tribhuvan University, Rampur, Chitwan, Nepal.
5. Anton Krone, Amanuel Assefa, Laurens van Veldhuizen, Ann Waters-Bayer & Mariana Wongtschowski. 2006. Reflections on FAIR project. Paper presented at Innovation Africa Symposium, 21–23 November 2006, Kampala, Uganda. PROLINNOVA Working Paper 14.
6. Assefa Amanuel & Tesfahun Fenta. 2006. Harnessing local and outsiders' knowledge: experiences of multi-stakeholder partnership to promoter farmer innovation in Ethiopia. Paper presented at Innovation Africa Symposium, 20–23 November 2006, Kampala, Uganda. 15pp.
7. Assefa Amanuel, Teshome Dahessa, Yohannes GebreMichael & Ann Waters-Bayer (eds). 2004. Promotion of farmer innovation and experimentation in Ethiopia (PROFIEET) *National Workshop Proceedings*, 25–27 August 2003, Ethiopian Management Institute, Debre Zeit, Ethiopia & AgriService Ethiopia, Addis Ababa.
8. Assefa Amanuel. 2003. Promotion of farmer innovation and experimentation in Ethiopia (PROFIEET). Paper presented to the GFAR Steering Committee Meeting, October 2003, Nairobi, Kenya.
9. Assefa Amanuel. 2004. Promotion of farmer innovation and experimentation in Ethiopia: An emerging platform to link farmer innovation with research and development. In: ESAP (ed), *Proceedings of 12th Annual Conference of the Ethiopian Society of Animal Production*, 12–14 August 2004, Addis Ababa.
10. Assefa Fiker, Ann Waters-Bayer & Amanuel Assefa (eds). 2002. *Promotion of farmer innovation and experimentation in Ethiopia (PROFIEET): Proceedings of Awareness Creation Seminar for Policy Makers*. Organised by AgriService Ethiopia & Mekelle University, 11–12 January 2002, Global Hotel, Addis Ababa, Ethiopia. 98pp.

11. Bayer, Wolfgang and Ann Waters-Bayer. 2003. Pastoral innovations and participatory development, Deutscher Tropentag 2003 “Technological and Institutional Innovations for Sustainable Rural Development”, 8–10 October 2003, Göttingen, Germany.
12. Bayer, Wolfgang & Ann Waters-Bayer. 2002. *Participatory Monitoring and Evaluation (PM&E) with pastoralists: a review of experiences and annotated bibliography*. Eschborn: Germany Agency for Technical Cooperation (GTZ) / Leusden: ETC Foundation. 90pp.
13. Beek, S van & RL Rutt. 2007. Cleaning, greening and feeding cities: local initiatives in recycling waste for urban agriculture in Kampala, Uganda. *Urban Agriculture Magazine* 19: 36-38.
14. Bisrat Ayalu. 2005. Bridging the gap: maize seedlings produce early crops. *Appropriate Technology* 32 (4): 14–15.
15. Bruce, Joy, N Karbo & Malex Alebekiya. 2004. Building multi-stakeholder partnerships to promote farmer experimentation and innovation in Ghana *IK Notes* 74. Washington DC: World Bank Knowledge and Learning Centre (www.worldbank.org/afr/ik/default.htm)
16. Critchley, William, Miranda Verburg & Laurens van Veldhuizen (eds). 2006. *Facilitating Multi-stakeholder Partnerships: Lessons from PROLINNOVA*. A publication in the series on Promoting Local Innovation. Silang: IIRR / Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture. 56pp.
17. Critchley, William, Chesha Wettasinha & Ann Waters-Bayer. 2007. Promoting local innovation in rural agriculture: experience and lessons for urban settings. *Urban Agriculture Magazine* 19: 3–7.
18. Critchley, William, Maxine Brown & Judith Ann Francis. 2007. “Where’s muck there’s money” but an anti-social smell as well: a cautionary tale from Jamaica. *Urban Agriculture Magazine* 19: 8.
19. Critchley, William *et al.* 1999. *Promoting Farmer Innovation: harnessing local environmental knowledge in East Africa*. Nairobi: RELMA.
20. Critchley, William. 2007. *Working with farmer innovators*. Wageningen: CTA.
21. Dangol, Dharma Raj. 2006. A Review on Studies and Documents on Local Innovations and Knowledge of Nepal. Pokhara: PROLINNOVA–Nepal. 18pp.
22. Dangol, Dharma Raj. 2009. Baigyanik bhanda kam chhainan kisan. (Eng: Farmers are not less innovative than scientists, about farmer innovators of Nepal). *Naya Patrika Mangalbar* 9 Bhadau 2066 (25 August 2009): 7.
23. Dangol, Dharma Raj. 2009. Integrating innovative system concepts academic institutions: Experiences of IAAS, Nepal. Pp 54. Book of Abstracts. Innovation Asia-Pacific Symposium, 4-7 May 2009, Kathmandu, Nepal organised by LI-BIRD, Practical Action, ICIMOD, CIAT, RIU.
24. Dangol, Dharma Raj. 2009. Kisan anweshak ra khula vishwavidyalaya (Eng: Farmer Innovator and Open University, about farmer innovator of Uganda). *Naya Patrika Sombar* 5 Asoj 2066 (21 September 2009): 11.
25. Dangol, Dharma Raj. 2009. Sthaniya gyan ra anweshan srotendra: Abadharana, karyaniti ra bhabhi karyakram (Eng: Local Knowledge and Innovation Resource Centre: Concepts, Strategy and Future Activities). *Krishi Rupantaran Baishakh* 1: 57–58.
26. Dangol, Dharma Raj. 2010. Promoting local innovation in Nepal: Achievements and lessons learned from PROLINNOVA–Nepal Programme. *The BlueCross* 10: 91–93.
27. Diop, Jean-Marie & Davis Onduru. 2000. Farmer experimental design workshop for the LEINUTS Project in Kenya: a low-potential area case. PROLINNOVA Working Paper 2. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
28. Diop, Jean-Marie & Peter Laban. 2000. Experiences with Farmer Experimental Design Workshops in Egypt. PROLINNOVA Working Paper 1. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
29. Diop, Jean-Marie, Marga de Jong, Peter Laban & Henk de Zeeuw. 2001. Building capacity in participatory approaches. PROLINNOVA Working Paper 4. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
30. FAO. 2007. SARD and scaling-up of good practices. SARD Policy Brief No 1, 2007. Published by FAO in collaboration with PROLINNOVA, Rome
31. Fetien Abay & Gebrecherkos Gebregiorgis. 2009. Process documentation of experiences in facilitating FLD in Tigray, Ethiopia. PROLINNOVA Ethiopia, Mekelle, April 2009.
