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Abstract

Top-down rural development strategies in Africa have generally not succeeded in raising living standards among the rural poor. It is argued that inappropriate development strategies have stemmed from methodologies that fail to appreciate the whole picture in rural communities, and in particular ignore local people's perceptions, needs and understanding. Participatory Rural Appraisal (PRA) represents a significant step forward in the design of methodologies and a selection of these techniques is evaluated. Many PRA methods have much in common with the field research methods that have been used by geographers over many years to interpret people-environment relationships. A research investigation in Eastern Cape Province, South Africa, suggests that geographers could have an important role to play in this area of applied research and, in particular, in the context of post-apartheid South Africa there is an urgent challenge to be met in promoting rural development in poor, former black Homeland areas.

Introduction

It is widely acknowledged that past rural development strategies have failed to raise living standards significantly in African rural communities (Binns, 1995). They have typically adopted centrally driven, top-down approaches, often failing to appreciate the skills, perceptions, knowledge and aspirations of those whom the programmes are designed to assist. All too frequently in the past, it has been assumed that development programmes implicitly embodied objectives of poverty reduction and that positive progress would be achieved through the process of 'trickle down' from richer to poorer regions and communities. However, to date there have been many instances of such programmes failing to reach the poor, particularly those living in remoter rural areas (Easter, 1995).

It is suggested here that one of the key reasons for the failure of many rural development schemes stems from the fact that they are derived from inappropriate methodologies which have failed to fully comprehend the dynamics of rural life. More specifically, these methodologies have failed to understand the complexities of the socioeconomic and cultural contexts in which indigenous livelihood and production systems function. Such limitations have sometimes arisen through the utilization of methodologies with a strongly econometric bias (Hill, 1986) and an obsession with the search for universal solutions, rather than trying to identify appropriate strategies for the particular local context. In addition, a lack of empathy and developers' inability to communicate with the supposed beneficiaries of development have sometimes led to antagonism.

A positive trend in recent years has been a notable shift in the focus of rural development strategies, from the rather dictatorial 'top-down' approaches of the past to locally based and more democratic 'bottom-up' strategies. One of the key reasons for this paradigmatic swing is undoubtedly due to the development of new, more enlightened and sensitive rural research methodologies, particularly an array of methods known collectively as 'Participatory Rural Appraisal' (PRA) (Chambers, 1994). At one level PRA can be seen as a reaction to previous econometric and quantitative approaches, which frequently ignored people, preferring instead to concentrate on issues of 'production' rather than on 'producers', and failing to appreciate the critical role played by indigenous knowledge systems and coping mechanisms. The emergence of PRA has led to a significant reappraisal of methods, which has slowly but steadily been followed through into a reformulation of rural development strategies. As Scoones and Thompson observe: 'in national and international agricultural research centres, universities, government agencies and NGOs, there is a growing acceptance of the need to involve local people as active partners in all aspects of the research and development process' (Scoones and Thompson, 1994: 2).

A key feature of PRA is its holistic approach, in which the interaction between different elements in complex people-environment relationships is an important focus. This holistic perspective, together with the emphasis on people-environment relationships, has also traditionally been important in much geographical study. We would argue, therefore, that geography and geographers, possibly more than any other discipline, have a significant role to play in such investigations and, furthermore, can make an important contribution to the use and development of PRA and hence to rural development in general. This paper examines this issue in the specific context of vitally needed rural development in post-apartheid South Africa, where past strategies either totally ignored rural black communities or subjected them to harsh forms of control. It seems that PRA has not yet been fully recognized and accepted by geographers as a research methodology in South Africa, and this paper considers what is thought to be the first PRA study to be undertaken by geographers in the country.

