Manor, James, Power, Poverty and Poison: Disaster and Response in an Indian City (New Delhi: Sage, 1993). Martin, Stephen, Journal of Economic Theory, Vol. 59, No.

2 (1993), pp. 445-450

Seers, Dudley, "Why visiting economists fail," Journal of Political Economy, Vol. 70, No. 4 (1962), pp.

Straka, John W., "Is poor worker morale costly to firms?" Industrial and Labor Relations Review, Vol. 46, No. 2 (January 1993), pp. 381-394.

Toye, John, "Tax reform in developing countries,"

Cambridge Journal of Economics, Vol. 13, No. 1 (March 1989).

Wade, Robert, Governing the Market: Economic Theory and the Role of Government in East Asia's Industrialization (Princeton: Princeton University Press. 1990)

White, Gordon (Ed.), The Chinese State in the Era of Economic Reform: The Road to Crisis (London: Macmillan, 1991).

Waller, M.A., Journal of the Operational Research Society,

Vol. 44, No. 2 (1993).

LIBRARY IRC PO Box 93190, 2509 AD THE HAGUE Tel.: +31 70 30 689 80

Fax: +31 70 35 899 64

BARCODE: 16930

Pergamon

World Development, Vol. 22, No. 10, pp. 1437-1454, 1994 Converght © 1994 Elsevier Science Ltd Printed in Great Britain. All rights reserved $0305 - 750 \times 794 \$7.00 + 0.00$

125 94PA

0305-750X(94)00066-2

Participatory Rural Appraisal (PRA): Challenges, Potentials and Paradigm*

IRC International via: and Sanitalian Conins Tel.: +31 70 89 236

ROBERT CHAMBERS†

Institute of Development Studies, Brighton. U.K.

Summary. - Much of the spread of participatory rural appraisal (PRA) as an emerging family of approaches and methods has been lateral, South-South, through experiential learning and changes in behavior, with different local applications. Rapid spread has made quality assurance a concern, with dangers from "instant fashion", rushing, formalism and ruts. Promising potentials include farmers' own farming systems research, alternatives to questionnaire surveys, monitoring, evaluation and lateral spread by local people, empowerment of the poorer and weaker, and policy review. Changes in personal behavior and attitudes, and in organizational cultures, are implied. PRA parallels and resonates with paradigm shifts in the social and natural sciences, business management, and development thinking, supporting decentralization, local diversity, and personal responsibility.

1. INTRODUCTION

The term Participatory Rural Appraisal (PRA) (Mascarenhas et al., 1991) is being used to describe a growing family of approaches and methods to enable local people to share, enhance and analyze their knowledge of life and conditions, to plan and to act, PRA flows from and owes much to the traditions and methods of participatory research (e.g., Freire, 1968). applied anthropology, and field research on farming systems (Gilbert, Norman and Winch, 1980; Shaper, Philipp and Schmehl, 1982), and has evolved most directly from a synthesis of agroecosystem analysis (Gypmantasiri et al., 1980; Conway, 1985, 1986, 1987) and rapid rural appraisal (RRA) (Agricultural Administration, 1981; Longhurst, 1981; KKU, 1987).

PRA shares some of its principles with RRA: direct learning from local people, offsetting biases, optimizing tradeoffs, triangulating, and seeking diversity. To these it adds its own principles which concern the behavior of outsiders: facilitating analysis by local people; practicing critical self-awareness and responsibility; and sharing. RRA and PRA are compared in Table 1. A major contrast is that in RRA information is more elicited and extracted by outsiders, while in PRA it is more owned and shared by local people.

Some of the more developed and tested methods of PRA are participatory mapping and modeling, transect walks, matrix scoring, well-being grouping and ranking, institutional diagramming, seasonal calendars, trend and change analysis, and analytical diagramming, all undertaken by local people. Modes of investigation, sharing and analysis are open-ended, and often visual, by groups of people, and through comparisons. Among many applications (RRA Notes passim) PRA has been used in natural resources management (soil and water conservation, forestry, fisheries, wildlife, community planning, etc.), programs for women and the poor, agriculture, health and food security.

PRA has evolved and spread from beginnings in Ethiopia, India, Kenya, Sudan and elsewhere, and in early 1994 is known to be being quite widely practiced in parts of Bangladesh, Botswana, Ethiopia, francophone West Africa, India, Indonesia, Kenya, Nepal, Nigeria, Pakistan, the Philippines, Sri Lanka, Sudan, Uganda, Vietnam, and Zimbabwe, while starts have been made in at least a score of other countries in Latin America, Africa and Asia, Hundreds of nongovernment organizations (NGOs) have adopted PRA and developed applications, as have a number of government departments. The use of PRA methods is being increasingly explored by students and faculty in universities for research, and by training institutes for fieldwork. Spread appears to be accelerating.

This article reviews practical and theoretical questions raised as this spread occurs both internationally. within countries and within organizations. While this

^{*}This paper is the third in a three-part series examining participatory rural appraisal. The first and second papers appeared in the July and September 1994 issues, respec-

[†]Final revision accepted: February 23, 1994.

Table 1. RRA and PRA compared

	RRA	PRA
Period of major development	Late 1970s, 1980s	Late 1980s, 1990s
Major innovators based in	Universities	NGOs
Main users	Aid agencies	NGOs
	Universities	Government field organizations
Key resource earlier overlooked	Local people's knowledge	Local people's capabilities
Main innovation	Methods	Behavior
Predominant mode	Extractive-elicitive	Facilitating-participatory
Ideal objectives	Learning by outsiders	Empowerment of local people
Outcomes sought	Useful information, reports, plans, projects	Sustainable local action and institutions

may be timely, it has also to be tentative and to rely on the writer's personal experience and judgement. PRA approaches and methods will be examined in terms of how they have spread, quality assurance, dangers, potentials and strategies, and finally paradigmatic significance.¹

2. HOW PRA HAS SPREAD

The way PRA has spread can be analyzed in terms of three basic components and in terms of modes and media.

(a) Spread stressing basic components of PRA

The three basic components of PRA (Mascarenhas et al., 1991, p. 35a) have been identified as methods, behavior and attitudes, and sharing. Their significance has been recognized and stressed in that sequence.

The first basic to be recognized was participatory methods to facilitate analysis by rural people. Some methods were adaptations of those already widely used in RRA, such as semi-structured interviewing and focus groups. Others such as participatory mapping and matrix scoring were new: local people now did what before outsiders had done, and had often believed that only they could do.

In RRA and initially in PRA, training stressed the correct performance of the methods. Manuals, guides and sourcebooks (e.g., McCracken, Pretty and Conway, 1988; PID and NES, 1989; Gueye and Freudenberger, 1990, 1991; Theis and Grady, 1991; Campbell and Gill, 1991) covered approaches from a more extractive-elicitive RRA style to a more participatory-empowering PRA style. They also varied in the degree of formality or flexibility implied, from a set stepwise sequence specialized for the preparation of a Village Resource Management Plan (PID and NES, 1991) to the open-ended listing of a menu with commentary (Campbell and Gill, 1991).

Methods have provided a professionally acceptable point of entry for the spread of PRA. PRA meth-

ods which generate figures, matrices and tables can be immediately attractive. Mearns et al. (1992) found in Mongolia that wealth ranking was useful in this context as part of a "hidden agenda" by giving "every appearance of being the kind of 'hard' statistical method that Mongolian researchers and bureaucrats, like their counterparts in many parts of the world, have been professionally socialised to use and expect" (p. 37). Similarly, matrix scoring for varieties of a crop provides not only fascinating and useful information and insights (see e.g., The Women of Sangams, Pastapur and Pimbert, 1991; Drinkwater, 1993) but also good-looking tables with figures. Scientists and others, can be so impressed by farmers' criteria, judgements and abilities as demonstrated in matrix scoring that they go on from this method to others, and progressively become more participatory in their approach.

Increasingly in PRA, a second basic came to be seen as the behavior and attitudes of outsiders. For local people confidently and capably to express their own knowledge, to conduct their own analysis, and to assert their own priorities, outsiders had to step off their pedestals, sit down, "hand over the stick," and listen and learn. Such behavior conflicts with much normal professional conditioning and self-esteem. In the field, most outsiders find it difficult to keep quiet, to avoid interrupting, to abstain from criticism, to refrain from putting forward their own ideas. In line with this recognition, field experience training came to stress changes in how outsiders behave. Kumar (1991), a leading trainer in the Indian Government service, placed his main emphasis on behavior and attitudes. He made the counterintuitive discovery that outsiders with less briefing about the methods were more successful as facilitators than those who were more fully briefed. To tackle the problem of behavior in the field, Anil Shah, of the Aga Khan Rural Support Programme (India) invented "shoulder tapping" (Shah, 1991) as a corrective. This is a contract between outsiders to tap the shoulder of any colleague who criticizes, asks a leading question, or puts forward his or her own ideas.

The most powerful and immediate change in

behavior and attitudes has been through DIY (do-it-yourself). This entails requesting local people to be teachers, while the outsiders are students who are taught to do a local task such as winnowing grain, mudding a wall, thatching, spreading manure, weeding, transplanting, washing clothes, cooking, or fetching wood or water. In a refinement developed by Kamal Kar in India, the outsiders are videoed with subsequent viewing and discussion of a playback both to them and to villagers. The impact can be strong, both personally for outsiders, and in establishing rapport between outsiders and villagers.

These shifts of emphasis have found expression in the content and style of training (Table 2). Didactic training has taken longer, and has been mainly in the classroom; experiential learning has taken less time, and has been mainly in the field, and especially staying or camping in villages. As behavior and attitudes have come to be recognized as crucial, so field experiential learning has become more prominent.

The third basic in the philosophy and practice of PRA came to be recognized as *sharing*. For practitioners and trainers this has become increasingly a conscious strategy and mode of spread. It has two dimensions: sharing knowledge and sharing experience.

Sharing knowledge takes three main forms:

 Local people share knowledge among themselves, especially through analysis in groups and visual presentations.

— Local people share that knowledge with outsiders. As a condition for facilitating this process, outsiders restrain themselves from putting forward their own ideas, at least at first, or imposing their own reality.

— Outsiders themselves share what they learn with each other and with local people.

In this spirit, the emerging philosophy of PRA has stressed open access to information and avoiding professional possessiveness. RRA Notes, which disseminates recent experience in PRA, has been free on request, and has invited readers to photocopy and dis-

tribute photocopies. Outsiders have been encouraged not to own ideas or methods but to make them open access common property. Putting local people first has been stressed: local mappers and analysts have been given professional recognition through recording their names on their maps and diagrams, and through their contributions to professional work (see e.g., The Women of Sangams, Pastrapur and Michel Pimbert, 1991; Chidhari et al., 1992).

