Research Viewpoints

Robert Chambers has been a member of the rural problem area group at IDS for some years. He has moved from public administration into the advocacy and practice of interdisciplinary approaches to rural development. Research and operational work particularly in East Africa and South Asia have convinced him of the importance of indigenous knowledge and of the difficulties trained professionals have in learning from rural people, especially the poorer. Here he further develops some points from his book Rural Development: putting the last first (Longman, 1983).

Professionalism for Rural Development: reversals and gaps

One theme from the past 10 years' work on rural development is that many obstacles to reducing rural deprivation in the Third World have a professional dimension. Two aspects stand out: academic and professional preferences, values and rewards; and the organised specialisation of knowledge and technology generation.

Academic and professional preferences, values and rewards pull research towards technology and projects which reflect and embody the needs and things of those who are 'first' — the urban privileged of the rich world, and away from their polar opposites, the needs and things of those who are 'last' — the rural deprived of the poor world. The 'first' and 'last' lists in the table make the point.

Along with 'first' biases go prejudices that poor rural people are ignorant and stupid and the professional outsiders have a monopoly of useful knowledge. Indigenous technical knowledge, though often rich and practical, is ignored and despised. 'First' R & D generates technology which does not fit the needs and resources of the poor, and sometimes impoverishes them further.

Specialisation narrows fields of study, and as more and more is known about less and less, so any one professional knows less and less about more and more. Polishing paradigms entails more and more attention to measurement and microdetail. As researchers dig their ruts deeper, they lose sight of the wider world. Interlocking profession-based organisations reinforce these tendencies. Faculties or departments of agriculture, veterinary science, forestry and economics train students who then pass into government departments of, respectively, agriculture, animal husbandry, forestry, health, and economic planning. Specialisation and departmentalism concentrate on narrow bands of concern, neglecting linkages. Gaps between disciplines and professions are left unexplored and unexploited.

For understanding and reducing rural deprivation, these 'first' biases and professional gaps present opportunities. Most technologies generated by mainstream disciplinary work in, say, agriculture, animal husbandry or forestry have in the past fitted the needs of those who are better off, and been appropriated by them. But they have at the same time left untouched potentials and resources from which the poor might now gain. New 'last' technology and new patterns of gap development offer scope for enabling poor rural people to command better livelihoods.
First urban industrial high cost capital-using mechanical inorganic large modern exotic marketed quantified geometrical visible and seen tidy predictable hard clean odourless

Last rural agricultural low cost labour-using animal or human organic small traditional indigenous subsistence irregular unseen untidy unpredictable soft dirty smelly

Professional preferences and values

A FOR TECHNOLOGY, RESEARCH AND PROJECTS

Some examples

There are many ways of attacking rural deprivation. But making professional reversals and exploring gaps have two advantages: they are intellectually challenging (though that is really a 'first' luxury); and much more important they have fair potential feasibility, since they do not frontally threaten entrenched interests. What they all too often lack is enough imaginative support. Four examples can illustrate these points.

To start with, methods of rural investigation used by 'first' professionals often exclude the 'last'. Either they engage in urban-biased rural development tourism - brief rural visits heavily biased against encountering or learning from the poor, or they undertake long-drawn-out surveys with long questionnaires which impose meanings and gather misleading 'data' which are rarely of any use. In the gap between these quick-and-dirty and long-and-dirty approaches lies rapid rural appraisal, meaning methods of finding out, which are cost-effective, offset anti-poverty biases, allow and encourage learning from the poor, and optimise trade-offs between accuracy, relevance, timeliness and cost of collection.

Second, agroforestry - the interactions of trees, crops and livestock - has until recently been a gap almost totally neglected by agricultural research concerned with crops, livestock research concerned with animals, and forestry research concerned with trees. Yet agroforestry is widely practised in Third World small farm agriculture, can be a powerful countercyclical strategy, and has special advantages for small as against larger farmers.