32. Fetien Abay & Gebrecherkos Gebregiorgis. 2009. Women documenting their innovations: Outcomes of a farmer-led documentation process. PROLINNOVA Ethiopia, Mekelle, April 2009.

33. Fetien Abay, Ann Waters-Bayer & Åsmund Bjørnstad. 2008. Farmers' seed management and innovation in varietal selection: Implication for barley breeding in Tigray, Northern Ethiopia. *Ambio: A Journal of the Human Environment*. 37(4): 312–320.
34. Fetien Abay, Edson Gandarillas, Pratap Shrestha, Ann Waters-Bayer & Mariana Wongtschowski. 2009. Recognising and enhancing local innovation in managing agricultural biodiversity. September 2009. PROLINNOVA Working Paper 29.
35. Fetien Abay, Mamusha Lemma, Pauline O'Flynn & Ann Waters-Bayer. 2001. A challenge and an opportunity: Innovation by women in Tigray. In: Chris Reij & Ann Waters-Bayer (eds), *Farmer innovation in Africa: a source of inspiration for agricultural development* (London: Earthscan), pp 155–167.
36. GFAR Newsletter. 2004. An expanding network: Promoting local innovation, PROLINNOVA. *GFAR (Global Forum on Agricultural Research) Newsletter*, December 2004, pp 6–7.
37. GFAR. 2005. Partnership in action: PROLINNOVA. In: *Global Forum on Agricultural Research Annual Report 2004* (Rome: GFAR), pp 20–25.
38. Gonsalves Julian, Thomas Becker, Ann Braun, Dindo Campilan, Hidelisa de Chavez, Elizabeth Fajber, Monica Kapiriri, Joy Rivaca-Caminade & Ronnie Vernooy (eds). 2005. *Participatory Research and Development for Sustainable Agriculture and Natural Resource Management: A Sourcebook. Volume 1: Understanding Participatory Research and Development*. Los Banos: CIP–UPWARD.
39. Gonsalves Julian, Thomas Becker, Ann Braun, Dindo Campilan, Hidelisa de Chavez, Elizabeth Fajber, Monica Kapiriri, Joy Rivaca-Caminade & Ronnie Vernooy (eds). 2005. *Participatory Research and Development for Sustainable Agriculture and Natural Resource Management: A Sourcebook. Volume 2: Enabling Participatory Research and Development*. Los Banos: CIP–UPWARD.
40. Hagen, Kim. 2008. *From Degradation to Innovation – The Effect of Support and Funding in Promoting Local Innovation in Kikandwa Environmental Association, Uganda*. MSc thesis, Vrije Universiteit Amsterdam, Faculteit der Aard en Levenswetenschappen, MSc Environment and Resource Management.
41. Haile Mengistu. 2004. Ethiopia: A woman innovator speaks. *IK Notes* 70. Washington DC: World Bank Knowledge and Learning Centre (www.worldbank.org/afr/ik/default.htm).
42. Haile Mitiku & Fetien Abay. 2006. Encouraging university teachers and students to promote local innovation. Paper presented at Innovation Africa Symposium, 20–23 November 2006, Kampala, Uganda.
43. Hailu Araya and Yohannes GebreMichael. 2006. Endogenous and modern innovations: differing perspectives. *IK Notes* 96. Washington DC: World Bank. 4p. <http://siteresources.worldbank.org/INTINDKNOWLEDGE/Resources/iknt96.pdf>
44. Hailu Araya & Sue Edwards. 2006. Chain of innovations. *LEISA Magazine* 22 (3): 40.
45. Hailu Araya & Yohannes GebreMichael. 2006. Endogenous and modern innovations: differing perspectives. *IK Notes* 96. Washington DC: World Bank. 3pp.
46. Hailu Araya & Yohannes GebreMichael. 2006. Local and 'modern' innovations: what interest whom? *LEISA Magazine* 22 (3): 28–29.
47. Hailu Araya, Kiflay Tebari, Leul HaileSelassie & Guesh WoldeSelassie. 2008. Participatory Innovation Development in water management in Tigray, Ethiopia. PROLINNOVA Working Paper 17. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
48. Hailu Araya, Kiflay Tebari, Leul HaileSelassie & Guesh. WoldeSelassie. 2008. Participatory innovation development in water management in Tigray, Ethiopia. *Rural Development News* 2/2008: 53–57.
49. Hailu Araya, Sue Edwards & Ann Waters-Bayer. 2006. Agricultural innovation: Do we understand who wants what? *Rural Development News* 2/2006: 39–43.
50. Hailu Araya, Yohannes GebreMichael, Abera GebreAmlak & A Waters-Bayer. 2007. Participatory research that builds on local innovation in beekeeping to escape poverty. *Rural Development News* 1/2007: 29–33.
51. Hailu Araya, Yohannes GebreMichael, Abera GebreAmlak & Ann Waters-Bayer. 2006. Participatory research that builds on local innovation in beekeeping to escape poverty. Paper presented at Tropentag 2006: Conference on International Agricultural Research for Development, University of Bonn, 11–13 October 2006.

52. Hailu Araya. 2006. Innovation increases incomes for Ethiopian beekeepers. *Appropriate Technology* 33 (4): 40–42.
53. Hailu Araya. 2007. The story of a smart water harvester in Tigray Region, Ethiopia. In: *Smart Water Harvesting Solutions for Rain, Fog, Run-off Water and Groundwater* (Netherlands Water Partnership), pp 36–39.
54. Hailu Mengistu. 2003. *The soil makers: analysis of local socio-technical innovations and transformation of Irobland farmers, northeast Ethiopia*. MSc thesis, Management of Agricultural Knowledge Systems (MAKS), Wageningen University. 106pp.
55. Hart Tim & Isaacs Joyene. 2003. Transforming the South African Agricultural Research Council to engage in PTD with black smallholder farmers. In: Laurens van Veldhuizen, Chesha Wettasinha & Ann Waters-Bayer (eds), *Advancing Participatory Technology Development - Case Studies on Integration into Agricultural Research, Extension and Education*. International Institute of Rural Reconstruction, (IIRR), Philippines, pp 61–80.
