# Editorial

Rural people in third world countries, and especially the poorer rural people, are losers in many ways. Whatever vocabulary is in fashion—whether one talks of dependence, deprivation, domination, exclusion, exploitation, impoverishment, marginalisation, powerlessness or subordination—part of the reality to be captured is weakness. This weakness is often seen in terms of lack of political organisation, poor access to resources, employment and services, and impotence in the face of class and urban interests and of the machinery of the state.

Less well recognised is the weakness of rural people in the face of exogenous organised knowledge. Those with formal education and training believe that their knowledge and skills are superior and that uneducated and untrained rural people must, by definition, be ignorant and unskilled. From rich-country professionals and urban-based professionals in third world countries right down to the lowliest extension workers it is a common assumption that science-based knowledge is sophisticated, advanced and valid and, conversely, that whatever rural people may know will be unsystematic, imprecise, superficial and often plain wrong. Development then entails disseminating modern and scientific knowledge to inform and uplift the rural masses. Knowledge flows in one direction only—downwards—from those who are strong, educated and enlightened towards those who are weak, ignorant and in darkness.

The papers in this Bulletin challenge this orientation. They are concerned with the technical knowledge possessed by rural people and with their capabilities for assimilating, adapting, communicating and creating knowledge. The authors approach the subject from the various angles of social anthropology (Michael Howes), agricultural economics and agronomy (Deryke Belshaw), geography (Paul Richards, David Barker), biology and economics (Jeremy Swift) and history and economics (Martin Bell), drawing evidence mainly from Africa and Asia. The main thrust of their argument is that to neglect the stock of indigenous technical knowledge, and the processes whereby rural people can assimilate, adapt, communicate and create knowledge, is both inefficient and wrong.

The richness and relevance of the stock of indigenous technical knowledge (ITK) often goes unrecognised. Examples cited by Howes from the literature of social anthropology and by Belshaw from the practice of inter-cropping in East Africa indicate a wealth and sophistication of knowledge which may surprise some who work on rural development. Rural people, free of disciplinary blinkers, usually not only know more about local conditions and needs but also take a more holistic view than specialists from outside. Their knowledge can complement organised science. Soil surveys are but one example where it might often be highly cost-effective for investigations by organised science to be based upon or linked with local classifications and local knowledge. The neglect of ITK is, in these terms, a straightforward form of inefficiency.

But the argument goes further. We are concerned with far more than unused or underused resources—a mine of knowledge to be exploited; for this repeats the familiar pattern of dominant outsiders extracting raw materials, in this case nuggets of information, to be processed somewhere else and then used to act on the rural environment from outside, rather than enhancing the control and capabilities of the rural people themselves. Less obvious, but perhaps more important, are the processes whereby knowledge is generated, communicated, adapted, incorporated and transmitted, and who controls all this. There are degrees to which rural people can participate in and control these processes. It is a start for them simply to be consulted and asked for information. Beyond this, farmers can, as Richards suggests, complement organised science with activities, especially local observation, in which they have a comparative advantage. Howes suggests that it is misleading to see ITK as purely utilitarian and points out that rural people conduct experiments. But this capability often goes unused, not least because R and D is so often carried out away from the rural environment. The location of R and D—whether on a research station or on a farmer's field, in an urban engineering laboratory or in a rural workshop—affects not just the technology developed, but whether it will be adopted and who will control it and with what ease and independence. And besides R and D, as Bell explains, there are other important processes in technical change, including

the adoption and modification of knowledge and its incorporation into ITK. Given the dominance of the knowledge of organised science, linked with the power of the state, part of the task is, in Swift's words, "to transfer the power of action back to rural people and to equip them with an adequate understanding of what modern knowledge and technology have to offer". The search is for an optimal synthesis in which the balance of power is shifted away from the bearers of modern knowledge and much more towards rural people.

Non-rural professionals and officials of all kinds and levels tend, however, to be primitive in their failure to recognise the knowledge and capabilities of rural people. The failure of agricultural scientists to see the advantages of inter-cropping, indicated by Belshaw, shows an extraordinary and prolonged blindness. There are two key problems here. First, respectable methods of rural research may not be cost-effective: the traditional participant-observation of the social anthropologist is time-consuming, while survey questionnaires distort or exclude information by imposing their own categories and logic on respondents. Second, as both Howes and Swift point out, many of those who ought to learn from rural people rely on their modern knowledge to establish and maintain their superior status; to admit that they could and should learn from their clients would threaten the foundation of their authority. It is scarcely surprising that methods of learning from rural people rarely, if at all, feature in the syllabuses of training institutions for agricultural extension staff and the like. What is needed are methods of learning which are appropriate—quick, not threatening to those who use them, accurate, and easy to incorporate in training programmes.[1]