The sharing of PRA experience has been between individuals, organizations, countries and continents. Some of this has flowed from NGOs in India such as ActionAid, AKRSP, MYRADA, OUTREACH, Seva Bharati, and SPEECH which have established, maintained and disseminated this culture of sharing. Village camps have been made open to people from other organizations. Quite often, a training camp organized by an NGO has included not just its own staff but also people from other NGOs, from government and from other local communities. Sharing of experience has then been part of the rationale and culture of the camp: beyond the sharing of information by villagers, presenting it to each other and to outsiders, the aim has been sharing among outsiders and between them and villagers of daily experience, food, and sometimes celebration, and sharing among outsiders of learning through self-critical appraisal of process.

Some international sharing South—South has been in the same spirit. In early 1992, three Indian NGOs — ActionAid, AKRSP and MYRADA — hosted the first international PRA field workshop to which participants came from 11 other countries of the South Starting in 1990, trainer/facilitators from the South have traveled to other countries and conducted field learning workshops. By early 1994 trainer/facilitators had gone from at least five countries in the South — India, Kenya, Senegal, Sri Lanka and Zimbabwe — to conduct PRA workshops in other countries both in the South including Bangladesh, Botswana, Ethiopia, Ghana, Indonesia, Lesotho, Malaysia, the Philippines, South Africa, Tanzania, Uganda, Vietnam, Zambia

Table 2. RRA and PRA: Contrasts in training

	Didactic (more RRA)	Experiential (more PRA)
Aim Duration Style Source of learning Location Learning experience Good performance seen to	Learn methods Longer (weeks) Classroom then practice Manuals, lectures More in the classroom Intermittent Intellectual Stepwise and correct application	Change behavior and attitudes Shorter (days) Practice then reflection Trials, experiences More in the field Continuous Experiential Flexible choice, adaptation and
be through	of rules	impro

Source: Chambers (1993a), p. 99.

and Zimbabwe, and also in the North, including Bulgaria, Canada, Denmark, Finland, Norway, Sweden, Switzerland and the United Kingdom.

(b) Modes of spread

Most programs in government, and many in large NGOs, are spread vertically, from the top-down, through central decision-making, official instructions, and formal training. In government, obvious examples include programs in health, water, irrigation, forestry, soil and water conservation, credit, and integrated rural development. In agriculture an example is the Training and Visit system for agricultural extension.

The spread of PRA, in contrast, has been lateral more than vertical, personal more than official, and experiential more than didactic. Unlike Farming Systems Research, it has not required substantial special funding for special units or departments. It appears to have been adopted, adapted and developed because it has been seen to fulfill a need. High-level support in large organizations has been a predisposing condition for adoption, but not in itself enough: where staff have been instructed from above to use PRA, performance has been patchy. Classroom teaching has also not worked well. PRA has been internalized much more through personal choice and field experience than through official requirement or formal teaching.

Empirically, the manner in which PRA has spread can be described under four headings:

Through field learning experience: Field learning experiences, camping or staying in villages, or very close by, have proved powerful and popular. The Sustainable Agriculture Programme of the International Institute for Environment and Development (IIED), London, has facilitated over 30 such workshops in at least 15 countries. The World Resources Institute has been active in Latin America. In India at least a dozen NGOs had by early 1994 provided such experience. Not uncommonly, after three to 10 days of a field learning experience with villagers, a participant has left and started to train and spread PRA in her or his own organization and area.

Through a light touch: A short workshop, from as brief as an hour or two to as long as a day or two, has familiarized participants with some basics. A few people have then started using PRA methods, learning as they went. In one instance, two senior staff of Samakhya, a large NGO in Andhra Pradesh in India, saw slides of participatory mapping and of "handing over the stick" (symbolically passing authority and initiative to others), and immediately adopted these in their procedure for forming new cooperatives. In other cases, after a brief work-

shop, senior officials have decided to permit, encourage and support PRA in their organizations, enabling members of their staff who were so inclined to adopt PRA approaches and methods.

—By villagers — lateral and bottom-up: In the lateral mode, villagers who have gained experience with PRA have themselves become trainer/facilitators. Such lateral transfer to other villages and villagers is documented for AKRSP in Gujarat (Shah et al., 1991a). Village volunteers familiar with PRA approaches and methods have become consultants to facilitate PRA in other villages.

In the bottom-up mode, villagers train outsiders or present their analysis to them. With the AKRSP in India, villagers have become trainers for NGO staff (Parmesh Shah, personal communication). With MYRADA in India, farmers presented slides of their technology to a high-ranking committee in Bangalore and to a workshop in ICRISAT (the International Crops Research Institute for the Semi-Arid Tropics). In other countries, such reverse transfer of PRA experience and analyses has been from village to capital city. In Sri Lanka in January 1992, in Botswana in June 1992, and in Bangladesh in January 1993, villagers first conducted and presented their own analyses in their villages. They were then invited as consultants to present their maps, models, matrices, institutional diagrams, well-heing rankings, seasonal calendars and other analyses to senior people in, respectively, Colombo, Gaborone and Dhaka. In Colombo and Dhaka, a video of the village process contributed to the impact on capital city skeptics. In Dhaka, the villagers, women and men, formed a panel and answered searching questions with confidence and conviction.

— Through dissemination materials: Dissemination materials have played a big part, especially RRA Notes (1-18 continuing) distributed free by IIED, and a handful of videos, among which MYRADA's Garuda-Kempanahalli: A Participant's Diary of a PRA Exercise (1990), Michel Pimbert's Participatory Research with Women Farmers (1991), and the Sri Lanka Self-Help Support Programme's We Could Do What We Never Thought We Could have been influential. The multiplication and distribution of slides has also been significant. The visual nature of much PRA analysis has lent itself to visual forms of dissemination.

There remains the question why PRA, despite the changes in behavior and attitudes entailed, has developed and spread so fast. Among many factors, some stand out. As communications have improved in much of the world, new ways of doing things have been learned about more quickly. The sort of open institutional culture in which PRA has evolved and thrived has become commoner among NGOs. Openended-

ness has encouraged rapid innovation. The practicality of applications has contributed to the momentum. PRA, has, moreover, usually proved enjoyable and generated rapport. The information and insights which flow from it have often been diverse, detailed, complex, accurate, interesting and useful, and shared in a short time. Again and again, PRA has proved both powerful and popular. With all these factors operating, it is less surprising that its spread has been rapid.

3. DEALING WITH DANGERS

Rapid spread has brought dangers. Like any other newly labeled approach to development, PRA faces dangers and is vulnerable.

In an earlier draft of this article, the first danger was listed as rejection, especially by academics. But professional attitudes are changing rapidly. Social anthropologists, for example, have been increasingly open to adopting and adapting PRA methods. Perhaps some academics who are firmly wedded to conventional questionnaire surveys will not wish to change horses in the midstream of their teaching and research careers, but, to mix the metaphors, the student tail may wag the teacher dog, as students demand to use RRA and PRA methods for their research.

Four dangers remain as concerns expressed by practitioners and trainers. They stem not from rejection but from rapid or rigid adoption.

The first is "instant fashion." As happened at one stage with farming systems research, RRA and PRA are vulnerable to discrediting by overrapid promotion and adoption, followed by misuse, and by sticking on labels without substance. The hardened development professional who knows how to vary vocabulary to fit fashion will replace questionnaires or "RRA" in project documents with "PRA," but may not know or care about what it entails, "PRA" may be used to legitimate the very approaches and methods PRA practitioners have sought to replace. The PRA label has been stuck on questionnaires: a recent publication on rapid urban environmental assessment (Leitman, 1993) opens its section on methodology with the words: "In the same spirit as rapid and participatory rural appraisal . . . an urban environmental indicators questionnaire was designed..." Yet conventional questionnaires are one of the methods which RRA and PRA have sought to avoid and improve on. In early 1994, the warning signs of instant fashion are evident: demand for training which exceeds the small cadre of competent trainers; requirements that consultants who were once to "use RRA" now "use PRA"; consultants who say they will do so, when they lack the experience and orientation; the belief that good RRA or PRA are simple and easy, quick fixes, which they are not; and a failure to recognize that most of the experienced and skilled practitioners are from the South and in the South, not

from the North or in the North. The practical implication is a caveat to donors and policy makers to proceed in a measured manner, not to request or require PRA immediately and everywhere, and to recruit expertise in the South.

A second danger is rushing. The word "rapid" was needed in the late 1970s and early 1980s to offset the long drawn-out learning of traditional social anthropology and counter that of large-scale questionnaire surveys. But by the late 1980s "rapid" had become a liability. It has been used to legitimize brash and biased rural development tourism (the brief rural visit by the urban-based professional). Hurried rural visits, insensitivity to social context, and lack of commitment compound errors, and can mean that the poorest are, once again, neither seen, listened to, nor learnt from. Misleading findings then follow. Pottier's critique (1992) of hurried farmer interviews conducted in Northern Zambia warns of such error. Van Steijn's review (1991) of RRAs conducted by NGOs in the Philippines similarly points to quite widespread practices of low quality. Rapid often means wrong.

To offset this danger has been found to require care, patience and planning to have plenty of time. Much of the rationale for RRA/PRA has been to make time to find the poorest, to learn from them, and to empower them. Sensitive behavior and treating time as plentiful have proved to be crucial. It has been suggested that the first R of RRA and the middle R of PRA would better be "relaxed" than "rapid."

A third danger is formalism. In the long term, this may prove the most difficult problem. With any innovation, there is an urge to standardize and codify, often in the name of quality. Manuals are called for and composed. They can indeed be useful as compilations of ideas and experience, as handbooks that widen choice of methods and applications, and as sources of tips and techniques, both for field practitioners and for trainers. But manuals also inhibit and intimidate. With any new approach or method, they are short to start with but grow fast. Paragraphs proliferate as intelligent authors seek to cater for every condition and contingency. Some farming systems research gave rise to manuals the weights and volume of which was itself a problem. The four volumes of Farming Systems Support Project Manuals (FSSP, 1987) weigh approximately 3.6 kg. The dangers are evident. As the text lengthens, training is prolonged. More time is spent in the classroom teaching the theory and less in the field learning the practice. Spontaneity is lost and spread slowed, stopped or reversed.