Third, a surprising gap is the management of canal irrigation systems. Engineers who operate irrigation systems covering tens or hundreds of thousands of hectares are trained in civil engineering, largely concerned with structures. Not only are they not trained in the scheduling and distribution of water, but the methodologies of irrigation system management are at an early rule-of-thumb level of development. Managing the main irrigation system is a professional blind spot. One consequence is deprivation for tens of millions of tailenders - farming families whose water supplies are unpredictable, untimely and inadequate, and labouring families who with improved water supplies could expect more work and higher wages.

Fourth, shortages and high costs of energy since 1973 have been regarded as a problem for the rich rather than an opportunity for the
poor. Rising fuelwood prices in Third World towns have been seen to present difficulties for urban consumers rather than chances of livelihoods for rural producers. However, once it is recognised that tree tenure is separable from land tenure, vast scope is revealed for poor people owning, growing, cutting and selling trees on common and public land. Again, producer gas locomotion is a well-known technology which in the remoter parts of Africa might be used to power buses and lorries, substituting local for imported fuel, at one stroke generating incomes for the peripheral rural poor and saving foreign exchange. But 'first' thinking — urban, elite and so on — together with the fixation on the gasoline internal combustion engine — has hidden or repressed this opportunity.

The obstacles

Combining reversals and gaps-as-centres is enormously exciting and satisfying for anyone who becomes involved but faces problems of acceptance, diffusion and take up. To make reversals requires fighting institutional inertia and intellectual conservatism. To explore gaps requires funds and may need special organisations. The four cases above illustrate these problems.

For example, after the 1979 IDS conference on rapid rural appraisal, no book was written because a funding agency turned down a modest request for the support needed for the editor. Rapid appraisal has since become more accepted in most professions concerned with rural development, but not as much as it might, and practitioners are still hesitant and apologetic in describing their innovations and methods.

Another example: the International Council for Research on Agroforestry (ICRAF) has had prolonged problems over funding. Although agroforestry research should serve hundreds of millions of members of poor farm families, and offers promising leads for reversing declining productivity and incomes of rural sub-Saharan Africa, ICRAF in 1984 had only 15 scientists for the whole world. Then again, it was only after a decade of debate that the International Irrigation Management Institute (IIMI) was set up in Sri Lanka in 1984, and at the start of 1985 it had only four professionals. Like ICRAF, IIMI has not been accepted into the club of International Agricultural Research Centres which have the security of joint funding by a consortium of donors with a demonstrated long term commitment.

For rural energy-based livelihoods, an international centre has, to my knowledge, never been seriously considered. Enormous though the opportunities appear, the vision and will have not been mustered. There still appears a great need and opportunity to bring together mechanical engineering, chemical engineering, forestry, agronomy, organic chemistry, sociology and other disciplines for R & D on biomass-based and other energy technologies to generate livelihoods for poor and peripheral rural people.

The future

There is much other scope for reversals and many other gaps. Reversals in agricultural research methodology, starting and ending with the priorities, resources and needs of resource-poor farmers is one approach, and there may be equivalents for animal husbandry, forestry, health, engineering and other domains. Many of the gaps concern common property resources such as pasture, forests, trees, fish, riverbeds, wildlife, and water, especially groundwater and mechanical and organisational technologies for its equitable exploitation. To work on gaps like these, main line professional and disciplinary organisations have the technical competence but rarely the necessary flexibility; and voluntary agencies have the flexibility but rarely the technical competence. Meanwhile, aid budget cuts inhibit the creation of new organisations which could make centres out of gaps; and special organisations like ICRAF and IIMI remain small compared with needs and potentials. At a time when many minds are exercised over the crisis in sub-Saharan Africa and the deep deprivation of hundreds of millions elsewhere, conditions cannot, it seems, be created for anything like adequate appropriate R & D to generate livelihoods for those who are last.

The question now is whether enough professionals will have the vision and courage to reverse their plans and to make gaps central, with and for the rural poor; and whether governments, universities and funding agencies will have the flexibility and wisdom to support them. In the development decades so far, a few bridgeheads have been established but on a scale which only nibbles at the edges of the potential. We are still far from anything like a mass movement among professionals. One wonders, looking back it 10 years time, will we have been found wanting once again?