The South African rural development context

Before South Africa's first democratic elections in April 1994, rural development policies were confined to targeting support to white commercial farmers and the continuing exploitation of the black labour force concentrated in the overcrowded rural Homelands-African ethnic reserves established under apartheid policies. The result of these policies has been a legacy of inequality, the breakdown of family and community structures caused by the migrant labour system, and exceedingly high levels of poverty. A recent World Bank study (World Bank, 1995) established that 75 per cent of the country's poor live in rural areas, the majority concentrated in the former Homelands. In certain districts in these impoverished areas, up to 85 per cent of the potential economically active workforce is unemployed (Development Bank of Southern Africa, 1991). The long-standing absence of programmes to assist black farmers and to provide the necessary supporting infrastructure, services and funds has further exacerbated rural deprivation, making the need for intervention all the more urgent. These conditions have motivated the new

government to prioritize rural development in its recently released 'Draft Rural Development Strategy' (Republic of South Africa, 1993, which is placed within the broader context of the 'Reconstruction and Development Programme' of the African National Congress (ANC, 1994).

A new political regime with its new policies clearly requires some new strategies to begin to solve the immense rural development challenges and also to understand better the dynamics and needs of rural communities. Such an approach is clearly informed by the experience of other African countries and the failure of many rural development strategies within them. There is great urgency in South Africa to implement policies leading to empowerment of the people, whilst promoting rural development and establishing a basis for the sustainable use of available human and natural resources. This would represent a major departure from earlier approaches and would hopefully strengthen the ideals of democracy and transparency which are gradually developing in the 'new' South Africa.

To assist with this transformation process and to incorporate rural people fully, it is believed that PRA provides a vital approach in appreciating the views and skills of rural people and in formulating locally appropriate development strategies. Thus far, however, relatively little has been written about the current and potential application of PRA in the context of rural development in South Africa.

PRA: development and focus

The popularity of PRA has grown in recent years, largely as a consequence of many researchers' disillusionment with earlier methodologies. Its origins seem to be derived from a number of different, yet related, methodological strands, including agroecosystem analysis, farming systems research and, more recently, Rapid Rural Appraisal (Chambers, 1983). Field research undertaken in semi-arid northern Nigeria, for example, during the late 1960s and 1970s by David Norman and others, recognized the importance of a 'systems approach' in obtaining a complete picture of rural communities. It involved much detailed observation and discussion with indigenous people. These investigations involved unravelling the complexities of crop production strategies such as intercropping, which were initially unfamiliar and often perceived as irrational by 'western' observers (Norman, 1974). Polly Hill's important work in Ghana and northern Nigeria did much to reveal and give further credibility to the 'indigenous perspective' (Hill, 1970).

A common thread in all these methodologies is their recognition of important interlinkages between different elements of rural livelihood and production systems. Following their development during the 1970s and 1980s it was realized that although the methodologies involved both a recognition of indigenous technical knowledge and the value of dialogue with rural communities, households and individuals, a key element was missing. Unlike earlier methodologies, PRA recognizes that indigenous people are capable of identifying and expressing their needs and aspirations themselves and in their own way, such that the role of the researcher is reduced to that of a listener, learner, catalyst and facilitator (Chambers et al., 1989; Chambers, 1993).

Conventional research has often suffered from the drawback of not adequately incorporating and taking cognizance of the subjects of the research process. The criticism can be levelled that many research investigations in the past (and even today!) tend(ed) to be of a rapid and superficial nature, leading to what has been described as ‘rural development tourism’ (Chambers, 1983: 10-12). Furthermore, such research is often characterized by a wide range of biases, such as tarmac bias, roadside bias, project bias, gender bias, dry-season bias and professional bias. Such biases often prevent the true identification and assessment of third world rural development problems, as well as marginalizing the views of rural people and inducing a bias based on western preconceptions and accessibility limitations. Through inappropriate methodologies with their attendant biases, the true nature and extent of rural poverty is, in essence, often hidden from the ‘rural development tourist’ and, consequently, appropriate measures of support and funding often fail to reach the ‘hidden poor’ (Chambers, 1983).

PRA is ‘a growing family of approaches and methods to enable local people to share, enhance and analyse their knowledge of life and conditions, to plan and to act’ (Chambers, 1994: 1). There is now a considerable amount of literature available on PRA, and the Sustainable Agriculture Programme of the International Institute for Environment and Development, based in London, publishes three times a year *PLA Notes* (formerly *RRA Notes*) [1], which provides useful updates on PRA techniques and their application in various locations.