56. Hart, Tim & Ineke Vorster. 2006. *Indigenous Knowledge on the South African Landscape: Potentials for Agricultural Development*. Human Science Research Council Occasional Paper. Cape Town: HRSC Press. 44pp.
57. Hart, Tim & Roberta Burgess. 2005. Across the divide: linkages in the absence of extension services. Paper presented at 39th Conference of the South African Society for Agricultural Extensions, 10-12 May 2005, Holiday Inn Garden Court, Bloemfontein. 7pp.
58. Hart, Tim, Aubrey Billet & Roberta Burgess. 2005. South Africa: A smallholder farmer's innovative approach to producing and exporting fruit. *IK Notes* 78. Washington DC: World Bank Knowledge and Learning Centre (www.worldbank.org/afr/ik/default.htm).
59. Hart, Tim, Roberta Burgess & Hans Hugo. 2003. Little bugs, big problems. *LEISA Magazine* 19 (4): 6–8.
60. Hart, Tim. 2002. Towards participation in technology development and technology transfer programmes: A case from smallholder researchers in the deciduous fruit sector in South Africa. In: *Proceedings of the 36th Conference of the South African Society for Agricultural Extension and the 18th Conference of the Association for International Agricultural and Extension Education, 26–30 May 2002, Elangeni Holiday Inn, Durban, South Africa*.
61. Hart, Tim. 2005. Local innovations using traditional vegetables to improve soil quality. *IK Notes* 79. Washington DC: World Bank Knowledge and Learning Centre (www.worldbank.org/afr/ik/default.htm).
62. IIRR. 2007. PROLINNOVA at Work: Highlights in 2004 - 2006. Brochure printed by IIRR, May 2007.
63. Jonfa Ejigu & Ann Waters-Bayer. 2005. *Unlocking farmers' potential: institutionalising farmer participatory research and extension in Southern Ethiopia*. Project Experiences Series 2. FARM–Africa, London. 48pp.
64. Kaburire, Laurent 2008. Catalogue for farmer Innovation in Tanzania, Vol. 1 (January 2008). Dar es Salaam: PROLINNOVA–Tanzania, PELUM Association Tanzania / EED.
65. Kafeero, Fred. 2004. Promoting local innovation in ecologically oriented agriculture and NRM: progress made since 2003. Paper presented to GFAR Steering Committee meeting, October 2004.
66. Karbo Naaminong. 2006. Research to promote local innovation: The case of 'siella' mineral lick for livestock in northern Ghana. PROLINNOVA Working Paper 11. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
67. Karbo Naaminong. 2007. Natural mineral licks to enhance livestock growth. *Appropriate Technology* 34 (1): 46–48.
68. Karbo Naaminong. 2008. Nigeria PROLINNOVA Programme Development Inception Workshop: Sharing the Ghana experiences. Invited paper presented at "Meeting of Stakeholders in Agricultural Research and Development to Establish PROLINNOVA in Nigeria", 20 August 2008, Kaduna, Nigeria. PROLINNOVA Working Paper 25. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
69. Kibwana OT, Haile Mitiku & Tegegne Firew. 2001. Learning for sustainability: incorporating participatory approaches into education for rural development in Ethiopia and Tanzania. In: Chris Reij & Ann Waters-Bayer (eds), *Farmer innovation in Africa: a source of inspiration for agricultural development* (London: Earthscan), pp 331–346.

70. Kibwana OT, Haile Mitiku, Laurens van Veldhuizen & Ann Waters-Bayer. 2001. Clapping with two hands: bringing together local and outside knowledge for innovation in land husbandry in Tanzania and Ethiopia – a comparative case study. *Journal of Agricultural Education & Extension* 7 (3): 133–142.
71. Killough, Scott. 2005. Participatory approaches to agricultural research and extension, In: Gonsalves J, Becker T, Braun A, Campilan D, de Chavez H, Fajber E, Kapiriri M, Rivaca-Caminade J & Vernooy R (eds), *Sourcebook on participatory research and development for sustainable agriculture and natural resource management* (Los Banos: CIP–UPWARD), pp 23–31.
72. Kolff, Annette, Laurens van Veldhuizen & Chesha Wettasinha (eds). 2005. Farmer-centered innovation development: Experiences and challenges from South Asia. Proceedings and papers of a regional workshop held at Bogra, Bangladesh, November 22–25, 2004. Documentalists: AFM Akhtaruzzaman & Md Nayeemul Karim. Berne: Swiss Agency for Development and Cooperation (SDC) / Intercooperation. 156pp.
73. Kombiok, James. 2006. Challenges faced by biological scientists in participatory technology development processes. Savanna Agricultural Research Institute, Tamale.
74. Kranstauber, Helen. 2009. Ecological Agriculture in Uganda and the Contribution of Farmer Innovation. MSc Thesis, VU University, Amsterdam.
75. Laban, Peter & Jean-Marie Diop. 2000. Experiences with farmer experimental design workshop in Egypt. PROLINNOVA Working Paper 1. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
76. Letty, Brigid & Ann Waters-Bayer. 2008. Recognising local innovation in livestock-keeping – a path to empowering women. Paper based on poster prepared for the Tenth World Conference on Animal Production, 22–28 November 2008, Cape Town.
77. Letty, Brigid & Laurens van Veldhuizen. 2007. Synergies between supporting endogenous development and participatory innovation development as methodologies for understanding and improving rural livelihoods. In: Bertus Haverkort & Stephan Rist (eds), *Endogenous development and bio-cultural diversity: the interplays of worldviews, globalisation and locality* (COMPAS Series on Worldviews & Sciences 6. Leusden: COMPAS, ETC Foundation / Bern: Centre for Development and Environment), pp 214–222.
78. Letty, Brigid, Monique Salomon, Tebogo Serapelwane & Aart-Jan Verschoor. 2006. Forging links with existing research and development institutions in order to institutionalise PID approaches: A mechanism adopted by PROLINNOVA South Africa. Paper presented at Innovation Africa Symposium, 20–23 November 2006, Kampala, Uganda. 13pp.