It is here that the new methods developed and described by Richards and Barker are relevant and indeed exciting. The repertory grid technique described by Richards can be used to elicit useful information and to understand the way in which rural people construe their environment. Similarly, the *Ayo* board described by Barker is a neat adaptation of a traditional game to obtain quantified responses to questions and also debate about the questions themselves. And others including David Atteh, John Gay, John Karimu, Joyce Tait, and Stephen Turner, are also engaged in developing games for learning from rural people. These methods may be good for training staff. Because they do not impose meanings but are open to information, they are likely to be efficient; and because they are fun for all concerned, they may overcome the insecure dominance of junior officials or researchers, allowing them to learn without being threatened. If playing 'games' such as these with farmers could become standard practice in their training, agricultural research and extension staff should come to appreciate better how much they could and should learn from their clients.[2] Further work is required to develop and experiment with these and other methods to see how replicable they are, what kinds of knowledge they elicit best, and how effective they can be in breaking down the common authoritarian and one-way relationship between junior rural official and farmer.

Junior rural officials are easy to blame and easy to prescribe for at a distance. But as Bell reminds us, the systems with which we are concerned operate at different levels both within nations and between nations. Changes are needed, perhaps most of all, in the values, perceptions and behaviour of professionals—social and technical scientists, planners and administrators. International systems of professionalism dominated by the universities, professional associations, and journals of the richer countries, reinforce values hostile to ITK and penalise values which are open to it. Some examples can illustrate. A third world student in a rich country university wished to do his PhD on ethno-soil science but was dissuaded by thesis advisers who said it would be bad for his career since he would be unable to publish articles in any of the 'hard' journals. A rich country professor working in a third world country devised new methods to handle the special problems of research on inter-cropping, only to find that the international journal which he had formerly edited would not accept his papers. Agricultural researchers in a third world country were reluctant to collaborate with those developing new methods for eliciting indigenous knowledge because they feared they would be unable to publish the results. In another third world country, scientists who worked in villages, devising appropriate technologies jointly with villagers,

[1] See the Papers from a workshop on 'rapid rural appraisal' held at IDS on 26 and 27 October 1978, which identify and discuss methods which are quick, cheap and accurate. A limited number of these papers are available on request from Ms. Susan Saunders, Secretary to RUPAG, IDS, University of Sussex, Brighton BN1 9RE, UK.

[2] This, like other points made, applies also in the rural sectors of the richer nations. Recent research at Cornell University into the categories for distinguishing soil types used by farmers in part of New York State showed that farmers' categories were quite different from those of the United States Department of Agriculture which the farmers did not find useful (Personal Communications, Milton Barnett and Norman Uphoff).

found that they could not publish their work in their institute's own journal. In all these cases, it was the supposed or actual policies of journals which deterred or hindered those who wished to explore ITK and to work with rural people on a more equal basis. The editors of journals, as arbiters and custodians of professional values, have a responsibility not just to change their policies and criteria, but to make it widely known that they have changed them.

In the meantime, it is pertinent to ask: who are the true professionals? Those who earn esteem on their fenced-in research stations for tidy, safe and irrelevant journal articles, or those who find new ways of learning from farmers and fitting their work to farmers' resources and needs? Those who develop practical techniques in villages with villagers, or those who make inappropriate machines in urban engineering works? Those whose work fits real needs but is unpublished and unrecognised, or those whose work is published and recognised but does not fit real needs? Those whose values and behaviour are set towards conventional recognition, rewards and channels of promotion, or those who seek excellence in unconventional values and behaviour in sensitive work with and for rural people?

Many will wish to reject the implications of these rhetorical questions and of the papers in this Bulletin. For they imply painful changes, not least in the citadels of professionalism in the rich countries. It may be tempting to seek an easy rejection of the arguments put by the various authors by stigmatising them as romantic Luddism, a quaint antiquarianism, or a new form of sterile collectors' mania for bits and pieces of local lore. But a careful reading will show that these are no part of the philosophy or of the case. The concern is for approaches which are hard-headed, cost-effective, and sensitive to what rural people want, need and can manage and control. The search is for an optimal mix of two systems of knowledge which are grotesquely unequal in leverage. Modern scientific knowledge is so strong, so enmeshed with the power of the state and of state functionaries, and so embedded in the conditioning imparted by education and training, that only sustained reversals can achieve that optimality. But who defines what is optimal? We are confronted again with who is powerful and who is weak. Rural people generally are weak *vis-à-vis* officials and professionals; and rural society is itself differentiated into those who are stronger, and whose interests and capabilities are liable to dominate, and those with less voice and control. The interests of those who are weaker would be better served if more of the powerful professionals would step down off their pedestals, seek out the poorer people, and sit down, listen and learn.

*R.C.*