A selection of the most useful PRA techniques

Direct observation and ‘do it yourself’. Detailed observations and probing questions (what?, when?, who?, and so on). Outsiders are taught and supervised by villagers in performing various tasks, such as ploughing, food preparation and fetching water.

Discussion with key informants. Meet community elders, schoolteachers, health workers and so on, to identify key events in the past and current issues of importance to the community.

Group discussions. These can be casual or specifically focused and deliberately structured group discussions on a variety of topics relating to community life. These sessions can be used to identify community problems and aspirations.

Case studies and stories. An individual or group might describe, for example, a household history and profile, coping with a crisis, or how a particular conflict was resolved.

Participatory mapping and modelling. There are many possibilities for individuals or groups to draw maps or make models, using local materials (sticks, stones, seeds, and so on) to show the layout of the village and its farmlands, and the extent and variability of resources, such as water, fuelwood and soil quality. Specific constraints/problems may be indicated on the map or model.

Transect walks. Systematic walks with key informants through an area of interest observing, asking, listening, identifying different zones, seeking problems and possible solutions. Findings can then be mapped by the local informant or outsider onto a transect diagram.

Time-lines and trend and change analysis. Community members might produce a diagram in the sand, using local materials, to show a history of major recollected events with approximate dates. Discussion of changes that have occurred can be a good icebreaker for PRA exercises. Diagrams and discussion might focus on a single issue that has changed over time, such as health, population, crop yields or rainfall.

Seasonal calendars. By asking community members to ‘take outsiders through’ a typical year, various constraints can be identified at particular points in the annual cycle, such as rainfall, nutritional problems, labour inputs and expenditure. Marked seasonal variations are common in tropical regions, where rainfall variability impacts upon the annual cycle of life and food production. In some tropical regions of Africa, for example, the late rainy season before the start of the harvest is known as the ‘hungry season’, a time when food is in short supply, diseases such as malaria are widespread and there is much work to be done on the farm. Important seasonal variations and their implications might be illustrated in a diagram.

Daily time use analysis. The focus here is on a typical day, identifying pressures and relative times associated with particular tasks. Which members of the household or community undertake specific tasks: men, women, children, young or old?

Wealth ranking. This involves a range of methods to identify groups or clusters of households according to relative wealth or well-being. Who are the poorest and richest households, and why? Findings can be illustrated diagrammatically and can lead into discussions on livelihoods, vulnerability and coping strategies.

Matrix scoring and ranking. A wide range of matrices can be constructed using local materials, giving scores for different variables, such as the productivity of particular crop varieties or methods of soil and water conservation. Labour inputs, taste preference or fertilizer use, for example, might be plotted against particular rice or millet varieties.

PRA, geography and South Africa

The spatial and temporal character of many of these enquiry techniques has much in common with well-tested geographical fieldwork methods. In fact, it might be suggested that geographers were practising PRA-type techniques long before the concept became fashionable. For example, those techniques focusing on the interaction between people and environment in an integrated and holistic manner, such as resource maps, transect walks and seasonal calendars, have their parallels in much geographical investigation. Geographers have long been aware that an

understanding of environmental factors such as rainfall, landforms, soils and vegetation is as important as appreciating the social, cultural and economic context of decision-making among rural producers. Whilst it is recognized that there is a role for a wide range of social scientists in conducting PRA, geographers are particularly well placed and have many of the necessary skills to undertake this work (Binns, 1995; Brace, 1995). The potential for geographers becoming more involved in future PRA evaluations parallels the apparently growing recognition from government agencies, non-governmental organizations, environmental scientists and others that geographers do have particular skills and research strategies which are highly relevant in the light of a growing concern about environmental issues and people-centred development.