The lesson has been for practitioners to learn in the field, through experience, feeling free to start taking responsibility for what they do, making mistakes, and learning on the run. It has been not books of instructions, but personal commitment, critical awareness, and informed improvisation, which have best assured quality and creativity.

ods. The report concluded (NCAER, 1993, p. 92): villages as against only 10 with the RRA/PRA meth-The sample survey with questionnaires covered 120 (Maharashtra) level for some, but not all, variables. and also some fairly good ratio estimates for the state tative as well as qualitative data at the village level, were then found to generate valid and reliable quantiwere trained by Joseph in RRA/PRA methods. These (Chaudhari, 1993; NCAER, 1993). NCAER staff to a conventional sample survey using questionnaires RRA/PRA methods as an alternative or complement Survey, has undertaken a research project to test nization in India apart from the National Sample Economic Research, probably the largest survey orgaincluding assets. The National Council of Applied ate, have used cards to record household information, conditions.3 Local people, nonliterate as well as liter-

the (sample survey) approach. relatively smaller sample than normally required in the set for generation of regional/state level parameters with in the number of RRA/PRA villages can provide a data ... It is perhaps conceivable that an appreciable increase

Participatory methods have also been used as alternutrition insecure (Haddad, Chung and Devi, 1993). ject on alternative approaches to locating the food and energy use), and seasonal calendars, as part of a procharts for food and women's activities (time use, and recording visual analyses by villagers, using mapping, dures, schedules and routines for facilitating and ICRISAT have been developing and testing procegram (Khan, 1993). In India again, IFPRI and identify target groups for a nonformal education protested participatory mapping as an alternative way to sonal communication). In Bangladesh, BRAC has 38,000 people for this purpose (Humera Malik, per-ActionAid staff have facilitated well-being ranking of poorer with whom they seek to work; in Pakistan, MYRADA and ActionAid in India to identify the well-being ranking has been used for this purpose by instead of questionnaires to identify target groups: Participatory methods have been used increasingly

group activities. The information was collated by the various agricultural practices, and participation in cation and health, the use of pit latrines, adoption of information including utilization of services for eduvillage. This presented a differentiated census, and information covering the whole population of each were reported made in about 130 villages, giving vey for services. Problems were encountered but maps patory mapping as a basic method for a utilization sur-ActionAid staff (ActionAid, 1992) facilitated partici-1991b; Shah, 1993a). In Mepal, in September 1991, measures and yields (Shah, Bhardwaj and Ambastha, used them for monitoring soil and water conservation unteers have retained the maps made by villagers and tion. In some AKRSP villages in Gujarat, village volnatives to questionnaires in monitoring and evalua-

> naire surveys. for some professionals still, rural research is question-1978). Nevertheless, such surveys persist. Moreover, gling and weighing multiple causality (Chambers, of finding comparable control areas, and of disentantural (what would have happened without the project), in subsequent surveys, of assessing the counterfacbaseline, of quality control, of ensuring comparability often unforeseen or underestimated at the time of the worth the cost. The reasons include the difficulties, scarce that such baseline surveys have been useful or progress can be monitored and evaluated. Evidence is baseline surveys for projects, in the hope that later largest customers have been donor agencies requiring spread and sustainable of rural industries. Among the longitudinal studies, remain one of the most wideveys, whether for one-off ad hoc investigations or for 1991, 1992; Gill, 1993), large-scale questionnaire sur-1979; Hill, 1986; Bleck, 1987; Daane, 1987; Inglis, e.g., Moris, 1970; Campbell, Shrestha and Stone,

institutes. Above all, until recently, they have lacked employed for years on temporary terms by research and salaries for the field investigators who have been less than congenial. They provide continuing work for whom too intimate exposure to the field would be to central computers. They protect those senior staff standing. They reliably feed commensurable numbers donors find in them a common language and under-Academics, officials, researchers, consultants and as mode of investigation is not difficult to explain. The sustainability of large questionnaire surveys

methods now present alternatives in two dimensions. The evidence is accumulating that participatory serious competition.

The second dimension has been the generation of pret change and causality. accurate, and can from their personal experience interare usually committed to getting detail complete and triangulation and crosschecking; and local analysts ods, in contrast, present a plurality of methods, with dimly discerned, if at all. PRA approaches and methbe poorly motivated; and complex causality can be but application, both local people and enumerators tend to only a single, peculiarly fallible, method; in their ism of information and analysis. Questionnaires are The first dimension is in depth, richness and real-

Sam Joseph of ActionAid, Bangalore, was able when In India, a leading PRA practitioner and trainer, ticipatory mapping and well-being ranking. and surveys based upon PRA methods such as parand Vigeria come evidence and examples of censuses numbers. From India, Nepal, Bangladesh, Pakistan

other symbols to present different sorts of people and using different seeds, colours, stones, vegetables or ground have been used to present demographic data, survey. In practice, participatory maps made on the obtaining all the items of data in a standard baseline challenged to specify an alternative PRA method for

> methods are still in an early stage of development. scientists' time (Chambers and Jiggins, 1986) but its

of innovation has been rapid, and much that has taken enable farmers to conduct their own analysis. The rate change diagramming have also been facilitated to ping and modeling, seasonal calendars, and trend and them (Chambers, 1993b, p. 95). Participatory mapthey would like extension and scientists to provide for variety in which farmers specified the characteristics crop was developed by asking analysts to add a "wish" Botswana in 1992, matrix scoring for varieties of a Velayudham and Shunmugavalli, 1993). In India and to change their research priorities (Manoharan, learn farmers' preference for red over white rice, and methods, including matrix scoring, led scienusts to Pretty, 1992). In Tamil Nadu, India, in 1992 PRA grams for their farms and livelihoods (Guijt and literate as well as literate, drew flow and linkage diaa PRA field training exercise, women and men, non-(Drinkwater, 1993, p. 24). In Pakistan in carly 1992 in finger millet than they knew at the beginning" and researchers, had learned a great deal more about which "by the end of the session, all present, farmers for varieties of millet was the core of a process in Ofoni et al., 1993). In Zambia in 1991, matrix scoring Guijt and Pretty, 1992; Lightfoot and Noble, 1993; ground and on paper (Lightfoot and Minnick, 1991; in their farming systems by diagramming on the sented and analyzed nutrient flows and other linkages Chana, India, Malawi, and Pakistan farmers have pre-Comwall, Guijt and Welboum, 1993). In Bangladesh, Paliniswamy et al., 1992; Vijayraghavan et al., 1992; Mascarenhas et al., 1991; Guift and Pretty, 1992; Quiros and Rivers, 1989; Lightfoot et al., 1989; has been normal professional belief (see e.g., Ashby, greater capabilities for diagramming and analysis than Team at IIED, and others has shown that farmers have ICLARM, the Sustainable Agriculture Programme Jacqueline Ashby of CIAT, Clive Lightfoot of India (see e.g., Mascarenhas et al., 1991), and by Pioneering work by many of those working in

Chambers, 1993). will be little short of revolutionary (Pretty and tures in agricultural education, research and extension procedures, training, rewards and institutional cultinue to be successful, the implications for activities, and priorities known to scientists. If such efforts coners do their own analysis and make their own needs seminate such approaches and methods to help farm-The challenge now is to further develop and displace has probably remained unreported.

(b) Participatory alternatives to questionnaire

often high costs, errors, delays and other defects (see Despite repeated exposure and criticism of their

> strength of PRA. That spirit has been nurtured through standy trying to improve have been part of the experimenting, inventing, testing, adapting and consequences of methods for specific purposes. But even desirable. For example, there is a logic in certain Some routinization and repetition are inevitable, varying standard practices, overlooking other options. or even region, have shown signs of slipping into unple, and the like. But practitioners in any organization, ranking and scoring, identifying special groups of peotransects, walks, seasonal analysis, group interviews, ways of doing participatory mapping and modeling, trainers into regular habits. There are many different ing up and spread, repetition leads practitioners and A final danger is routinisation and ruts. With scal-

Together, these four dangers threaten the quality of sharing of methods, experiences, and ideas, especially nizations, countries and continents, and through open exchanges of trainers and practitioners between orga-

and through personal critical awareness, trying to do quality control but from internal quality assurance, Good performance would come then not from external then where it is adopted, practice should improve. if these are part of the "genes" of PRA as it spreads, responsibility). The working hypothesis has been that best judgement at all times" (stressing personal as opportunities for learning), and "using your own "embracing error" (welcoming and sharing mistakes lagers can map, model, rank, score and so on), lagers), "they can do it" (having confidence that vil-"handing over the stick" (passing the initiative to vility can be assured by stressing changes in behavior, about PRA the question has been raised whether qualspread, so it may degenerate. In strategic discussions PRA as it spreads. As PRA becomes more wide-

4. POTENTIALS AND CHALLENGES

considered under seven heads. Potentials and challenges presented by PRA can be

(a) Beyond farming systems research (FSR)

analysis. This is potentially parsimonious in the use of toward involving farmers to undertake their own (Chambers, Pacey and Thrupp, 1989) have moved ogy development (ILEIA, 1991) and farmer first Farrington and Martin, 1988), participatory technolfarmer participatory research (Farmington, 1988; as farmer-back-to-farmer (Rhoades and Booth, 1982), the South. Participatory approaches known variously many farming systems, especially rainfed farming in of the diversity, complexity and uncontrollability of Farming systems research faces problems because

ActionAid teams and presented in conventional tables. In Bangladesh, participatory mapping has been facilitated similarly by CARE to enable women to present and assess changes resulting from a Women's Development Project (Vigoda, 1993). Also in Bangladesh, trials were conducted in 1993 as part of a joint project of BRAC and the International Centre for Diarrhoeal Disease Research to test and develop participatory methods to assess change in health and women's lives in Matlab Thana (Adams, Roy and Mahbub, 1993).

In Nigeria, the late Selina Adjebeng-Asem of Obafemi Awolowo University, Ife-Ife, reported (personal communication, July 1992) on the application of PRA methods in monitoring a soyabean project:

I trained the . . . Soyabean project group in the use of PRA for monitoring of the project impact in five states of the Federation i.e. Kaduna, Niger, Enugu, Anambra and Oyo States of Nigeria. The group of 16 researchers were amazed about how much easier it is to obtain indepth information through participatory mapping in addition to other RRA techniques they have already known. We were able through mapping to obtain all relevant sociodemographic information we required for the project; for example, the number of households in a village, households involved in soyabean production, gender issues in soyabean production, utilization of soyabean, and preference rankings of various soyabean diets . . . We gathered an incredible amount of information within an hour and a half visit to the village . . . The researchers have been begging me to give more training in PRA . . .

In cases such as this, PRA methods, used well, have proved not only more cost-effective than question-naire surveys; they have also proved more popular with all concerned, researchers and local people alike; and repeatedly villagers have said that they had not realized they could make such maps, that they have learned from the process, and that they now see things differently.

There remains the problem of comparability. The central need for commensurability can conflict with local diversity: this was faced by the ActionAid teams in Nepal, who had to invest time and effort in "gap filling" after central analysis had taken place, concluding that analysis itself would be better decentralized. Comparability of information shared in different contexts may become a big question in the 1990s. Decentralized and democratic processes tend to generate disparate data which central planners cannot then easily add up or compare. More remains to be learned about how and how well PRA methods can generate commensurable data (for example demographic, health and agricultural information) from different places; and to what extent central planners and officials can tolerate and manage incommensurability, and variability in the form of locally shared information and locally generated plans.

Conventional questionnaire surveys are then not

the only means of generating quantified social data. In many contexts, for the data-gathering purposes of outsiders, participatory methods now provide substitutes or complements to them, using various protocols or schedules for recording and standardization. Participatory mapping, seasonal calendars, trend and change analysis, well-being ranking, matrix scoring, impact diagramming, and innovations such as visual interactive questionnaires (Shah, 1993b) present alternatives to questionnaires. On the evidence available by early 1994, such participatory methods have shown advantages. When well facilitated, they have so far proved cheaper and quicker; in their comparison of a questionnaire survey approach to identifying economic status in a community of 412 households with a participatory wealth ranking approach, a team in South India found the questionnaire cost seven times as much (7,111 rupees against 1,011 rupees) and took eight times as much staff time (776 hours to 96 hours), besides giving less valid results (Rajaratnam et al., 1993, pp. 20, 36). Participatory mapping can also eliminate laborious household and respondent sampling and sampling errors by covering the whole population of a community. Participatory methods have improved accuracy through cumulative presentation, crosschecking and analysis. They have entailed sharing rather than straight extraction of data, and to varying degrees fun, interest, learning and empowerment. Given the precondition of trained and suitable facilitators, PRA methods have proved so far to be generally cheaper, quicker, more accurate and more insightful.