79. Letty, Brigid, Tim Hart & Bram Buescher (eds). 2007. *Catalogue of local innovations 2006/2007*. Vol. 2. Pietermaritzburg. PROLINNOVA South Africa (www.prolinnova.net)
80. Lizares-Bodegon, Sophie, Julian Gonsalves, Scott Killough, Ann Waters-Bayer, Laurens van Veldhuizen & Marise Espineli (eds), *Participatory Technology Development: Challenges for Institutional Integration*. IIRR, Silang, Cavite. 110pp.
81. Loevinsohn, Michael. 2008. Innovation in agriculture and NRM in communities confronting HIV/AIDS: A review of international experience. PROLINNOVA Working Paper 18. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture. March 2008, revised in June 2008.
82. Lunch, Chris. 2004. Participatory video: Rural people document their knowledge and innovations. *IK Notes* 71. Washington DC: World Bank Knowledge and Learning Centre (www.worldbank.org/afr/ik/default.htm).
83. Lunch, Nick & Chris Lunch. 2006. *Insights into participatory video: a handbook for the field*. Oxford: Insight (www.insightshare.org).
84. Lutalo, Ronald & William Critchley. 2006. Controlling ticks and influencing policy. *LEISA Magazine* 22 (3): 24–25.
85. Lutalo, Stella. 2006. About farmer-led documentation (FLD). *Ground Up* 16 (2): 21–22.
86. Magagi Saidou, Jean-Marie Diop, & Abdou Mamane. 2008. Expérimentation conjointe de l'innovation paysanne en fumage de poissons en banda au Niger (English): Joint experimentation of Fish smoking in Banda Niger (French) PROLINNOVA Working Paper 27. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.

87. Million Alemayehu. 2001. Ayelech Fikre, an outstanding women farmer in Amhara Region, Ethiopia. In: Reij C & Waters-Bayer A (eds), *Farmer innovation in Africa: a source of inspiration for agricultural development* (London: Earthscan), pp 28–32.
88. Mirgheni Ibnoaf & Nageeb Ibrahim. 2007. Promoting local innovation in Sudan: Local innovations and indigenous practices from the Sudan: The hidden power of the poor (March 2007). PROLINNOVA–Sudan & Practical Action Sudan.
89. Mitiku Haile & Fetien Abay. 2006. Encouraging university teachers and students to promote local innovation. Abstract for Innovation Africa. (www.innovationafrica.net)
90. Mitiku Haile, Ann Waters-Bayer, Mamusha Lemma, Mengistu Hailu, Berhan GebreAnenia, Fetien Abay & Yohannes GebreMichael (eds). 2000. Farmer innovation in land husbandry. *Proceedings of Anlogphone Regional Workshop*, 6–11 February 2000, Mekelle, Tigray, Ethiopia / ISWC II, Mekelle University, Mekelle.
91. Mitiku Haile, Fetien Abay & Ann Waters-Bayer. 2001. Joining forces to discover and celebrate local innovation in land husbandry in Tigray, Ethiopia. In: Chris Reij & Ann Waters-Bayer (eds), *Farmer innovation in Africa: A Source of Inspiration for Agricultural Development*. Earthscan, London. Pp 58-73.
92. Naidu YD & Edith van Walsum. 2002. PTD for sustainable dryland agriculture in South India: Balancing our way to scale. PROLINNOVA Working Paper 7. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
93. Nasr, Nouredine, Ann Waters-Bayer, Marilyn Minderhoud-Jones, Ingrid Huibers-Govaert & Coen Reijntjes (eds). 2000. Grassroots innovation. *ILEIA Newsletter* 16 (2). 40pp.
94. Nasr, Noureddine: Bellachheb Chahbani & Rahdia Kamel. 2001. Women's innovation in rural livelihood systems in arid areas of Tunisia. In: Chris Reij & Ann Waters-Bayer (eds), *Farmer innovation in Africa: a source of inspiration for agricultural development* (London: Earthscan), pp 132–136.
95. Nasr, Noureddine. 2004. Regional radio in Tunisia: linking indigenous innovation and formal research and development. *IK Notes* 72. Washington DC: World Bank Knowledge and Learning Centre (www.worldbank.org/afr/ik/default.htm).
96. Ngubane N & Mudhara M. 2008. FAIR pilot project in South Africa (www.prolinnova.net).
97. Nomaphelo Ngubane & Maxwell Mudhara. 2008? Farmer access to innovation resources in South Africa: Synthesis of lessons learnt. Action Research Phase 1: 2006–2007. PROLINNOVA Working Paper 22. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
98. Ouedraogo Aly, Hamado Sawadogo, Chris Reij & Ann Waters-Bayer. 2005. Burkina Faso: indigenous innovation in farmer-to-farmer extension. *IK Notes* 77. Washington DC: World Bank Knowledge and Learning Centre (www.worldbank.org/afr/ik/default.htm).
99. Paul Tchawa, Félix Nkapemin & Jean-Marie Diop. 2002. Participatory technology development in Cameroon: The route and milestone In *The Process of its Institutionalisation*. PROLINNOVA Working Paper 4. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
100. Perera GD & Bert Sennema. 2002. Towards sustainable development in Mahaweli settlements through farmer participation. PROLINNOVA Working Paper 6. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
101. Piepenstock, Anne, Orlando Arratia & Luis Carlos Anguilar. 2006. New technologies support farmers' documentation. *LEISA Magazine* 22(1): 28-29. (www.leisa.info).
102. PROFIEET. 2006. *Catalogue of farmer innovations*, Vol. 1. PROFIEET (Promoting Farmer Innovation and Experimentation in Ethiopia). AgriService Ethiopia, Addis Ababa.
103. PROFIEET/ PROLINNOVA. 2004. *Proceeding of the First International PROLINNOVA Workshop*, 8–12 March 2004, ASE Yirgalem, Addis Ababa, Ethiopia / International Institute of Rural Reconstruction, Silang, Philippines. 210pp.
104. PROLINNOVA International Secretariat. 2004. New initiatives in smallholder natural resource management: PROLINNOVA. *PLEC News and Views*, New Series 4 (March 2004):19.
105. PROLINNOVA International Secretariat. 2004. Partnership in action: PROLINNOVA. In: *Global Forum on Agricultural Research Annual Report 2004* (Rome: GFAR), pp 20–25.
106. PROLINNOVA International Secretariat. 2007. (Electronic) *PTD/PID Circular* 13, 14, 15, 16. Leusden: PROLINNOVA International Secretariat c/o ETC Ecoculture.