Despite the growing international interest in PRA, there has been remarkably little research and writing on this topic in South Africa and there is little, if any, evidence of explicit PRA work being done by geographers. Work undertaken to date includes that by psychologists van Vlaenderen and Nkwinti (1993) (see also van Vlaenderen, 1995), who wrote on participatory research in the former Ciskei Homeland, the sociologist Roodt's (1995) paper on theoretical issues, and an *OD Debate* discussion paper (1994). Although geographers have not worked specifically on PRA, they have undertaken much related work on rural development in South Africa. Hitherto, however, field research and PRA-style investigation in South Africa have been hampered by the realities of apartheid, antagonism and disempowerment, which have themselves generated biases unique to the South African field research situation. Such biases include racial prejudice, crime and violence, marked inequality and discrimination.

Disempowerment of the majority of the rural black population has generated a further constraint: these people have been subjected to top-down decision-making over many years, which has perhaps understandably stifled any self-expression. They are frequently not used to articulating their views and having others listening to them. A review of published South African geographical literature reveals a further significant bias—a distinct reluctance among researchers to work in rural and marginal (usually black) areas (Beavon, 1982).

The research scenario in rural South Africa is further complicated by questions of physical and political access. Given the country's historical legacy, communities are often reluctant to accept the presence of researchers and frequently question the legitimacy and relevance of their research. In the light of these realities, and the urgent need for appropriate development-orientated research, researchers have to adopt techniques that both fulfil their own objectives and at the same time are acceptable to rural communities. Geographers and other researchers in South Africa should be encouraged to adopt and apply PRA methodologies with some urgency, to assist with the improvement of living standards in impoverished rural communities within the wider context of post-apartheid national development programmes.

PRA in Hertzog, Eastern Cape Province

A long-term PRA-based research investigation is currently underway in the rural community of Hertzog, in the former Ciskei Homeland (now part of Eastern Cape Province) in South Africa. In this district, a community-driven agricultural cooperative was launched by the local civic community organization in 1994, following the collapse of apartheid-created state structures which had denied black people access to land, support and funds. The community structure is characterized by strong, democratically elected leadership, transparency at all levels and a real sense of ownership and empowerment (Nel and Hill, 1996). In a region characterized by disempowerment, restricted opportunities and limited access to land and resources, the significance of what has been achieved in Hertzog should not be underestimated.

In 1995, the present authors, through their involvement with black community structures elsewhere in South Africa, became aware of the significant and apparently unique Hertzog initiative. With the post-apartheid government's emphasis on promoting widespread local economic development (LED) in impoverished black rural areas, the authors decided to investigate the key elements in this success story, with a view to identifying some guidelines for future LED policy. In order to understand how and why the process of development had taken place and to examine the key social, economic and environmental variables, a number of PRA techniques were utilized. The confidence of the Hertzog community and its leaders was gained initially through the research team's record of involvement in other local communities.

With the full cooperation of community leaders assured, a team of geographers initiated a PRA exercise which has yielded some detailed insights into the dynamics of rural upliftment and social change. Through key informants and group discussions with participating farmers in the cooperative, a detailed chronology was obtained of the period leading up to the establishment of the cooperative and the subsequent success of the venture. The group discussions went particularly smoothly, with all those taking part making valuable contributions, most notably some dynamic and assertive women farmers. In addition to these discussions, detailed observations were made of the area and the production process through a series of 'transect walks' across the cooperative's lands. One researcher engaged in a 'do it yourself' exercise with the farmers, both to learn from hands-on experience and to gain the confidence of local farmers. The same researcher worked effectively with primary school children in evaluating the quality of their drinking and irrigation water supplies, through active water sampling by the children themselves. Seasonal calendars were constructed as a result of detailed discussion, identifying the key elements of the production cycle and the timing of these. Seeding, spraying and harvesting of the vegetable crops proved to be the most labour-intensive activities in the farming year and were characterized by a strong sense of communal effort. Key findings from the PRA exercise included a detailed chronology of the region, which included much reference to the trauma and dislocation associated with the denial of access to land under the apartheid regime. PRA also proved valuable in identifying the reasons why the community was driven to initiate the project. There was much self-analysis and

reflection amongst the community in recognizing and articulating their skills and in identifying competent project leaders.