To what extent PRA methods can and should replace questionnaire surveys requires further investigation. Issues include the feasibility and cost of training fieldworkers in PRA methods and the validity of data for generalization at higher levels. It is also practical now for local people to use PRA methods to generate and use their own numbers, conducting their own censuses, appraisal, baseline surveys, monitoring and evaluation.

(c) Empowerment and equity

In practice, much PRA has been found to empower. Those who, through a PRA process express and share what they already know, also learn through that expression and sharing. Those who investigate and observe add to their knowledge. Those who analyze become yet more aware and reach new understanding. Those who plan and then implement what they have planned take command, and further learn through the experience of action.

Whether empowerment is equitable depends on who is empowered. There is a danger (stressed by Scoones and Thompson, 1993) of a naive populism in which participation is regarded as good regardless of who participates or who gains. If those who partici-

pate and gain are only a local male elite, the poor and disadvantaged may end up worse off. The "natural" tendency is for those who are empowered to be men rather than women, the better off rather than the worse off, and those of higher status groups rather than those of lower status. The challenge is then so to introduce and use PRA that the weaker are identified and empowered and equity is served.

Fortunately, the tools available suit this task. Sequences, such as participatory mapping leading to household listing to well-being ranking and then to livelihood analysis, can identify groups distinguished according to local values. Focus group discussions can then be convened to enable different categories of people, including and especially the disadvantaged, to identify their priorities and interests. The contrasts can be sharp. Drawing on applications of PRA techniques in Sierra Leone, Ghana, Malawi and Bangladesh, Welbourn (1991) has shown significant differences by ethnic group, age, gender and economic status, and combinations of these. With pastoralists in Kenya, Swift and Umar (1991, p. 56) found marked and striking differences in the identification of priority problems: out of a possible maximum of 100, livestock management was scored 87 by focus groups of the rich, but only seven by those of the poor, and lack of livestock zero by the rich but 49 by the poor.

Differentiating by groups, interests and gender can empower the poorer and women in several ways. It can give them collective awareness and confidence to confront others and argue their case: Youth for Action, an NGO based in South India, worked at first in some villages only with Harijans (Untouchables) so that they gain in confidence and capability first, before later extending their work to the rest of the village. AKRSP (India) convenes separate groups of women and of men to choose the numbers of trees of different sorts they want in their nursery, and then helps them negotiate a consensus. Differentiation through wealth or well-being ranking can help an outside organization select and deselect those with whom it will work: ActionAid and MYRADA, both in South India, and ActionAid in Pakistan, have used PRA methods to identify the poorer people with whom they then

PRA methods such as diagramming can also be brought into play to clarify and resolve conflicts. Agroecosystem diagramming was used in the Philippines to make explicit the differences of interests between groups after the construction of a small dam at Lake Buhi and to achieve consensus about priorities (Conway, Sajise and Knowland, 1989; Conway, 1989). In the approach of the Neighbourhood Initiatives Foundation in the United Kingdom, a large model of a neighborhood allows people to address conflicts by putting down suggestions, and using markers to agree or disagree without needing to identify themselves. This "depersonalises

conflicts and introduces informality where consensus is more easily reached" (Gibson, 1991).

The identification, expression and resolution of conflicts of interest remain a frontier for participatory methods. Diagrams are promising as a means to defuse tension by making agreed fact visible and differences explicit, focusing public debate on physical things rather than on individual people. There remain both potential and need for new and better participatory methods for negotiation and equitable conflict resolution.

(d) Local people as facilitators and trainers

A commonplace of PRA experience is that rural people can do much that outsiders have thought they could not do, and often that they themselves have not known they could do. One by one the dominoes have fallen as they have shown that they can map, model, rank, score, estimate, diagram and analyze more and better than expected. Often, too, they have done these better than outsiders. The working rule has become to assume that local people are capable of something until it is proved otherwise.

One challenge then becomes the development and spread of participatory approaches and methods by local people themselves. Farmers' own extension has a long history. Deliberate training of farmers as extensionists may be more recent. As one example, in the 1980s in Central America, World Neighbours trained volunteer extensionists and gradually handed over responsibilities for experiments and extension to them (Bunch, 1985). In India, both MYRADA and SPEECH have invited villagers who had already gained experience of PRA to take part in PRA activities in other villages.

The Aga Khan Rural Support Programme (AKRSP) (India) has taken this further, through the training of village volunteers as PRA facilitators (Shah and Shah, 1994). In the late 1980s, it developed village extension volunteers as an approach in which villagers were trained in PRA both for their own and for other villages. These village volunteers were not just extensionists, but facilitators of the PRA approach and methods (Shah, Bharadwai and Ambastha, 1991a). They formed teams to conduct PRA exercises in other villages "... involving mapping, transect diagramming, interviewing, group discussions, prioritisation and preparation of a village natural resources management plan. It is observed that they enjoy the process . . ." (pp. 87-88). In February 1992, a team of village volunteers from other villagers demonstrated their skills as facilitators to an international group of visitors in Kabripathar village, Bharuch District, Gujarat. In one day, the village volunteers enabled villages to map their degraded forest, count and measure

(Shah, 1991). Scope and need remain for more such

conditions and priorities and to the needs of the poor. enabling them to fit policy and action more to local experience in the field from and with rural people, at the local level, personally to gain direct learning to enable many more policy makers, as well as others tapped. The frontier here is to see how to scale up, how interlock. Their scope has scarcely begun to be The policy and personal potentials of RRA/PRA

(g) PRA in organizations

tional cultures are quite often more participatory than by NGOs. This is not surprising, since their organizaorganizations and universities and training institutes. been involved with PRA: NGOs, government field with the three main types of organization which have modes of operation. This is shown by the experience lateral communication, and flexible and adaptive been in organizations with democratic management, and effective adoption and development of PRA has tive routines and actions. Conversely, the most rapid hierarchy, evaluative and punitive styles, and repetiorganizations with strong top-down authority and tance to its adoption and spread has been found in requires reversals and a change of culture. More resis-PRA as the norm in an organization usually therefore creativity and diversity of good PRA. To establish impede or prevent the open-endedness, flexibility, standardize, centralize, and impose top-down targets organizations. Normal bureaucratic tendencies to of PRA as a way of operating, affecting the culture of Perhaps the biggest challenge is the establishment

Adoption and use in government field organizacooperation, the Mear East Foundation and OXFAM. ActionAid, CARE, the Ford Foundation, Intertraining on a wider scale in several countries include and foundations which have taken up PRA support and Organisations in Pakistan. Those international NGOs Programme in Sri Lanka; and Support Participatory Bharati, and SPEECH in India; the Self-Help Support Aid, AKRSP, MYRADA, OUTREACH, Seva Programme of IIED in the United Kingdom; Action PRA. These include the Sustainable Agriculture redefined their roles to include training for others in attempting to disseminate it. Others have defined or most. Some have simply adopted PRA without Initially, PRA has been evolved and spread largely

zations and staff. Behavior and attitudes have proved PRA training on a large scale for government organimode (SPWD, 1992). MYRADA has undertaken Management is designed to be implemented in a PRA adopted PRA, and the movement for Joint Forest tant. In India, several state forestry departments have crument operations, it is also potentially more importions has been more difficult. Given the scale of gov-

> already in early 1994 being used in policy analysis. people's conditions, values and priorities were ception by gender. The resulting insights into poor degrees of deprivation, and their differences of pertheir needs, their distinctions between types and gies, eliciting their concepts of well-being and wealth, analysis of their life, conditions, and livelihood stratethen facilitated local people's own appraisal and

(f) Personal behavior, attitudes and learning

tion follows. earlier decades. Top-down, center-outward prescripaction on ignorance or on personal experience from recent direct knowledge, and base their analysis and nounce and prescribe on rural development often lack Senior officials, scientists and academics who pro-

spend time unofficially living and learning in rural gain if senior officials and policy makers were able to It is not a new idea that rural development would

and especially rural context, to facilitate changes in Much needs to be learned about how, in the local exciting, practically relevant, and often enjoyable. ence and learning which have been intellectually both sides have found rewarding, providing experipeople in an informal and nonthreatening mode which tists and academics have come face-to-face with local methods have provided ways in which officials, sciensabbaticals easier to envisage. PRA approaches and methods of PRA offer new scope, and make ministrained by official protocol. At a personal level, the incognito in villages, with their interactions uncon-India have appreciated the opportunities to spend time 1992). In a less structured manner, senior officials in (Kochendörfer-Lucius and Osner, 1991; Osner et al., siders to learn the life stories of village people which for some years has been enabling senior outof the German Commission of Justice and Peace exception is the Exposure and Dialogue Programme conditions, but little appears to have been done. An

I told them in advance that a transect in Participatory in Gujarat onea transect walk to see the problems of tapping." He has written that, taking District Officers already been devised, such as Anil Shah's "shoulder outsiders' behavior and attitudes. Some methods have

or query into an open-ended question. and if necessary offer my services to rephrase the advice questions with implicit advice, I would tap his shoulder Therefore, when I heard anyone giving advice or asking for educated people, more so for those in authority. out implied advice. I told them that this was very difficult do not advise, but ask --- ask open-ended questions withstand the knowledge and perception of the farmers. We Rural Appraisal (PAA) is for observation and to under-

been learned that would otherwise have been missed By the end of half a day, and several taps, a lot had

> by lack of credit for ploughs, oxen, improved seeds, nologies to increase production but were constrained keting alone; local people knew methods and tech-The survey showed that more was needed than marmoting free market systems for agricultural produce. which held that the key to raising production was prochallenged the conventional thinking in N'djamena nve household food security strategy. The results administrative areas were found, each with a distincfor improving this sort of survey. Three categories of achieved despite difficulties, and lessons were learnt

> Institute of Resource Assessment at the University of government reassessment of land policies, the Johansson and Hoben, 1992). As a contribution to a Tanzania (Idris Kikula, personal communication; Another example is provided by land policy in and more efficient irrigation.

