

PTD CIRCULAR

Six-monthly update on Participatory Technology Development

With this first issue of the PTD Circular, ILEIA takes the initiative to spread documented experiences on participatory technology development in Low-External-Input and Sustainable Agricultural (LEISA). Recently, Europe-based advocates of the approach met in Germany and the request for a regular update was heard frequently. Now that interest in participatory technology development or farmer participatory research approaches has increased considerably, more and more field experiences are becoming available and developments are going fast. However, very few of these experiences reach people working in the field. This circular hopes to bridge the gap in an informal way. It aims to keep people informed on recent experiences, publications and audiovisuals on PTD. We also hope to inform you on recent and upcoming workshops and training opportunities.

Participatory Technology Development covers methods in working with farmers in problem analysis, looking for opportunities, experimentation, monitoring and evaluation, farmer-to-farmer extension and local institutional development to sustain all this. The danger exists that we try to cover too many areas and make this update too thick and less useful. We hope to prevent this by

- ▶ *focusing only on experiences where outsiders support and/or participate in development work of farmers.*
- ▶ *focusing on actual experimentation by farmers and farmer-to-farmer extension as areas of key interest (but maintaining the above overall perspective)*
- ▶ *including experiences from other areas such as participatory analysis, problem diagnosis, monitoring and evaluation only if they refer to an integration or overview of a number of cases, or if they are very innovative. Many of these experiences are also reported in the excellent RRA Notes, available free of charge from IIED, 3 Endsleigh Street, London WC1H 0DD, United Kingdom.*

If you have new information in the field of PTD, that you would like to be made known to a wider audience, please inform us. Don't forget to include the source of your information, so that readers may obtain a copy from that person or organisation.

This first update contains not only all PTD documents received in the ILEIA library in 1993, but also other publications that colleagues suggest to us. A new update will be published twice a year, in future also including new PTD entries in international databases. If you wish to obtain copies of publications or audiovisuals, please take up contact with the author or publisher mentioned. Photocopies can only be ordered (at cost price), if sources are unknown or difficult to trace.

We would appreciate your comments on this initiative. Do we focus on the right topics? Do the updates meet your expectations? Your suggestions may lead us to narrowing or widening the focus as the need arises.

Note that only this first issue is sent to all ILEIA Newsletter subscribers. The next issues will only be sent to those of you who return to us the subscription form.

● ANNOTATED PUBLICATIONS

Indigenous knowledge & development monitor. CIRAN, PO Box 90734, 2509 LS, The Hague, Netherlands.

indigenous knowledge participatory methods sustainable development
A new newsletter produced by the Centre for International Research and Advisory Networks, providing a forum for national, regional and international indigenous knowledge resource centres to interact with all other persons and institutions interested in the role that IK can play in truly participatory approaches to development.

Beingolea, J, Beingolea, H and Ruddell, E. 1992. **Report on field trials to determine appropriate potato varieties and methods of fertilization for potatoes produced between 2.800 and 3.900 m. above sea level.** 1990-1991 Report. World Neighbors, Casilla 20005, Santiago 20, Chile. Describing how over 200 farmers in the Bolivian Andes volunteered to work with World Neighbors to improve their experimentation practices. Semi-scientific procedures suggested and applied. A draft training module is also available from the authors.



Bliek, J vd and Veldhuizen, L van. 1993. **Developing tools together.** ETC Foundation, PO Box 64, 3830 AB Leusden, Netherlands.

Giving the results of a study commissioned by GATE/GTZ on role of PTD in appropriate technology programmes. With a review of many experiences with PTD in appropriate technology, the report outlines the possibilities of applying the approach in developing tools and equipment and it identifies complicating factors.

Brouwers JHAM. 1993. **Rural people's response to soil fertility decline: the Adja case (Benin).** Wageningen Agric. Univ. Papers; 93-4. Wageningen Agricultural University, Wageningen, Netherlands. 157 p.

agricultural research, Benin, farming systems, farming systems development, indigenous knowledge, oil palms, rapid rural appraisal, soil fertility
This case study (thesis) of the responses of the Adja people of South-West Benin towards the changing environment aims at increasing our understanding of what is called Rural People's Knowledge (RPK) and the way it is generated, adapted, and exchanged. Studying the Adjas' concepts related to soil fertility as compared with conventional scientific understanding, leads to new insights in local farming systems. It shows how much can be learned about ways rural people learn, 'make sense' of new ideas by studying in detail their experiments and innovative activities.