A short structured questionnaire was administered by a community member to supplement background socioeconomic detail. Results indicated the high pre-existing levels of poverty and the significant impact that the development endeavour has had. The research team experimented with a video-making exercise to encourage community participation, in which members talked about aspects of their daily lives. Although the researchers prompted certain questions, much of the information on video was elicited through community members interviewing each other and describing developments in the project and surrounding area. This proved to be a most valuable mechanism for focusing the community's attention on their own achievements and critically analysing the development process.

Considerable social and economic improvement has resulted from the project's early successes. With the rehabilitation of a pre-existing irrigation system, large quantities of vegetables are now being produced and sold, the most successful crops being cabbages and potatoes. During the 1995/6 growing season, well over 1000kg of potatoes were produced on single-hectare plots that had lain fallow for 20 years. In addition, individual plot holders are producing up to 8000 cabbages each growing season. In a community previously reliant on state pensions and migrant labour remittances as its primary sources of income, the sale of this produce has revolutionized household budgets, often quadrupling monthly incomes. This has undoubtedly led to a significant improvement in the quality of life in the area. Many families are now able to purchase both basic household items as well as luxury goods such as furniture, which had previously been impossible. The cooperative initiative has also created jobs in an area that had hitherto experienced an unemployment rate in excess of 90 per cent. A particularly interesting result of the scheme is that produce is not only sold to regional markets, but a significant share is purchased by residents of neighbouring villages, which has in turn encouraged entrepreneurial initiatives in those communities. The only drawbacks to the project thus far are shortages of land and finance, and some resentment from non-participating residents in the valley.

The Hertzog initiative is significant in the degree to which a traditionally disempowered rural community in South Africa has itself seized a development opportunity and successfully launched a sustainable and economically viable agricultural project. The research investigation has provided an important insight into community dynamics, decision-making and the development processes involved, with particular emphasis on leadership, accountability, empowerment, cooperative organization and transparency. Such information could be invaluable if the experience is to be replicated elsewhere. The research process is an on-going one with various strands to it. The researchers have over time gained the community's confidence, such that the former have been invited to assist with identifying further development possibilities for the area, notably eco-tourism and the diversification of agricultural production and marketing arrangements. In the meantime, the video material collected has been distributed throughout South Africa. As part of a national business initiative to promote local and community development.

Conclusion

This research investigation has perhaps more than anything revealed the extent to which the researchers have learned from the local people in Hertzog. This endorses the view that ‘in participatory research . . . the researcher is regarded as a person with specialized knowledge who is a committed participant and also a learner’. As such, the researchers ‘assume a facilitating role rather than being predominantly data collectors and analyzers in charge of the research project’ (van Vlaenderen and Nkwinti, 1993: 213). This paper makes a strong case for applied, action-orientated and participatory research, which geographers are particularly well qualified to undertake. In South Africa there is an especially urgent need for geographers to engage in field-based PRA research, particularly in marginal and impoverished black rural areas. Such research must be undertaken with a view to identifying appropriate development options and strategies in partnership with communities. The Hertzog study clearly supports what Scoones and Thompson regard as the key objectives of PRA, where ‘the focus is on bridging gaps between development professionals and resource-poor farmers, and on finding new ways to understand local knowledge, strengthen local capacities and meet local needs’ (Scoones and Thompson, 1994: 2).

The investigation also confirms Phillips-Howard’s findings that South African farmers are not always passive recipients of aid, incapable of making informed decisions, but rather ‘innovation and experimentation are common features of African agriculture and [that] “inside experts” can make valuable contributions to technological development’ (Phillips-Howard, 1994: 11). PRA has indeed much to offer in identifying the needs, aspirations and constraints of rural communities such as Hertzog. Participatory methodologies provide researchers with a valuable learning experience, and the Hertzog example shows that South African research prejudices can be overcome, to the mutual benefit of researchers and rural communities.

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Notes

[1]. *PZA Notes* (formerly *RRA Notes*) is published three times a year by the Sustainable Agriculture Programme, IIED, 3 Endsleigh Street, London WC1H 0DD, UK.

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