> tested in Nepal. There, eight small Rapid Deploytotype for a more permanent facility has been being These three examples were one-off efforts. A pro-(Johansson and Hoben, 1992, p. 30). vant insights for policy makers and planners" and how effective an RRA can be in providing releimpression such a short visit to a rural area can have of policy, and seemed 'to indicate just how great an mendations from the seminar implied major changes with high-level policy makers. The resulting recomneeded. They presented their findings to a seminar guided, and that new participatory approaches were planning, that imposing a land use map was miscommunities and people were already doing land use the government's top-down approach was wrong, that the direct learning of the RRAs they concluded that each spent five days in one of the villages. Through a range of conditions. Four teams were formed, and policy makers. Four villages were chosen to represent Dar es Salaam organized four RRAs for mid-level

> (Chambers, 1992). credible, than those through official channels insights which were more up-to-date, reliable and approaches and methods, receive information and makers could now, through improved RRA and PRA equntries. The evidence to date suggests that policy strating a model which might be applied in other ers (Cerard Gill, personal communication), demonditions, providing comparative insight for policy makto investigate and report on aspects of policy and conland). They have simultaneously used PRA methods and are in place at different locations in the termi (lowment Teams have been trained in basic PRA methods

teams of facilitators were first trained in PRA. They tested in Chana, Guatemala and Zambia. National Poverty Assessments using PRA methods were pilot poverty line and similar criteria. In 1993 Panicipatory have been conducted in a conventional manner, using ments sponsored by the World Bank. Most of these policy purposes is in the Country Poverty Assess-A more general application of PRA methods for

> numbers of nursery plants needed. rootstock in five quadrats on the ground, and assess

whether voluntarily or for a fee. encouraging them to form teams that provide services, spread with a light touch by training volunteers and Organizations such as AKRSP could then foster self-spreading, self-sustaining and self-improving. as a program initiated from outside, might become market incentives for good performance, what began consultants. Were this to become common, with pared to pay for the services of village volunteers as performance. Some new villages have also been prevolunteers with payment by results, rewarding good voluntary basis. AKRSP has incentive systems for tate appraisal and analysis in neighboring villages on a improving. Villagers experienced in PRA may facilivolunteers can become self-sustaining and self-One question is whether spread through village

not just facilitators but learners and trainees. tive competences and roles, and that outsiders become accept that through such reversals there are new relatraining approaches and methods. The challenge is to potential that they will develop and invent their own ing PRA trainers for outsider professionals, with the domino to fall then, is the reversal of villagers becomvolunteers to be trainers for NGO staff. The latest Finally, AKRSP has trained and enabled village

(e) Policy research and change

Chad and Nepal illustrate. PRA as specific examples from Zimbabwe, Tanzania, Policy insights have been gained through RRA and

farmers' viewpoint and their intentions. cies, and provided policy makers with insight into the tudes toward agricultural structural adjustment poliinput supply, prices, food security, and farmers' attiback from the field concerning marketing, transport, ately after the fieldwork, provided immediate feeddations, in a report (FSRU, 1991) completed immeditwo Communal Areas. Their findings and recommenconducted by a team of researchers over two weeks in culture of structural adjustment policies. RRAs were methods were used to investigate the effects on agri-In Zimbabwe in November 1991, RRA and PRA

points. Organizing and analyzing the mass of data was different weather conditions were used as reference represented in the group interview). Three years of ticularly oriented toward women (who were rarely as guide was followed by household interviews, parday in each village. A group interview with a checklist worked in 55 representative villages, spending about a Smith et al., 1993). Thirteen survey enumerators lems, and what solutions they proposed (Buchananstand how people perceived their food security probnational scale using RRA techniques to try and under-In 1991 a survey was undertaken in Chad on a

included mandatory overnights in villages, with senior officials expected to set an example by refusing special comforts (Fernandez and Mascarenhas, 1993). The introduction of PRA into the work of the State Watershed Development Cell of the Government of Karnataka, facilitated by MYRADA, raised problems of conflict between community-level PRA and professional norms and government procedures (Bhat and Satish, 1993). In Kenya, the Soil and Water Conservation Branch of the Ministry of Agriculture, following training workshops conducted with IIED (Pretty, 1990) adopted PRA as policy in over 40 districts, and some initial successes have been revealed through participatory monitoring and evaluation (Pretty and Thompson, 1993). The problems and opportunities for PRA in government field organizations require sensitive research to add to understanding of reasons for resistance and distortion, and to provide the basis for a realistic assessment of potentials.

Universities and training institutes were at first slow to notice or adopt PRA. Given that PRA is concerned with learning rather than teaching, and with the field rather than the classroom, this is perhaps not surprising. From modest beginnings in the early 1990s, however, interest in PRA approaches and applications on the part of individuals and groups in universities and training institutes has grown quickly, and by early 1994 included at least 25 countries. The Indian experience is instructive. In some cases PRA was adopted quickly for the fieldwork of students, as with probationers at the Lal Bahadur Shashtri National Academy of Administration. In other cases, sequences of workshops, field experiences, and training have been part of a patient process facilitated by an NGO or NGOs which have led to gradual incorporation of PRA approaches and methods into curricula, fieldwork and research, as with the Gujarat Agricultural University (Shah and Mane, 1993), the Tamil Nadu Agricultural University (Paliniswamy et al., 1992; Vijayraghavan et al., 1992; Manoharan et al., 1993), and several other agricultural universities. In other universities, the culture of learning (as opposed to the more usual teaching) resonates with PRA, as in Australia (Bawden et al., 1984; Ampt and Ison, 1988, 1989; Dunn, 1991; Dunn and McMillan, 1991; PRA Team, 1991) especially but not only Hawkesbury Agricultural College (now the University of Western Sydney). The challenge presented by PRA modes to traditional university teaching remains largely unrecognized.

To summarize experience to early 1994, those organizations which have embraced and developed PRA have shared four characteristics. The leadership has been stable and committed to participatory approaches; a substantial proportion of staff have personally wished to use PRA; there has been little rentseeking activity by staff; and there has been recurrent reinforcement. Commitment of a director or principal

a key problem, and attempts to achieve change have of an institution has not on its own proved enough; nor, on its own, has repeated training. Training at lower field levels without higher level understanding and commitment has proved ineffective. It appears critical for adoption that the middle-level managerial staff in any organization genuinely, and not just verbally, wishes to use or support PRA. If the staff does not, there are many ways in which its lack of support can undermine and finally eliminate the participatory spirit and practices of PRA.

4

The bottom line in organizations has been, however, individual choice and freedom. Much has depended on facilitators who were both committed and free of line responsibilities. The organizational challenge and opportunity for PRA can then be seen as enabling such people to be identified and then protected from line duties, freeing them to devote time to the spread of participatory approaches and methods, and contribute to cultural change in their own and other organizations.

5. THE PARADIGMATIC SIGNIFICANCE OF PRA

One contribution to be sought from universities is a better understanding of underlying theory. In Australia, RRA has been linked with soft systems theory (Checkland, 1981) and contextual science (Russell and Ison, 1991). In making these links, Australian researchers have begun to explore further the paradigmatic significance of RRA and PRA. The word "paradigm" is used here to mean a coherent and mutually supporting pattern of concepts, values. methods and action, amenable to wide application.

In his paper (Jamieson, 1987) "The paradigmatic significance of RRA," delivered at the International Conference on Rapid Rural Appraisal at Khon Kaen in 1985, Neil Jamieson argued that RRA, with its rapid learning, fitted and supported a new and emerging paradigm of development. Despite ideological conflicts, Marxists, socialists and capitalists had shared evolutionary, unilineal, universalistic, positivistic and utilitarian assumptions, and a fervent belief in progressi Another view of development, he wrote, was of human evolution as problem solving under pressure, as adaptive change. This fitted better with a cybernetic systems approach, which included the concepts of feedback, of lead time (the time between receipt of information and when it is too late to use it), and of lag time (the time between receipt of information and the completion of action based on it) (see also Joseph, 1991). Jamieson presented the case that change had accelerated and unpredictability had increased, making accurate and timely feedback more than ever vital for effective adaptive change.

Much that Jamieson wrote applies with even more force in 1994 than it did in 1985. At a theoretical level, chaos theory has led to a clearer understanding that natterns and directions of change can be sensitive to small differences in starting conditions (Gleick, 1987), stressing the importance of quick, accurate learning and action. At the empirical level, changes in global and local conditions - ecological, social and political — appear to be accelerating. In conditions of faster change and of increasing unpredictability, it is even more important than before to have timely feedback, prompt learning, and rapid adaptive responses which will differ to fit local contexts. This learning and need is encapsulated in the title - "More diversity for more certainty" - of the last chapter of Development in Practice (Porter, Allen and Thompson, 1991, pp. 197-213), which analyses and describes a development project in Kenya. PRA approaches and methods, through local analysis. improvization and action, appear suited to the understanding and expression of local diversity, and to enabling local people to assess, analyze, cope with, adapt to, and exploit accelerating change.

Beyond these aspects, PRA as it is emerging is experiential, not metaphysical. Theory has been induced from practice, from what is found to work, not deduced from propositions. Good performance has been sought through empiricism, diversity, improvization and personal responsibility.

It is striking that parallel shifts of paradigm can be noted in four other major domains of human experience: in the social sciences; in the natural sciences; in business management; and in developing thinking itself.

In the social sciences, postmodernism (e.g. Harvey, 1990; Rosenau, 1992) asserts philosophical relativism and multiple realities. Interpreting the view of affirmative postmodernists, Rosenau writes,

The absence of truth . . . yields intellectual humility and tolerance. They see truth as personal and communityspecific: although it may be relative, it is not arbitrary. ... Some of them substitute a substantive focus on the local, on daily life, and on traditional narrative for the hegemonic theory of mainstream social science (Rosenau 1992, p. 22).

Uphoff's (1992) study of participation in Sri Lanka and his "post-Newtonian social science" combine to challenge reductionism and mechanistic models, to recognize and rehabilitate altruism and cooperation, and to stress positive sums and the potentials of "social energy" which is manifest when individuals and groups work for some common purpose. Postmodernism, Uphoff's analysis, and PRA have different starting points: postmodernism tends to start with a certain theoretical pluralism; Uphoff starts with empirical experience which then informs and interlinks with theory; and PRA is found to stick largely with the action, with dispersed practitioners subject to the discipline of what works, reflecting more on how to do bet-

ter than on the theoretical implications of their experience. But postmodern theory, post-Newtonian social science, and the experience of PRA are mutually reinforcing on common ground: for all affirm and celebrate multiple realities and local diversity.

In the natural sciences, conventional approaches, using hard systems and reductionist assumptions and methods, are in crisis when faced with many of our important problems (Mearns, 1991; Appleyard, 1992). Scientific method is not competent to predict or prescribe for the complex open systems which matter most. Global environmental issues involve huge uncertainties and demand what Funtowicz and Ravetz (1990) call a "second order science" in which judgement plays a more recognized part. Precise understanding, prediction and prescription for local agroeco-social systems can be similarly elusive. This is not a new discovery. Jeremy Swift wrote in 1981:

... a major World Bank livestock development project in Mali is based, for crucial calculations of sustainable grazing pressure, on the report of a highly competent ecologist in 1972; the calculations were redone in 1977/78 by a different, equally well-qualified ecologist, who halved the earlier carrying capacity. Nobody is to blame; the science is inexact. But the consequences could be disastrous for the project, and more so for the pastoralists involved (Swift, 1981, p. 487).