107. PROLINNOVA International Secretariat. 2008. Farmer Access to Innovation Resources: Synthesis of lessons learnt. Action research Phase 1: 2006–2007. PROLINNOVA Working Paper 24. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
108. PROLINNOVA International Support Team. 2005. Strengthening PROLINNOVA policy dialogue and advocacy strategy. PROLINNOVA Working Paper 10. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
109. PROLINNOVA International Support Team. 2004. PROLINNOVA. In: *IK News Asia. Linking Regional and Indigenous Knowledge*, April 2004, pp 6–7.
110. PROLINNOVA International Support Team. 2004. PROLINNOVA. In: *IK Worldwide: Linking Global and Indigenous Knowledge*, March 2004, pp 7–8.
111. PROLINNOVA–Cambodia. 2006. *Farmer Innovation*. Phnom Penh: CEDAC.
112. PROLINNOVA–Ethiopia & REST. 2008. *Catalogue of local innovations* Vol. 2. (July 2008), AgriService Ethiopia, Addis Ababa.
113. PROLINNOVA–Ethiopia progress report. 2006. Unpublished report
114. PROLINNOVA–NEPAL. 2005. *Country Programme Report*. Pokhara: PROLINNOVA–Nepal Secretariat c/o LI-BIRD.
115. PROLINNOVA–Nepal. 2006. *Innovation catalogue*. Pokhara: PROLINNOVA–Nepal Secretariat c/o LI-BIRD.
116. PROLINNOVA–Nepal. 2006. *PROLINNOVA Nepal Khabarpatrika*. Barsha 2 Anka 1 Baishak-Asoj 2066. Pokhara: PROLINNOVA–Nepal Secretariat c/o LI-BIRD.
117. PROLINNOVA–Nepal. 2006. *Promoting Local Innovation Program: An Introduction* (A video of 20 minutes in English). PROLINNOVA Nepal, LIBIRD, Pokhara, Kaski, Nepal
118. PROLINNOVA–Nepal. 2006. *Report on Participatory Innovation Development (PID) Training Workshop* on 5-9 November 2006 at Narayangardh, Chitwan. Pokhara : PROLINNOVA–Nepal Secretariat c/o LI-BIRD.
119. PROLINNOVA–Nepal. 2006. *Sthaniya Anwashan Prabardhan Karyakram: Yak Parichaya* (A video of 20 minutes in Nepali). Pokhara: PROLINNOVA–Nepal Secretariat c/o LI-BIRD.
120. PROLINNOVA–Nepal. 2006. *Sthaniya Anwashan Pustika*. Pokhara: PROLINNOVA–Nepal Secretariat c/o LI-BIRD.
121. PROLINNOVA–Nepal. 2009. *Sthaniya Anwashan Pustika Bhag 2*. Pokhara: PROLINNOVA–Nepal Secretariat c/o LI-BIRD.
122. PROLINNOVA–Nepal. 2064. *PROLINNOVA Nepal Khabarpatrika* Barsha 1 Anka 1 Baishak-Asoj 2064. Pokhara: PROLINNOVA–Nepal Secretariat c/o LI-BIRD.
123. PROLINNOVA–Nepal. 2065. *PROLINNOVA Nepal Khabarpatrika* Barsha 2 Anka 1 Baishak-Asoj 2065. Pokhara: PROLINNOVA–Nepal Secretariat c/o LI-BIRD.
124. PROLINNOVA–Nigeria. 2008. *Proceedings of Meeting of Stakeholders in Agricultural Research and Development to Establish PROLINNOVA in Nigeria*, held at Budget 5 Barnawa Kaduna on August 2008, organised by Development Resource Initiative (DRIVE), Space 2000, Complex Barnawa Kaduna.
125. PROLINNOVA–South Africa. 2005. *Proceedings of the Workshop on Participatory Innovation Development*, 30 November–2 December 2005. Polokwane, Limpopo Province. Pietermaritzburg: PROLINNOVA–South Africa.
126. PROLINNOVA–South Africa. 2006. *Proceedings Follow-up PID workshop*, 27–29 March 2006, Polokwane, Limpopo Province. Pietermaritzburg: PROLINNOVA–South Africa (www.prolinnova.net).
127. PROLINNOVA–Sudan. 2006. *Promoting local innovation in Sudan: local innovations and indigenous practices from the Sudan – the hidden power of the poor*. PROLINNOVA–Sudan.
128. PROLINNOVA–Uganda. 2008? Farmer Access to Innovation Resources Documentation of FAIR pilot programme in Uganda, Action Research Phase 1: 2006–2007. PROLINNOVA Working Paper 23. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
129. PROLINNOVA, Oxfam Novib, PELUM–Uganda. n.d. Farmer-led documentation for sustainable agriculture and natural resource management. 8pp (brochure with CDs).
130. Rai Sharad & Pratap K. Shrestha, 2006. Guidelines to Participatory Innovation Development, PROLINNOVA–Nepal Programme, LI-BIRD, Pokhara, Nepal.

131. Rai, Sharad. 2007. Supporting local innovation in Nepal. *id21 insights* 68 (Sept 2007):3.
132. Rana Bhat Basant, Rajan Ghimire & Rishi Adhikari. 2006. *Sthaniya Anwashan Bikash: Talim Srot Pustika*. PROLINNOVA–Nepal Secretariat, LI-BIRD, Pokhara, Nepal
133. Rana Bhat Basant, Rajan Ghimire & Rishi Adhikari. 2006. *Sthaniya Anwashan Pustika*. Pokhara: PROLINNOVA–Nepal Secretariat c/o LI-BIRD.
134. Rauri Alcock & Brigid Letty. 2008. Cross-visits to stimulate farmer experimentation in Msinga, South Africa. PROLINNOVA Working Paper 26. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
135. Reij, Chris & Ann Waters-Bayer (eds). 2001. *Farmer innovation in Africa: a source of inspiration for agricultural development*. London: Earthscan. 362pp.
136. Reij, Chris & Ann Waters-Bayer. 2005. Farmer innovation as entry point to participatory research and extension. In: Gonsalves J, Becker T, Braun A, Campilan D, de Chavez H, Fajber E, Kapiriri M, Rivaca-Caminade J & Vernooy R (eds), *Sourcebook on participatory research and development for sustainable agriculture and natural resource management* (Los Banos: CIP–UPWARD), pp 159–164.