Chambers, R. 1992. **Rural appraisal: rapid, relaxed and participatory.** IDS Discussion Paper 311. IDS, University of Sussex, Brighton BN1 9RE, UK. methods, participatory methods, rapid rural appraisal, rural development, social participation, farming systems research
The paper attempts to give a state-of-the-art of PRA development and links practical experiences with more conceptual discussions. After tracing the origin of PRA, it explains how RRA, Rapid Rural Appraisal, became

PRA after realising that interaction with farmers should not primarily aim at extracting information for outsiders' use but directly support farmers in their own development efforts. Although no systematic comparison has been done on the whole range of PRA methods presently available, evidence presented suggests that results of PRA are not less than those of exhaustive studies requiring much higher inputs. Main challenge mentioned is the need to spread the approach while safeguarding quality, without formalising it too much. This will be especially difficult in larger, often bureaucratic, organisations. A very good overview of present experiences and thinking in PRA.

Fliert E van den. 1993. **Integrated pest management: farmer field schools generate sustainable practices: a case study in Central Java evaluating IPM training.** AUW Thesis, Wageningen, Netherlands. In assessing the impact of the Indonesian IPM programme this study clearly establishes the link between the new way of looking at agricultural development and a participatory extension and technology development approach. Farmers are encouraged to more critically observe developments within their farm and actively manage the ecosystem with more room for own experimentation.

Hagmann, J. 1993. **Farmer participatory research in conservation tillage: approach, methods and experiences from an adaptive on-farm trial programme in Zimbabwe.** Paper presented to 4th Annual Scientific Conference of the SADC Land and Water Management Research Programme. An important element in participatory research is developing true partnership between farmers, extensionists and researchers. Intensive joint workshops in the "Training for Transformation" approach are an effective means to achieve such partnership. It further describes the specific experimental design aspects of participatory research in soil conservation.

Holt-Gimenez, E and Cruz Mora, O. 1993 **Farmer-to-farmer: the Ometepe Project in Nicaragua.** In: "Linking with farmers: Networking for Low-External-

Fair for participatory methods 1994 SHARING APPROACHES THAT WORK!

Do you have interesting experiences in promoting, supporting and sustaining participatory work in development cooperation and development research? Would you like to get ideas from other practitioners of participatory methods? Would you like to present a video, slides or posters depicting the methods you have used to enhance participatory appraisal, planning and technology development? Are you interested in giving a short presentation of your work in a discussion forum?

Then come to the Dare-to-Share Fair on 20 (and possibly 21) September 1994 at the Germany Agency for Technical Cooperation (GTZ) headquarters in Eschborn (near Frankfurt), Germany.

We would like to create a lively market forum for lively discussion and exchange of practical experiences, approaches, methods, tools and ideas. People active in work dealing with Participatory Appraisal (PRA, GRAAP, SWAP/SEPO, PALM etc), or related approaches shall have the opportunity to demonstrate their work, discuss it with other specialists and interested visitors and enhance networking for future sharing of promising approaches to research and development.

Rules of the game:

- ▶ Everyone organises (and pays for) his/her own participation in the market fair.
- ▶ Every presentation should "capture" the visitors by being visually stimulating and/or interactive.
- ▶ The GTZ preparation team will give you all the necessary organisational and technical support to make your active participation successful.

For registration please send your proposal for a presentation to:
Uwe Kievelitz or Katja Stille (re: Dare-to-Share Fair), GTZ OE 425,
PO Box 5180, Eschborn, Germany. Fax: +49 6196 797153.

Input Agriculture". ITP 103-105 Southampton Row, London WC1B 4HH, UK. This article systematically describes recent PTD experiences of a project associated with the Campesino a Campesino movement in Nicaragua. It assesses the effectiveness of different methods used in all stages of the process. It emphasises the need for flexibility in supporting farmer experimentation.

Hudson N, Cheatle RJ, Wood A and Gichuki F. 1992. **Working with farmers for better land husbandry.** ITP, 103-105 Southampton Row, London WC1B 4HH, UK. 272 p. ISBN 0 935734 29 5.

soil conservation, water conservation, East Africa, erosion control, participatory technology development, community participation, rangeland management, agroforestry, conservation farming, extension methods, economic aspects social aspects, land tenure, resource management, farming systems research, participatory rural appraisal, institution building, water harvesting

This book contains over 40 (summaries of) papers written for the 1991 workshop "Environment and the Poor" in Kenya. Apart from inventorising existing agro-technical options for better land husbandry these papers cover social and economic aspects (land tenure, cost benefit analysis of village level investment in management of natural resources). The authors give convincing evidence for the need for and potential of a different development approach, with priority to linking with and supporting farmers' efforts. The importance of monitoring and evaluation to accelerate learning from field experiences is emphasised. It finally outlines a training strategy which is crucial if the recommended shift towards a participatory development approach is to become reality.