Perhaps no one was to blame then. But now we know more about what is not knowable using the standard methods of professional disciplines. When so much is so unknowable and so unpredictable, it seems right to seek solutions through methodological pluralism, through flexible and continuous learning and adaptation, and through the exercise of judgement, again all elements in the practice of PRA.

In business management, the parallel shift has been from the values and strategies of mass production to those of flexible specialization (see e.g., Harvey, 1990, pp. 125-188; Kaplinsky, 1991, p. 7). Standardization has been replaced by variety and rapid response, hierarchical supervision by trust, and punitive quality control by personal quality assurance at source. A highly successful Brazilian manager, when he took over a company, abolished norms, manuals, rules and regulations, and put the company's employees "in the demanding position of using their own judgement" (Semler, 1989, p. 79). Much in Tom Peters's book of advice to US business managers, Thriving on Chaos: Handbook for a Management Revolution (1987), is found equally in PRA. He advocates, for example, achieving flexibility by empowering people, learning to love change, becoming obsessed with listening, and deferring to the front line. The theme of local knowledge and action is also strong. In The Fifth Discipline: The Art and Practice of the Learning Organization (1990, p. 228). Senge

which participants were trainer/practitioners from 12 coun-Exchange Workshop hosted in India in September 1993, in 2. These points were stressed in the South-South PRA

tries in the South.

KEFERENCES

Studies, Tribhuvan University, 1979). (Kathmandu: Research Centre for Nepal and Asian The Use and Misuse of Social Science Research in Nepal

Chambers, Robert, "Methods for analysis by farmers: The

ards, and chillies were used to represent two marriages

were placed around households where husbands were drunk-

In an all-women's PRA in South India, yellow circles

(Sheelu Francis, personal communication).

Research/Extension, Vol. 4, No. 1 (1993a), pp. 87professional challenge," Journal for Farming Systems

nology Publications, 1993b). Jor Rural Development (London: Intermediate Tech-Chambers, Robert, Challenging the Professions: Frontiers

Vol. 23, No. 4 (1992), pp. 31-42. Chambers, Robert, "The self-deceiving state," IDS Bulletin,

paradigm," IDS Discussion Paper, No. 220 (1986). research with resource-poor larmers: A parsimomous Chambers, Robert, and Janice liggins, "Agricultural

Publications, 1989). tural Research (London: Intermediate Technology (Eds.), Farmer First: Farmer Innovation and Agricul-Chambers, Robert, Amold Pacey, and Lori Ann Thrupp

Delhi: National Council of Applied Economic Research, complement/substitute to sample surveys," Mimeo (New Chaudhari, S. K., "Studies on efficacy of RRAs/PRAs as a Evaluation: Simple is Optimal? (Rome: FAO, 1978). Chambers, Robert, Rural Poverty-Oriented Monitoring and

(Chichester: John Wiley, 1981). Checkland, Peter, Systems Thinking, Systems Practice (5661

nous trees in Mhondoro Distnet" (Harare: Centre for Drummond, and Nontokozo Nabane, "The use of indige-Petinasi Nyamadzawo, Louise Fortmann, R. B. Chanakira, Xavier Mutsvangwa, Angeline Mvumbe, Muza, Tambudzai Muyombo, Hilda Chanakira, James Matsvimbo, Anna Mhinpini, Paul Kamanya, Wisdom Chidhan, Gift, Francisca Chirambaguwa, Patricia

Innovation and Agricultural Research (London: Pacey, and L. Thrupp (Eds.), Farmer First: Farmer Conway, G., "Diagrams for farmers," in R. Chambers, A. Applied Social Sciences, June 1992).

Farming Systems Research Projects (Khon Kaen, Rapid Rural Appraisal, Rural Systems Research and Proceedings of the 1985 International Conserence on analysis: A case study from Northern Pakistan," in KKU, Conway, G., "Rapid rural appraisal and agroecosystem Intermediate Technology Pub., 1989), pp. 77-86.

Conway, G., Agroecosystem Analysis for Research and Thailand: University of Khon Kaen, 1987).

Agricultural Development, 1986). Development, Winrock International Institute for

Administration, Vol. 20 (1985), pp. 31-55. Conway, G., "Agroecosystem analysis," Agricultural

Comwall, Andrea, Irene Guijt, and Alice Welbourn, Ject." Ambio, Vol. 18, No. 2 (1989), pp. 128-135. Resolving conflicts in a Philippines development pro-Conway, G., P. Sajise, and W. Knowland, "Lake Buhi:

Acknowledging Process: Challenges for Agricultural

(Kathmandu: ActionAid-Nepal, 1992). Singhupalchowk, Monitoring and Evaluation Unit Survey Report, Part I. Rural Development Area, ActionAid, Participatory Rural Appraisal: Utilization

Center for Population and Development Studies, Bangladesh Rural Advancement Committee and Harvard Cambridge, MA: Research and Evaluation Division, ICDDE, B loint Project in Matlab" (Dhaka and women's lives: An explotatory study for the BRAC-"Participatory methods to assess change in health and Adams, Alayne, Rita Das Roy, and Amina Mahbub, Agricultural Administration, Vol. 8, No. 6 (1981).

Proceedings of the XVI International Grassland the identification of grassland research problems," Ampt, P. R., and R. L. Ison, "Rapid rural appraisal for September 1993).

(Australia: School of Crop Sciences, University of research and development in the Forbes Shire, NSW" identify problems and opportunities for agronomic Ampt, P., and R. Ison, "Report of Rapid Rural Appraisal to Congress (Nice, France: 1989, pp. 1291-1292).

Soul of Modern Man (London: Picador, published by Pan Appleyard, B., Understanding the Present: Science and the Sydney, December 1988).

Ashby, Jacqueline A., Carlos A. Quiros, and Yoland M. Books, 1992).

mediate Technology Pub., 1989), pp. 115-122. Innovation and Agricultural Research (London: Inter-Pacey and L. Thrupp (Eds.), Former First: Former ment: Work with crop varieties," in R. Chambers, A. Rivers, "Farmer participation in technology develop-

education," Agricultural Systems, Vol. 13 (1984), pp. Valentine, "Systems thinking and practice in agricultural Bawden, R. J., R. D. Macadam, R. J. Packham, and L.

(London: Routledge, 1993), pp. 213-226. Non-Governmental Organisations and the State in Asia PIDOW Project," in J. Farrington and D. Lewis (Eds.), State watershed development cell: MYRADA and the Bbat, K. V., and S. Satish, "NGO links with the Kamataka 205-225.

Chana," Population and Development Review, Vol. 13, Bleck, W., "Lying informants: A fieldwork expenence from

Challenges of RRA at National Level," RRA Notes, No. tise their food security problems in Chad: The Buchanan-Smith, M. et al., "Finding out how people priori-No. 2 (1987), pp. 314-322.

Agricultural Improvement (Oklahoma City: World Bunch, R., Two Ears of Com: A Guide to People-centered 18 (June 1993), pp. 33-43.

Agriculture-Winnock International, February 1991). Support Series Number 4 (Kathmandu: HMG Ministry of Appraisal for Nepal: Concepts and Methods, Research Campbell, Lorna, and Gerard J. Gill, Participatory Rural Neighbors, 1985).

Campbell, J. Gabriel, Ramesh Shrestha, and Linda Stone,

inclusive holism, open systems thinking, and diverse

who are peripheral and weak. analysis and action by local people, empowering those fessionals' behavior and to enhance and support spire of paradigm lies in evolving ways to change pro-Much of its distinctive, if modest, contribution to this people's priorities, and democratic local diversity. adaptive change, the analysis and expression of local fests and supports methodological pluralism, rapid and sharing and lateral learning and spread. It manition and empowerment - "handing over the stick," complexity and diversity, a principle of decentralizament with local communities and people, openness to meory-and-practice. This includes practical engageulated by its practitioners, has an emerging normative sionalism (Pretty and Chambers, 1993). PRA, as articdevelopment thinking, and as part of a new profesnatural sciences, in business management, and in part of a more general paradigm shift in the social and RRA and more so PRA can, then, be recognized as

tions, judgement and choice. observances or procedures, but in personal interacthen not in a bible or manual, nor in a sequence of and facilitators. Authority and responsibility reside and improvised personal performance by local people be seen to be different, the outcome of local conditions 1987, p. 378). In this mode, every PRA experience can in North American business management (Peters, best judgement at all times" (KGVK, 1991) originates The one-sentence manual for PRA "Use your own ulations and procedures but in individual judgement. overlook. Responsibility rests not in written rules, reg-PRA is the primacy of the personal. This is easy to The most striking insight from the experience of

which seem increasingly to fit the priorities of the range of practical choices for local research and action PRA approaches and methods have opened up a new balance. A more securely empirical conclusion is that as it of bad against good. Pluralism itself demands a earlier version of this article, is to load the antitheses reductionist and pluralist, and timid and bold, as in an between closed and open, conservative and radical, to describe these decisions and actions as polarized research institutes, universities, and donor agencies. sionals in NGOs, government services, training and sions and actions by individuals, especially profesand promise coexist. What happens depends on decimethods known as PRA cannot be foreseen. Dangers The future of the philosophy, approaches and

Responsibility for errors, omissions and opinions is mine

linear thinking, and standard solutions give way to an

15m, and homogenization are opposed. Reductionism,

ued. The trends toward centralization, authoritarian-

diversity. What is local, and what is different, is val-

Early brings together decentralization, democracy and

this, the emergent paradigm for living on and with the

and achieve more of their own priorities. In line with

objectives is to enable local people to identify, express

repeating the errors of the rich. One way to serve these

poor, it is now to gain more and be better off without

the question is how to be better off with less; for the

able ways to enhance the quality of life. For the rich,

101 alternative normative paradigms, for more sustain-

resources are recognized as finite, so there is a search

mentally harmful among the richer, and as economic

pie, universal objective, as it is recognized as environ-

Sachs, 1992). As economic growth ceases to be a sim-

better life are no longer tenable (see e.g., Ekins, 1992;

universal economic growth as the main means to a

seen as one expression of a wider paradigm for effec-

that the philosophy and approaches of PRA can be

empowerment, diversity, and rapid change. So it is

obcu communications and sharing knowledge,

and PRA, value has been placed on decentralization,

have driven and drawn. In both business management

opened up by the new approaches and methods, which

with people and communities, and the opportunities

approaches, it has been the discipline of what works

transient niche markets. For PRA and related

ity, to diversification, and to finding and exploiting

drawn business management to decentralized flexibil-

tunities from new technology which have driven and

Necessary Disorganization for the Nanosecond

seller Liberation Management (1993) is subuitled

systems for a world turned upside down." His best-

In Thriving on Chaos, Peters wrote about "building

sized in the original, and "An Upside-down Society."

The Age of Unreason (1990) with the "Un" empha-

must appear irrationality. Charles Handy writes of

reversals, and what to a linear reductionist thinker

Surkingly, writers on management suess paradox,

none adaptation that change demands (Senge, 1992, p.

rends; they are in a better position to manage the contin-

tomer preferences, competitor actions, and market

Local actors often have more current information on cus-

Localness is especially vital in times of rapid change.

It has been the discipline of the market and oppor-

tive action in the contemporary world.