137. Ruter, Dorine & Laurens van Veldhuizen 2005. ICT and the facilitation of learning and exchange within international networks: The case of PROLINNOVA. In: Secretariat of the Pacific Community (ed), *Pacific Extension Summit: Bringing about Change – Promoting Participatory Agricultural Extension in the Pacific*, 21–25 November 2005, Nukualofa, Kingdom of Tonga. 35pp.
138. Salomon Monique & Brigid Letty. 2006. Partnering for farmer-led research and extension, Presented at the South African Society for Agricultural Extension Congress, May 2006.
139. Salomon Monique. 2006. The people and their cattle communal grazing in the Northern Drakensberg. Presented at the South African Society for Agricultural Extension Congress in May 2006.
140. Salomon Monique. 2008. PROLINNOVA–South Africa through the gender lens (www.prolinnova.net).
141. Salomon, Monique & Aart-Jan Verschoor. 2006. South Arica and the unspoken side of networking. In: Will Critchley, Miranda Verburg & Laurens van Veldhuizen (eds), *Facilitating multi-stakeholder partnerships: lessons from PROLINNOVA* (Leusden: PROLINNOVA International Secretariat), pp 34–37.
142. Sam Vitou. n.d. (2008?). The Cambodian experience in piloting Local Innovation Support Funds. Action Research Phase 1 2006–2007. PROLINNOVA Working Paper 20. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
143. Sanginga, Pascal, Ann Waters-Bayer, Susan Kaaria, Jemimah Njuki & Chesha Wettasinha (eds). 2008. *Innovation Africa: enriching farmers' livelihoods*. London: Earthscan.
144. Saruchera Munyaradzi. 2006. Continuity and change: Resilience of innovative mechanisms of traditional leadership and systems in agroforestry resource management: A case study of Bizana, Eastern Cape, South Africa. Paper presented at Innovation Africa Symposium, 20–23 November 2006, Kampala, Uganda.
145. Saruchera Munyaradzi. 2006. Gender and crop genetic resources management: the role of women farmers in conserving the genetic resources of jugo beans and cowpeas in KwaNgwanase, KwaZulu Natal, South Africa. Paper presented at Innovation Africa Symposium, 20–23 November 2006, Kampala, Uganda.
146. Scogings-Letty, Brigid, Nomaphelo Ngubane-Shezi & Zanele Shezi. 2007. Supporting or enhancing local innovation as a tool for ensuring the sustainable use of natural resources. Paper presented at the Fourth Biennial National Landcare Conference, Polokwane, Limpopo Province, 12–16 July 2009.
147. Stoop, Willem & Tim Hart. 2006. Research and development towards sustainable agriculture by resource-poor farmers in sub-Saharan Africa: Some strategic and organisational considerations in linking farmers' practical needs with policies and scientific theories. *International Journal of Agricultural Sustainability* 3 (3): 206–216.
148. Tagoe, Ruth. 2006. Identifying and cataloguing farmer innovation. *LEISA Magazine* 22 (3): 36 (www.leisa.info).
149. Tesfahun Fenta & Amanuel Assefa. 2006. PID workshops with farmers. ASE, Addis Ababa, Ethiopia (manuscript).

150. Tesfahun Fenta, Hailu Araya, Teklu Tesfaye, Luel Haileselassie & Ann Waters-Bayer. 2008. The Ethiopian experience in piloting local innovation support funds April 2006 – March 2008 PROLINNOVA Working Paper 21. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
151. Tesfaye Beshah. 2003. *Understanding Farmers: Explaining Soil and Water Conservation in Konso, Wollita and Wollo, Ethiopia*. PhD thesis, Wageningen Agricultural University, Wageningen.
152. Tesfaye Beshah. 2004. The interface between indigenous and modern knowledge systems. In: Ethiopian Society of Animal Production (ed.), *Proceedings of 12th Annual Conference of the Ethiopian Society of Animal Production, 12–14 August 2004, Addis Ababa*.
153. Timsina, Ram Hari. 2008. Assessment of local innovation documentation, promotion and dissemination process: a case of Chitwan and Dhading Districts. MSc thesis, Institute of Agriculture and Animal Science, Tribhuvan University, Rampur, Chitwan, Nepal.
154. Veldhuizen, Laurens van, Ann Waters-Bayer & Chesha Wettasinha. 2005. Participatory technology development where there is no researcher. In: Gonsalves J, Becker T, Braun A, Campilan D, de Chavez H, Fajber E, Kapiriri M, Rivaca-Caminade J & Vernooij R (eds), *Sourcebook on participatory research and development for sustainable agriculture and natural resource management* (Los Banos: CIP–UPWARD), pp 165–171.
155. Veldhuizen, Laurens van, Ann Waters-Bayer & Henk de Zeeuw. 1997. *Developing technology with farmers: a trainer's guide for participatory learning*. 1st published by ZED Books, London, 1997; reprinted by IIRR, Silang, Philippines, 2004.
156. Veldhuizen, Laurens van, Ann Waters-Bayer & Mariana Wongtschowski. 2005. Addressing rural poverty in Africa through agricultural research and development: Alternative and complementary approaches. Invited paper for American Association for the Advancement of Science (AAAS) meeting, 21–22 Feb 2005, Washington DC. 12pp.
157. Veldhuizen, Laurens van, Ann Waters-Bayer, Scott Killough, Marise Espineli & Julian Gonsalves. 2001. Institutionalising farmer participatory research: Lessons from a comparative study. Deutscher Tropentag: Conference on International Agricultural Research for Development, 9–11 Oct. 2001, Bonn, Germany. 8pp.
158. Veldhuizen, Laurens van, Ann Waters-Bayer, Scott Killough, Marise Espineli & Julian Gonsalves. 2002. Institutionalising Farmer Participatory Research: lessons from a comparative study. In: Leeuwis C & Pyburn R (eds), *Wheelbarrows full of frogs: social learning in rural resource management* (Wageningen University and Research Centre), pp 375–387.
159. Veldhuizen, Laurens van, Anton Krone, Mariana Wongtschowski & Ann Waters-Bayer. 2008. FAIR – farmer access to innovation resources. *Rural Development News* 2:47-52.