Koudokpon V (ed.). 1992. **Pour une recherche participative : stratégie et développement d'une approche de recherche avec les paysans au Bénin.** KIT, Mauritskade 63, 1092 AD

Amsterdam, Netherlands. DRA, BP 884, Cotonou, Benin. 96 p. ISBN 90 6832 048 3. Dfl 29.00. agricultural research, Benin, farmers participation, participatory research, research methods

Since the beginning of the 1980s the Agricultural Research Department of Benin is developing new, more participatory, research approaches. This book describes the experiences of the first 5 years of one of its programmes, Recherche Appliquée en Milieu Réel (RAMR). Step-by-step, they developed such an approach within a general conventional research context. The evolution of the RAMR approach from researcher controlled on-farm research to farmer-controlled experimentation is very well documented and analysed and provides important lessons for any other programme working towards a participatory research approach in similar contexts.

Mettrick H. 1993. **Development oriented research in agriculture: an ICRA textbook.** ICRA PO Box 88, 6700 AB Wageningen, Netherlands. 287 p. ISBN 90 73041 16 3. Dfl 50.00.

agricultural extension, agricultural knowledge systems, agricultural research, data collecting, experimenting farmers, farm surveys, farming systems research, indigenous knowledge, on-farm experimentation, participatory rural appraisal, rapid rural appraisal, research programmes This textbook is closely linked to ICRA's annual seven-month course. It describes and analyses all phases of development oriented research: planning, farming systems study, survey methods, data collection and analysis, organisation of field study, on-farm experimentation and the final evaluation. A good overview of the debate on development oriented research, including PTD.

Ofori J, Prein M, Fermin F, Owusu D, Lightfoot C. 1993. **Farmers picture new activities.** In: *ILEIA Newsletter* v.9 no.1 (March 1993). p. 6-7. agricultural extension, aquaculture, farmers participation, Ghana, resource evaluation, rural development, small-scale farming

Quiros CA, Gracia, T and Ashby JA. 1991. **Farmer evaluations of technology: methodology for open-ended evaluation: instructional unit no. 1.** CIAT, AA 6713 Cali Colombia. 92 p. ISBN 958 9183 31 X.

data collecting, farmers participation, methodology, technology assessment
A practical training guide based on the earlier handbook on farmers evaluation by CIAT Colombia.

Raintree, J. n.d. **Farmers and researchers together: observations on the social psychology of information processing in a community-based R&D team.** MS, 21 pp.

Describing the experiences with promoting experimentation with non-innovative communities in the Philippines. It analyses socio-cultural constraints on innovation and information processing by farmers and ways to overcome these.

Scheuermeier, U and Brunold, S. 1993. **Extension in animal husbandry: highlights of a workshop mission to Indo-Swiss Project Andhra Pradesh.** Lindau: LBL. The workshop analysed how PTD activities could fit within the large government extension service for animal husbandry serving over 20,000 villages. The report proposes an institutional arrangement for this, distinguishing between PTD and so called farmer-interactive-extension (FARINEX).

Sikana P. 1993. **Mismatched models: how farmers and scientists see soils.** In: *ILEIA Newsletter* v.9 no.1 (March 1993) p. 15-16

farmer-scientist interaction, soil classification, soil sciences, soil types, Zambia
Peasant farmers describe different kinds of soils and their uses according to categories which do not fit into the classification system of soil scientists. Sikana argues that the scientists - rather than the farmers - will have to change their way of looking at soils.

Stolzenbach A. 1993. **Farmers' experimentation: what are we talking about?** In: *ILEIA Newsletter* v.9 no.1 (March 1993) p. 28-29

experimenting farmers, Mali, on-farm experimentation
Farmers' experimentation is allotted great importance in Participatory Technology Development. This article reports the results of a study on how farmers in Mali perceive their experimental work, how they are changing their agriculture, how they learn.