Vineties (my emphasis).

in development thinking, normative theories of

Mascarenhas, Jules Pretty and two anonymous referees. grateful to many people, including Tony Dunn, James 1. For comments on earlier versions of this paper I am

1453

Paper 333 (Brighton: Institute of Development Studies, University of Sussex, December 1993).

Daane, J. R. V., "Quelle méthode pour l'analyse de systèmes de production en zone rurale tropicale: Le dilemme entre démarche quantitative peu fiable et démarche qualitative peu généralisable, contribution au 8ème Seminaire d'Économie Rurale (France: CIRAD, Montpellier, 1987).

Drinkwater, Michael, "Sorting fact from opinion: The use of a direct matrix to evaluate finger millet varieties," RRA Notes, No. 17 (1993), pp. 24-28.

Dunn, A. M., "New challenges for extensionists: Targeting complex problems and issues," Paper for the 10th European Seminar on Extension Education, Universidade de Tras-os-Montese Alto Douro (Vila Real. Portugal: September 1991).

Dunn, Tony, and Allan McMillan, "Action research: The application of rapid rural appraisal to learn about issues of concern in landcare areas near Wagga Wagga, NSW," Paper presented to a Conference on Agriculture, Education and Information Transfer, Murrumbigee College of Agriculture (Murrumbigee, NSW: September 30-October 2, 1991).

Ekins, P., Wealth Beyond Measure: An Atlas of New Economics (London: Gaia Books, 1992).

Farrington, John and David J. Lewis with S. Satish and Aurea Miclat-Teves (Eds.), Non-Governmental Organisations and the State in Asia: Rethinking Roles in Sustainable Agricultural Development (London and New York: Routledge, 1993).

Farrington, John (Ed.), Experimental Agriculture, Vol. 24. Part 3 (1988).

Farrington, John, and Adrienne Martin, "Farmer participation in agricultural research: A review of concepts and practices," Agricultural Administration Occasional Paper, No. 9 (London: ODI, 1988).

Fernandez, Aloysius P., and James Mascarenhas, "MYRADA: Participatory rural appraisal and participatory learning methods," in J. Farrington and O. Lewis (Eds.), Non-Governmental Organisations and the State in Asia (London: Routledge, 1993), pp. 201-212.

Freire, Paulo, Pedagogy of the Oppressed (New York: The Seabury Press, 1968).

FSRU, Structural Adjustment and Communal Area Agriculture in Zimbabwe: Case Studies from Mangwende and Chivi Communal Areas: A Report of a Rapid Rural Appraisal Exercise, Farming Systems Research Unit, Department of Research and Specialist Services, Ministry of Lands, Agriculture and Rural Settlement (Harare, Zimbabwe: FSRU, November 1991).

FSSP, Diagnosis, Design and Analysis in Farming Systems Research and Extension, Volumes 1, II and III, and Trainer's Manual, Farming Systems Support Project, Institute of Food and Agricultural Sciences, University of Florida (Gainesville, FL: FSSP, December

Funtowicz, S. O., and J. R. Ravetz, Global Environmental Issues and the Emergence of Second Order Science (Luxembourg: Commission of the European Communi-

Gibson, Tony, "Planning for real: The approach of the Neighbourhood Initiatives Foundation in the UK," RRA Notes, No. 11 (1991), pp. 29-30.

Research and Extension Methodology, IDS Discussion Gilbert, E. H., D. W. Norman, and F. E. Winch, Farming Systems Research: A Critical Appraisal, MSU Rural Development Paper No. 6 (East Lansing, MI: Department of Agricultural Economics, Michigan State University, 1980).

Gill, Gerard J., OK, The Data's Lousy, But Its All We've Got (Being a Critique of Conventional Methods), Gatekeeper Series No. 38 (London: HED, 1993).

Gleick, J., Chaos: Making a New Science (London: Heinemann, 1987).

Grandin, Barbara, Wealth Ranking in Smallholder Communities: A Field Manual (London: Intermediate Technology Publications, 1988).

Gueye, Bara, and Karen Schoonmaker Freudenberger. Méthode Accélerée de Recherche Participative (London: IIED, August 1991).

Gueye, Bara, and Karen Schoonmaker Freudenberger, Introduction à la Méthode Accélerée de Recherche Participative (MARP) (Dakar, Senegal: Centre de Recherches pour le Développement International, October 1990).

Guijt, Irene, and Jules N. Pretty, Participatory Rural Appraisal for Farmer Participatory Research in Punjab, Pakistan (London: Sustainable Agriculture Programme, International Institute for Environment and Development, September 1992).

Gypmantasiri, P. et al., and Gordon Conway, An Inter-disciplinary Perspective of Cropping Systems in the Chiang Mai Valley: Key Questions for Research (Thailand: Multiple Cropping Project, Faculty of Agriculture, University of Chiang Mai, June 1980).

Haddad, Lawrence, Kimberley Chung, and P. Yasoda Devi, "Alternative approaches to locating the food and nutrition insecure, and participatory rural appraisal protocol (Washington, DC: International Food Policy Research Institute, February 1993).

Handy, Charles, The Age of Unreason (London: Arrow Books, 1990).

Harvey, David, The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change (Oxford: Blackwell.

KGVK, Management Training Manual (Ranchi, Bihar, India: Krishi Gram Vikas Kendra, 1991).

Khan, Mahmuda Rahman, "The Sharshi village of Barisal: A survey for NFPE through RRA/PRA" (Dhaka: Research and Evaluation Division, Bangladesh Rural Advancement Committee, April 1993).

KU. Proceedings of the 1985 International Conference on Rapid Rural Appraisal, Rural Systems Research and Farming Systems Research Projects (Khon Kaen, Thailand: University of Khon Kaen, 1987).

Kochendörfer-Lucius, G., and K. Osner, Development Has Got a Face: Lifestories of Thirteen Women in Bangladesh on People's Economy, Results of the International Exposure and Dialogue Programme of the German Commission of Justice and Peace and Grameen Bank, Bangladesh, October 14-22, 1989, Gerechtigkeit und Frieden Series (Bonn: Deutsche Kommission Justitia et Pax. 1991).

Kumar, Somesh, "Anantapur experiment in 'PRA' training," RRA Notes, No. 13 (August 1991).

Leitman, J., "Rapid urban environmental assessment: A first step towards environmental management in cities of the developing world," Forum Valutazione, No. 4 (1992), pp. 47-69.

Lightfoot, Clive, and Reg Noble, "A participatory experiment in sustainable agriculture," Journal for Farming Systems Research/Extension, Vol. 4, No. 1 (1993), pp. 11-34.

Lightfoot, C., and D. Minnick, "Farmer-first qualitative methods: Farmers' diagrams for improving methods of experimental design in integrated farming systems," Journal for Farming Systems Research-Extension, Vol. 2, No. 1 (1991), pp. 57-71.

Lightfoot, C., O. de Guia Jr, A. Aliman, and F. Ocado, "Systems diagrams to help farmers decide in on-farm research," in R. Chambers, A. Pacey and L. Thrupp (Eds.), Farmer First: Farmer Innovation and Agricultural Research (London: Intermediate Technology Pub., 1989), pp. 93-100.

Longhurst, R., (Ed.) Rapid Rural Appraisal, IDS Bulletin, Vol. 12, No. 4 (1981).

Hill, Polly, Development Economics on Trial: The Anthropological case for a Prosecution (Cambridge: Cambridge University Press, 1986).

ILEIA, Participatory Technology Development in Sustainable Agriculture (Leusden, The Netherlands: Information Centre for Low-External-Input and Sustainable Agriculture, 1991).

Inglis, Andrew, A Tale of Two Approaches: Conventional Questionnaire Surveys vs PRA, Rural Development Forestry Network Paper 14c (London: Overseas Development Institute, Winter 1992).

Inglis, Andy, "Harvesting local forestry knowledge: A comparison of RRA and conventional surveys," RRA Notes, No. 12 (1991), pp. 32-40.

Ison, Raymond I., "Rapid Rural Appraisal: A participatory 'problem' identification method relevant to Australian agriculture" (Sydney: School of Crop Sciences, University of Sydney, 1990).

Jamieson, N., "The paradigmatic significance of RRA," in KKU Proceedings of the 1985 International Conference on Rapid Rural Appraisal, Rural Systems Research and Farming Systems Research Projects (Khon Kaen, Thailand: University of Khon Kaen, 1987).

Johansson, Lars, and Allan Hoben, "RRA's for land policy formulation in Tanzania," Forests, Trees and People Newsletter, No. 14/15 (February 1992), pp. 26-31.

Joseph, S., "Participatory rural appraisal in identifying major illness, healthcare providers and costs," RRA Notes, No. 16 (1992), pp. 53-56.

Joseph, S., "Lead time, lag time: RRA/PRA in ActionAid" (Bangalore: ActionAid, 1991).

Kaplinsky, R., "From mass production to flexible specialisation: 'A case study from a semi-industrialised economy," IDS Discussion Paper 295 (Brighton: IDS, University of Sussex, November 1991).

McCracken, J. A., Jules N. Pretty, and Gordon R. Conway, An Introduction to Rapid Rural Appraisal for Agricultural Development (London: IIED, 1988).

Manoharan, M., K. Velayudham, and N. Shunmugavalli, "PRA: An approach to find felt needs of crop varieties," RRA Notes, No. 18 (June 1993), pp. 66-68.

Mascarenhas, J., et al., Participatory Rural Appraisal: Proceedings of the February 1991 Bangalore PRA Trainers Workshop, RRA Notes, No. 13 (London: IIED and Bangaiore: MYRADA, August 1991).

Mearns, R. et al., "Direct and indirect uses of wealth ranking in Mongolia," RRA Notes, No. 15 (1992), pp. 29-38.

Meams, R., 'Environmental Implications of Structural Adjustment: Reflections on Scientific Methods," IDS Discussion Paper 284 (Brighton: IDS, University of Sussex, February 1991).

Moris, Jon R., "Multi-subject farm surveys reconsidered: Some methodological lessons," Paper for the East African Agricultural Economics Society Conference (Dar es Salaam: March 31-April 4, 1970).

NCAER, Comparative Study of Sample Survey and Participatory Rural Appraisal Methodologies (New Delhi: National Council of Applied Economic Research, November 1993).

Ofori, Joseph, Mark Prein, Frank Fermin, David Owusu, and Clive Lightfoot, "Farmers picture new activities," ILEIA Newsletter, Vol. 9, No. 1 (1993), pp. 6-7.

Osner, Karl, Gudrun Kochendörfer-Lucius, Ulrike Müller-Glodde and Claudia Warning, Exposure und Dialogprogramme: Eine Handreichnung für Teilnehmer under Organisatoren (Bonn: Deutsche Kommission Justitia et Pax, 1992).

Paliniswamy, A., S. R. Subramanian, Jules N. Pretty, and K. C. John (Eds.), Participatory Rural Appraisal for Agricultural Research at Paiyur, Tamil Nadu (Coimbatore: Department of Agricultural Economics, Centre for Agricultural and Rural Development Studies, Tamil Nadu Agricultural University and London: International Institute for Environment and Development,

Peters, Tom, Thriving on Chaos: Handbook for a Management Revolution (New York: Alfred A. Knopf, 1987).