160. Veldhuizen, Laurens van, Mariana Wongtschowski & Ann Waters-Bayer. 2005. Farmer Access to Innovation Resources (FAIR): Findings from an International Review of Experiences PROLINNOVA Working Paper 9. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
161. Veldhuizen, Laurens van. 2004. Promoting local innovation, from dispersed local programme to international programme. Paper presented at the Environmental Week, October 2004
162. Veldhuizen, Laurens van. 2005. Institutionalising participatory agricultural research and extension: lessons and challenges. In: Secretariat of the Pacific Community (ed), *Pacific Extension Summit: Bringing about Change - Promoting Participatory Agricultural Extension in the Pacific*, 21-25 November 2005, Nukualofa, Kingdom of Tonga, pp 26.
163. Veldhuizen, Laurens van. 2005. Promoting participatory agricultural research and extension. In: Secretariat of the Pacific Community (ed), *Pacific Extension Summit: Bringing about Change - Promoting Participatory Agricultural Extension in the Pacific*, 21-25 November 2005, Nukualofa, Kingdom of Tonga, pp 20-21.
164. Veldhuizen, Laurens van. 2007. Updates on PROLINNOVA. *GFAR Newsletter* 19 (April 2007): 4.
165. Villiers, Hannes de, Laurel Oettle & Monique Salomon (eds). 2005. *Catalogue of farmer innovations: Prolinnova–South Africa Inception Phase 2004*. Midnet, Pietermaritzberg/KwaZulu Natal, South Africa. 18pp.
166. Vusumuzi Sithole & Hannes de Villiers (compiled). 2004. *Participatory Innovation Development Training of Stakeholders*, 14–16 Sept 2004: Training Manual. Midnet, South Africa, Pietermaritzburg.

167. Waters-Bayer, Ann & Mengistu Hailu. 2002. *Dalda*: dams to trap silt and water – an Irob innovation in northern Ethiopia. In: Boven K & Morohashi J (eds), *Best practices using indigenous knowledge* (The Hague: Nuffic / Paris: UNESCO–MOST), pp 93–103.
168. Waters-Bayer, Ann, Laurens van Veldhuizen, Chesha Wettasinha & Mariana Wongtschowski. 2005. Developing partnerships to promote local innovation. In: Gonsalves J, Becker T, Braun A, Campilan D, de Chavez H, Fajber E, Kipiriri M, Rivaca-Caminade J & Vernooy R (eds), *Sourcebook on Participatory Research and Development for Sustainable Agriculture and Natural Resource Management* (Los Banos: CIP–UPWARD), pp 74–83.
169. Waters-Bayer, Ann, Laurens van Veldhuizen, Chesha Wettasinha and Mariana Wongtschowski. 2004. Developing partnerships to promote local innovation. *Journal for Agricultural Education and Extension* 10 (3): 143–150.
170. Waters-Bayer, Ann, Laurens van Veldhuizen, Chesha Wettasinha and Mariana Wongtschowski. 2004. Towards the institutionalisation of participatory approaches: The role of partnerships. IRSA (International Rural Sociology Association) XI World Congress on Rural Sociology, Trondheim, Norway, 25–30 July 2004. 12pp.
171. Waters-Bayer, Ann, Laurens van Veldhuizen, Mariana Wongtschowski & Chesha Wettasinha. 2006. Recognising and enhancing local innovation processes. Invited lead paper, Innovation Africa Symposium, 21–23 November 2006, Kampala, Uganda. PROLINNOVA Working Paper 13. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
172. Waters-Bayer, Ann, Laurens van Veldhuizen, Mariana Wongtschowski & Chesha Wettasinha. 2005. Multi-stakeholder partnerships to integrate participatory approaches into institutions of agricultural research and development. Keynote paper, Deutscher Tropentag, 11–13 October 2005, Stuttgart (www.tropentag.de). 10pp.
173. Waters-Bayer, Ann, Laurens van Veldhuizen, Mariana Wongtschowski & Scott Killough. 2005. Innovation Support Funds for farmer-led research and development. *IK Notes* 85. Washington DC: World Bank Knowledge and Learning Centre. (www.worldbank.org/afr/ik/default.htm) 4pp.
174. Waters-Bayer, Ann. 2000. Managing knowledge for local innovation. *Ground Up* 1 (2):24.
175. Waters-Bayer, Ann (rapporteur). 2003. Rural knowledge systems and innovation processes. In: GFAR (ed.), *Linking Research and Rural Innovation to Sustainable Development: Proceedings of the GFAR 2003 Conference, 22–24 May 2003, Dakar, Senegal*. GFAR, Rome, pp 125–130.
176. Waters-Bayer, Ann & Laurens van Veldhuizen. 2004. Promoting local innovation: Enhancing IK dynamics and links with scientific knowledge *IK Notes* 76. Washington DC: World Bank Knowledge and Learning Centre (www.worldbank.org/afr/ik/default.htm).
177. Waters-Bayer, Ann & Wolfgang Bayer 2006. Social dimensions in agricultural research and development: how civil society fosters partnerships to promote local innovation by rural communities. Keynote paper, European Forum on Agricultural Research for Development (EFARD), 27–29 April 2005, Zurich. 8pp.
178. Waters-Bayer, Ann & Wolfgang Bayer. 2007. Enhancing local innovation to improve water productivity in crop-livestock systems. IWMI / ILRI Workshop on Harnessing Water Productivity in Crop-Livestock Systems of Sub-Saharan Africa through Improved Livestock and Water Interventions, 24–26 September 2007, Addis Ababa, Ethiopia.
179. Waters-Bayer, Ann & Wolfgang Bayer. 2009. Enhancing local innovation in water productivity in crop-livestock systems. Revised version of paper presented at ILRI/IWMI workshop, Addis Ababa, 24–26 September 2007; pre-publication version of article published in *The Rangeland Journal* (www.publish.csiro.au/journals/trj). PROLINNOVA Working Paper 28. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
180. Waters-Bayer, Ann & Wolfgang Bayer. 2009. Enhancing local innovation to improve water productivity in crop–livestock systems. *The Rangeland Journal* 31 (2): 231–235.
181. Waters-Bayer, Ann, Chesha Wettasinha & Laurens van Veldhuizen. 2007. PROLINNOVA: Building partnerships to promote local innovation processes. Invited paper for Farmer First Revisited Workshop, 12–14 December 2007, Institute of Development Studies, Sussex University, Brighton.
182. Waters-Bayer, Ann, Coen Reijntjes & Nourredine Nasr. 2000. Unleashing the creativity of farmers. *Landmark* 37: 10–11.