FURTHER PUBLICATIONS

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- ▶ Alforja. n.d. **Técnicas participativas para la educación popular.** Centro de Estudios y Publicaciones. ALFORJA, Apartado 369, San Jose, Costa Rica.
- ▶ Baker, D. 1991. **Reorientation, not Reversal: African Farmer-based experimentation.** In: *Journal of Farming Systems Research-Extension*, vol. 2(1), pp 25-47
- ▶ Biggs, S. and Pound, B. 1992. **Farmers' Participatory Research: a review of Farm Africa's Project in Ethiopia.** ODG, University of East Anglia/NRI, Central Ave, Chatham Maritime, Kent ME4 4TB, UK.
- ▶ Boef, W de, Amanor, K and Wellard, K. 1993. **Cultivating knowledge: genetic diversity, farmer experimentation and crop research.** ITP, 103-105 Southampton Row, London WC1B 4HH, UK. 206 pp.
- ▶ Cernea, L. 1993. **Maguugmad's experiences in SWC-AF program implementation.** Paper presented at the Regional Expert Consultation on Agroforestry and Community Forestry Curriculum Development, Chiang-Mai, Thailand.
- ▶ Chambers, R. 1992. **Some sources on rapid, relaxed and participatory rural appraisal.** IDS, University of Sussex, Brighton BN1 9RE, UK.
- ▶ CIAT, 1991. **Institutionalizing local leadership for farmer participation in agricultural technology generation and extension.** Report of a special project. CIAT, AA 6713, Cali, Colombia
- ▶ Defoer, T Erenstein, O Husein, SS. 1992. **From consultative to collaborative on-farm experimentation in the agricultural development programme in Northern Pakistan.** ADP Programme, Pata Irrigation Project, Peshawar, Pakistan.
- ▶ Drinkwater, M. 1992. **Central issues for farmer participation in adaptive research in Zambia.** Paper adapted from a document prepared for Adaptive Research Planning Team Workshop, Kasama, Kabwe National Research Station, Zambia.
- ▶ Dupré, G (ed). 1991. **Savoirs paysans et développement.** Paris: ORSTOM/Karthala.
- ▶ Dupriez, H and Mapatano, M. 1992. **Le savoir paysan: un réservoir bien plein.** ADI-KIVU (Actions pour le Développement Intégré au Kivu) Zaire.
- ▶ Floquet, A and Mongbo, R. 1992. **Pour une autogestion durable des ressources naturelles: le diagnostic concerté des modes de gestion des ressources naturelles (R.R.A.): première étape d'une stratégie de sensibilisation des populations rurales et des intervenants en matière environnementale.** Eschborn: GTZ/-CEBEDES.
- ▶ Floquet, A. and Mongbo, R. 1993. **Demarche de diagnostic rapid: experiences de participation au Benin.** Les Cahiers de la Recherche-Development 36, pp 49-60. CIRAD-SAR, PO Box 5035, Montpellier Cedex 34032, France.
- ▶ Gibberd, V. 1993. **Final Report on the EMI and DARP [Dryland Applied Research and Development] Projects.** NRI, Central Ave, Chatham Maritime, Kent ME4 4TB, UK.
- ▶ Gnägi, A. 1992. **Elaboration participative de technologies: développement d'une méthode à partir de l'exemple de la technologie apicole locale dans l'arrondissement de Ouélessébougou, Mali.** Berne: Inst. of Ethnology.
- ▶ George, J, Bebbington, A, Kpeglo, K and Gordon, A. 1992. **Sustainable agriculture and village extension project: a mid-term evaluation.** Draft report submitted to CARE, Sierra Leone.



- Heinrich, G.M. 1993. **Strengthening farmer participation through groups: experiences and lessons from Botswana**. OFCOR Discussion Paper No. 3, ISNAR, The Hague, Netherlands.
- Harder, M. 1991. **Launching a self-evaluation process in farmer organizations**. National Development Foundation, Sri Lanka, and Intercooperation Self-Help Support Programme, Bern, Switzerland.
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- Ndufa, JK, Ohlsson, E, Shepherd, KD. 1992. **Participatory research methods for agro-forestry technology development in Western Kenya**. 12th Annual Farming Systems Symposium, Michigan, USA.
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participatory research, on-farm experimentation, farmer-scientist interaction
- ICLARM. 1991. **Pictorial modelling: a farmer participatory method for modelling biore-source flows in farming systems**. ICLARM, MC PO Box 2601, Makati, Metro Manila 0718, Philippines. 24 min (PAL).
aquaculture, fish ponds, human nutrition, Malawi subhumid zone
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participatory research, women's participation, rural women, on-farm experimentation, pest control, cowpeas, plant breeding, pest resistance, watersheds, genetic diversity, plant protection, traditional varieties, India semiarid zone
- Intercooperation Sri Lanka. 1993. **We could do what we never thought we could. PRA Training in Sri Lanka Dry Zone**. (VHS). Intercooperation, 92/2 Senanayake Mawatha, Colombo 8, Sri Lanka.
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community forestry, community self-management, development projects, farmers, forestry policies, participatory methods, reforestation, social participation, villages, senegal, farmers participation, semiarid zone

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