PID and NES, An Introduction to Participatory Rural Appraisal for Rural Resources Management (Worcester, MA: Program for International Development, Clark University and Nairobi: National Environment Secretariat, Ministry of Environment and Natural Resources, November 1989).

Porter, Doug, Bryant Allen, and Gaye Thompson, Development in Practice: Paved with Good Intentions (London: Routledge, 1991).

Pottier, Johan, "Agrarian change at the household level: A note on investigative styles in research on Mambwe Agriculture (Northern Zambia)," in Preben Kaarsholm (Ed.), Institutions, Culture and Change at Local Community Level, International Development Studies, Occasional Paper No. 3 (Roskilde, Denmark: Roskilde University Centre, 1992), pp. 61-74.

PRA Team, The Kyeamba Valley: Issues of Concern to Landholders and Their Families, identified in a Participatory Rural Appraisal by Members of the Kyeamba Valley Community, September 1991, compiled by a PRA Team with the following connections: Landcare, Department of Conservation and Land Management New South Wales Agriculture, School of Agriculture, CSU-R. Centre for Conservation Farming, CSU-R, School of Crop Sciences, The University of Sydney and Wagga Wagga City Council (1991).

Pretty, J. N., and J. Thompson, "Soil and Water Conservation Branch, Ministry of Agriculture, Kenya: Trip report, April 17-May 5, Mimeo (1993).

Pretty, Jules N., Rapid Catchment Analysis for Extension Agents: Notes on the 1990 Kericho Training Workshop for the Ministry of Agriculture, Kenya, Sustainable Agriculture Programme (London: IIED, November 1990).

Final revision accepted: May 14, 1994.

needed for change.

Raghay Gaiha, and the two anonymous reviewers of the

Lourdes Beneria, Gillian Hart, Geoffrey Hawthorn,

Seiz, Amartya Sen, Michael Lipton, Nancy Folbre,

sous for comments on the material presented here: Janet

June 1993. I am grateful especially to the following per-

Theory," Dept. of Economics, University of Amsterdam,

at the Conference on "Ferninist Perspectives in Economic

especially Chapter 1. A version of the paper was presented

in South Asia (Cambridge: Cambridge University Press),

ing book: A Field of One's Own: Gender and Land Rights

*This paper draws substantially on the author's forthcom-

tion 7 highlights some aspects of the interventions

cially mediated by noneconomic factors. Finally, sec-

women's command over economic resources is cru-

most parts of South Asia today, and illustrates how

cles women face in realizing effective land rights in

enjoyed rights in land. Section 6 identifies the obsta-

Asian communities in which women traditionally

looks at gender relations historically in those South

women to have independent rights in land. Section 5

section 4 elaborates why it is important for rural

conceptual links between property and gender, while

academics in South Asia. Section 3 examines some

Rergamon ()

I-82000(46)X027-20E0

Policy in South Asia A Critical Gap in Economic Analysis and Gender and Command Over Property:

Institute of Economic Growth, Delhi, India BINY YCYKMYT*

obstacles and the aspects needing a specific focus for policy and action are also discussed. and between ownership and control. The necessity of collective action by women for overcoming these are found to underlie the persistent gap between women's legal rights and their actual ownership of land, effectively control any. Why? A complex range of factors — social, administrative, and ideological substitute for land. But despite progressive legislation few South Asian women own land; even fewer tied to their having independent land rights. Better employment opportunities can complement but not form of property, any significant improvement in women's economic and social situation is crucially command over property. It outlines why in rural South Asia, where arable land is the most important Summary. — This paper focuses on a much neglected issue: the links between gender inequities and

I. INTRODUCTION

(Landless women in South India answering a query We want [arable] land, all the rest is humbug.

whether they wanted better houses)1

sentatives on the village council)2 Bengal government in 1979 through their women repre-(Message conveyed by poor peasant women to the West If my busband throws me out, what is my security? distributes land we don't get a title. Are we not peasants? Please go and ask the sarkar [government] why when it

women's situation, namely the gender gap in comment, to the neglect of a crucial determinant of women have long been preoccupied with employ-Economic analysis and policies concerning

It is argued here that the gender gap in the owntrue in analysis relating to South Asia. mand over property. This is especially (but not only)

the most important property in question is arable marily rural economies such as those of South Asia well-being, social status and empowerment. In pricritical contributor to the gender gap in economic ership and control of property is the single most

neglect of this issue by policy makers, activists and rights in arable land. Section 2, traces the considerable focuses on the following dimensions of gender and The discussion below, divided into six sections,

.8-E .qq poor conditions," RRA Notes, No. 10 (February 1991), varietal trials: Multilocational testing under resourceand Michel Punbert, "Farmer participation in on-farm

The Women of Sangarns Pastapur, Medak, Andhra Pradesh Notes, No. 14 (December 1991), pp. 14-23.

Welbourn, Alice, "RRA and the analysis of difference," RRA

Development (1992).

London: International Institute for Environment and Tamil Nadu Agricultural University, Coimbatore, and Centre for Agricultural and Rural Development Studies, (Tamil Nadu: Department of Agricultural Economics, Agricultural Research at Aruppulcottai, Tamil Nadu C. John (Eds.) Participatory Rural Appraisal for

Vijayraghavan, R., S. R. Subramanian, Jules M. Pretty and K. Bangladesh, January 1993).

nearth education project in Bangladesh (Dhaka: CARE-Vigoda, Marcy, "Participatory rural appraisal in a women's

Development, July 1991). Quezon City, The Philippines: Council for People's Philippines NGOs, GOs and university institutes kepon of a study on the application of RRA by

van Steijn, T., "Rapid rural appraisal in the Philippines:

Science (Ithaca: Comell University Press, 1992).

Participatory Development and Post-Newtonian Social Uphoff, Norman, Learning from Gal Oya: Possibilities for

(London: Save the Children and ILED, 1991). Experiences in the Middle East and North Africa

Community Development: A Training Manual Bused on Theis, J., and H. Grady, Participatory Rapid Appraisal for

(Isiolo, Kenya: Isiolo Livestock Development Project, Research in the Isiolo Livestock Development Project

Development in Isiolo District: Socio-economic Swift, Jeremy, and Abdi Moor Umar, Participatory Pastoral (November 6, 1981), pp. 485-492.

West Africa," Agricultural Administration, Vol. 8

Swift, J., "Rapid appraisal and cost-effective research in

opment, 1992). Delhi: Society for the Promotion of Wastelands Devel-

Appraisal (PRA) Methods in South Gujarat India (New Economy and Use Patterns: Participatory Rural Management Systems, and Vol. 2 Community Forest Vol. 1 Diagnostic Tools for Supporting Joint Forest SPWD, Joint Forest Management Field Methods Manual

Publications, 1993).

Oral Testimony and Development (London: Panos Slim, Hugo, and Paul Thompson, Listening for a Change:

Nadu, India: Activists for Social Alternatives, 1992).

An Initiation in Tamil Nadu-Experience Sharing (Tamil

Sheelu and Devaraj, Participatory Rural Appraisal (PRA);

Developing Countries (Boulder, CO: Westview Press,

Systems Research and Development: Guidelines for Shaner, W. W., P. F. Philipp, and W. R Schmehl, Farming and AKRSP," RRA Notes, No. 13 (1991b), pp. 127-131. servation programme by farmers, extension volunteers "Participatory impact monitoring of a soil and water con-Shah, Parmesh, Ginsh Bharadway, and Ranjit Ambastha,

appraisal and planning," RRA Notes, No. 13 (1991a), pp. "Farmers as analysts and facilitators in participatory rural

December 1993).

Institute of Development Studies, University of Sussex, Agriculture, IDS Discussion Paper No. 334 (Brighton: Paradigm: New Prosessionalism and Institutions for

(London: Routledge, 1993), pp. 169-177.

Programme, June 1989).

gnatuesa, 1992).

Governmental Organisations and the State in Asia

tural training," in J. Farrington and D. Lewis (Eds.), Non-

port programme and participatory approaches to agricul-

lysis: From PRA methods to process," RRA Notes (fouh-

approach" (Ahmedabad India: Aga Khan Rutal Support

waterzhed development — extension volunteet

Institute of Development Studies, University of Sussex,

on Alternatives to questionnaire surveys' (Brighton:

interesting?" Note prepared for the IIED/IDS workshop

Research and Extension Practice, Asia Papers, IIED

theories," in Rural People's Knowledge, Agricultural

grammes in India: reversing our roles and revising our

participatory rural appraisal," Forests, Trees and People

of the Learning Organisation (London: Century

Shah, Anil C., "Shoulder tapping: A technique of training in

Senge, Peter M., The Fifth Discipline: The Art and Practice

Senarame, S. P. F., "A program of micro-level studies in

Semler, R., "Managing without managers," Harvard

Business Review (September-October 1989), pp. 76-84.

332 (Brighton: Institute of Development Studies,

Research and Extension Practice, IDS Discussion Paper

Perspective; Rural People's Knowledge, Agricultural

Scoones, Ian, and John Thompson, Challenging the Populist

Sachs, W., The Development Dictionary: A Guide to Know-

International Rangelands Congress (France:

for contextual science," Plenary Paper for Fourth

development relationship in rangelands: An opportunity

Agriculture Programme, International Institute for En-

Sciences: Insights, Inroads, and Intrusions (Princeton,

ogy," Agricultural Administration, Vol. 11 (1982), pp. model for generating acceptable agricultural technol-

Rural Poor (Tamil Nadu: RUHSA Department,

Rankling of PRA and Formal Survey in Identifying the

Babu, and Abel Rajaratnam, Validating the Wealth

Rajaratnam, Iolly, C. Gamesan, Helen Thasian, Navamoni

Russell, David B., and Raymond L. Ison, "The research-

RRA Notes 1-18 and continuing (London: Sustainable

Rosenau, Pauline Marie, Post-Modernism and the Social

Rhoades, R. E., and R. Booth, "Farmer-back-to-farmer: A

Christian Medical College and Hospital, 1993).

ledge as Power (London: Zed Books, 1992).

Montpellier, April 22-26, 1991).

vironment and Development).

Ul: Princeton University Press, 1992).

Shah, Parmesh, "Participatory watershed management pro-

Newsletter, No. 14 (October 1991), pp. 14-15.

Shah, Parmesh, "Questionnaires: participatory, reliable and

Research Series, Vol. 1, No. 3 (1993a).

rural Sri Lanka," Mimeo (1976).

University of Sussex, December 1993).

Shah, Parmesh, and Meera Shah, "Training of village ana-

Shah, Parmesh, "Concept of people's participation in the

Shah, Parmesh, and P. M. Mane, "The Aga Khan rural sup-

Pretty, Jules, and Robert Chambers, Towards a Learning

Shah, Parmesh, Girish Bharadwaj, and Ranjit Ambastha,

MORLD DEVELOPMENT