183. Waters-Bayer, Ann, Wolfgang Bayer & Annette von Lossau. 2003. Keeping track, changing track: participatory monitoring and evaluation with pastoralists. Poster paper, VII International Rangeland Congress, Durban, South Africa, 28 July–1 August 2003. 3pp.
184. Waters-Bayer, Ann, Wolfgang Bayer & Annette von Lossau. 2005. Participatory monitoring and evaluation with pastoralists. In: Gonsalves J, Becker T, Braun A, Campilan D, de Chavez H, Fajber E, Kipiriri M, Rivaca-Caminade J & Vernoooy R (eds), *Sourcebook on participatory research and development for sustainable agriculture and natural resource management* (Los Banos: CIP–UPWARD), pp 113–117.
185. Waters-Bayer, Ann, Wolfgang Bayer & Will Critchley. 2003. Participatory approaches to innovation in the rangelands. Invited paper, VII International Rangeland Congress, Durban, South Africa, 28 July–1 August 2003. 11pp.
186. Waters-Bayer, Ann, Yan Zhaoli & Chesha Wettasinha. 2009. Local innovation in range management on the Tibetan Plateau. Presented at the Sino-German Tibetan Rangeland Ecosystem Research Symposium, 20–26 July 2009, Lanzhou, China.
187. Waters-Bayer, Ann. 2000. New partnerships in knowledge management for local innovation. *Proceedings of the GFAR-2000 Conference “Strengthening Partnership in Agricultural Research for Development in the Context of Globalization”, 21–23 May 2000, Dresden, Germany*. Global Forum on Agricultural Research, Rome.
188. Waters-Bayer, Ann. 2001. Promoting local innovation in ecological agriculture and NRM: From dispersed local initiatives to a global programme. Technical Workshop on Methodologies, Organization and Management of Global Partnership Programmes, 9–10 October 2001, IFAD, Rome. 8pp.
189. Waters-Bayer, Ann. 2001. The process of change in international agricultural research for development and the role of NGOs. In: Gura S (ed), *Food without farmers? Agricultural research needs a profoundly changed CGIAR* (Bonn: Forum Environment and Development), pp 45–58.
190. Waters-Bayer, Ann. 2002. Rural transformation and agricultural innovation processes. Invited paper for European Forum on Agricultural Research for Development, 15–17 May 2002, Rome. 10pp.
191. Waters-Bayer, Ann. 2003. Die Rolle kleiner NRO in der Förderung partizipativer Forschung und Entwicklung in der ökologischen Ressourcennutzung: das Beispiel von PROLINNOVA. In: Waters-Bayer A & Pich S (eds), *Möglichkeiten und Grenzen kleiner Nichtregierungsorganisationen (NRO) bei der Förderung ökologischer Landnutzung: Arbeitsdokument des AGRECOL e.V. Wochenendtreffens vom 19.–21. September 2003 in Bad Gandersheim-Ackenhausen*, pp 11–14.
192. Waters-Bayer, Ann. 2004. Local innovation and participatory innovation development: The concepts and their application in livestock-related research and development. In: ESAP (ed), *Proceedings of 12th Annual Conference of the Ethiopian Society of Animal Production, 12–14 August 2004, Addis Ababa* pp 1-9.
193. Waters-Bayer, Ann. 2004. New initiatives in smallholder natural resource management: PROLINNOVA. *PLEC News and Views*, New Series 4 (March 2004):19.
194. Waters-Bayer, Ann. 2007. Enhancing local innovation in agriculture and natural resource management. In: *CIDA-UPCD Sustainable Rural Agriculture Development Conference Proceedings on Innovation & Extension*. Hawassa University, Awassa. pp 38–48.
195. Waters-Bayer, Ann. 2007. Investment in enhancing innovation systems to reach development goals. Invited paper for Research Visioning and Strategy Workshop, Department for International Development (DFID), London, 7 March 2007. 4pp.
196. Wennink, Bertus & Willem Heemskerk (eds). 2006. Farmers’ organizations and agricultural innovation: Case studies from Benin, Rwanda and Tanzania. Bulletin 374 of the Royal Tropical Institute (KIT), KIT Development, Policy and Practice, Amsterdam.
197. Wettasinha, Chesha (ed). 2004. PTD/PID Circular: Periodic update on Participatory Technology/Innovation Development, Issue 13, with “Top 20” publications on local innovation and participatory innovation development. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.
198. Wettasinha, Chesha & Ann Waters-Bayer (eds). 2005. PTD/PID Circular: periodic update on Participatory Technology / Innovation Development, Issue 14. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.

199. Wettasinha, Chesha, Laurens van Veldhuizen & Ann Waters-Bayer (eds). 2003. *Advancing PTD: case studies on integration into agricultural research, extension and education*. Silang, Cavite: IIRR / CTA. 257pp.
200. Wettasinha, Chesha, Mariana Wongtschowski & Ann Waters-Bayer (eds). 2008. *Recognising local innovation: experiences of PROLINNOVA partners*. Silang, Cavite, Philippines: IIRR / Leusden: PROLINNOVA International Secretariat, ETC EcoCulture. Revised version.
201. Wettasinha, Chesha. 2002. Developing technology in organic agriculture: keynote address. In: Johannes Kotschi, Wolfgang Bayer, Thomas Becker & Berthold Schimpf (eds), *AlterOrganic: Local Agenda for Organic Agriculture in Rural Development: Proceedings of an International Workshop* at Bonn-Königswinter, Germany, 21–24 October 2002 (Marburg: Agrecol), pp 35–41.
202. Yohannes GebreMichael & Ann Waters-Bayer. 2007. Trees are our backbone: integrating environment and local development in Tigray Region of Ethiopia. *IIED Drylands Issue Paper 145*. London: International Institute for Environment and Development (IIED). 36pp.
203. Yohannes GebreMichael. 2001. Community assessment of local innovators in northern Ethiopia. In: Chris Reij & Ann Waters-Bayer (eds), *Farmer innovation in Africa: a source of inspiration for agricultural development* (London: Earthscan), pp 171–177.
204. Zeeuw, Henk de. 2000. Trying out PTD with NGOs in Peru and Bolivia. PROLINNOVA Working Paper 3. Leusden: PROLINNOVA International Secretariat c/o ETC EcoCulture.