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The Poor and the Environment: Whose Reality Counts?

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THE POOR AND THE ENVIRONMENT: WHOSE REALITY COUNTS?

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by

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Abstract

Sustainable rural livelihoods will be needed for many more people in the 21st century. Three widespread views tend to mislead and need to be qualified: that more people in rural areas is always and necessarily bad for the environment; that poor people inherently take the short-term view; and that their livelihoods and farming systems are, and are best kept, simple. In fact, it is the rich and powerful who do more environmental damage, take shorter-term views, and simplify. Blaming the victims can lend support to policies which do more harm than good. For the local, complex, diverse, dynamic and uncontrolled (LCDDU) reality of the poor to count more, and to support sustainable rural livelihoods requires new policies, research and methods (a) to differentiate local conditions, histories and trajectories, (b) to enable local people to conduct more of the analysis themselves, and (c) to achieve radical professional change. For it is when the reality of poor local people comes first that a balanced search can lead to adequate, decent and sustainable livelihoods; and these promise to be win-win solutions for the poor, the environment, and future generations.

"Truth is never pure, and rarely simple"
Oscar Wilde

"To every problem there is a solution that is simple, direct, and wrong"
H.L. Mencken

The Context and Challenge

In the 21st century, many more people will have to gain their livelihoods in rural areas of the South. Population projections are always uncertain, and more so now with the AIDS pandemic, but short of appalling catastrophe, it seems likely that the world population will at least double its present size in the 21st century, with most of the increase in the South. By 2025, it is estimated to be 8.3 billion, by which time the population of sub-Saharan Africa would be two and a half times its present size (WDR 1993: 268-9). Already over one billion people are living in totally unacceptable poverty. The preoccupying issue is how and where not only they but also so many more additional people will be able to gain livelihoods which are at all adequate, decent and sustainable.

Families and individuals able to move will continue to decide between urban and rural places to live. Some directions of migration are shown in figure 1. The more people can gain their livelihoods in rural areas, the less pressure there will be on urban environments and services. In this sense, rural solutions can be sought to some urban problems. The challenge is to find practical ways in which rural areas can provide many more people with better and sustainable levels of living and quality of life.

The Poverty of Development Professionalism

In searching for answers, a first question is : whose reality counts?

If there has been one humbling insight in the past ten years, it is that "we", the development professionals, have often been wrong while sure we were right, that we are almost certainly still wrong on many points, and that given the difficulties of central people keeping up with rapid peripheral change, being wrong is robustly sustainable. What changes is that at different times we are wrong in different ways about different things. Current error is likely to include parts of this paper, and parts of any consensus at this seminar.

Introspection has not been a marked characteristic of the development professions. But more and more we have come to realise that the way we see things, and what we believe, are artefacts, made and moulded by our education, professional values, personal interests, methods of investigation, the information others choose to present to us, where we go, what we are shown and see, and our selective perceptions. Similarly, but often with polar opposites of values, people who are poor, weak and peripheral have another reality, made and moulded by their life experiences, their ways of learning and knowing, their personal interests, where they are, what they see, and their selective perceptions. We and they interact, too, much of the time with self-sustaining patterns of mutual deception in which power deceives the powerful (Chambers 1994). Unlike the small child in Hans Andersen's story, the poor are too experienced and prudent to shout "he's no clothes on". They play along with us professionals and pretend; so our power, dominance, behaviour and experiences make it harder for us to learn and understand the reality that is "theirs".

The question for all development professionals is then to ask how we learn, what we perceive, and why; in short, what forms our reality. And then to struggle to understand that other reality of the poor To do this requires engagement, face-to-face learning, repeated empirical experience, and self-doubt, and improving the approaches and methods for enabling poor people to do their own analysis and share that analysis with us.

In a spirit of doubt, and with less assurance than the prose may suggest, I shall focus in this paper on one set of issues where the realities of professionals and of the poor differ[1]. This concerns the environments where poor rural people live and their livelihood strategies. The theme is that our professional misperceptions are part of the problem; that they are remediable; and that there are other realities than ours to be recognised and acted on. This implies priorities for policies, for research and for methodology.

Three Normal Beliefs

Three beliefs about the poor and the environment are so widely held and so deeply rooted that they can be described as normal. I shall argue that they are only correct in some conditions, and quite often flawed and misleading; that combined they lend plausibility to policies which are bad for the poor and bad for the environment; and that for each there is a counter-reality of poor people which, if correctly understood, points towards policies which can be win-win, good for both the poor and for the environment.

Belief No 1: In rural areas, a denser population is necessarily and always bad for the environment

The view here is that high rates of population growth make people poor and lead to migration into fragile areas where they cause environmental degradation in their struggle to survive. "Population pressure" is identified as responsible for deforestation, destructive shifting cultivation, overgrazing, erosion and other forms of damage to the environment. More poor people means more environmental degradation. Thus we have:

> "By disrupting traditional agricultural practices, population growth has also led to rapid soil erosion"
>
> (Hurtado 1992:18)

> "The interaction of poverty and environmental destruction sets off a downward spiral of ecological deterioration that threatens the physical security, economic well-being and health of many of the world's poorest people"
>
> (Leonard 1989:6)

> "The human factors responsible for this degradation are becoming increasingly apparent. High rates of population growth destroy the land and our future capacity to respond to the world's needs."
>
> (CGIAR 1993)

The implicit simple feedback loop is shown in figure 2.

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[1] Poor people are professionals in their livelihood strategies for survival and well-being. No devaluing of their professionalism is intended in this paper in limiting the use of the term "professional" to those who are not poor. I use "we" and "us" to refer to development professionals in general.

The most authoritative statement of this view, carefully written and qualified, comes from UNICEF's latest annual The State of the World's Children (1994). The diagram in figure 3 shows what is called the Poverty-Population-Environment (PPE) spiral. This is a step forward in presenting multiple causation and multiple effects. Several ways are indicated in which higher population increases poverty, poverty leads to higher population, poverty is bad for the environment, increased population is bad for the environment, and environmental deterioration contributes to poverty. These are indeed the common and conventional current professional wisdom. Since my argument is liable to be misunderstood, let me stress at the outset that the PPE spiral contains much that is true, and that UNICEF's policy conclusions appear beyond reproach. The question is whether and in what circumstances increased population is bad for the environment. The argument is that each case should be carefully examined in its own right.

Such examination is complicated by multiple local causality and by sequences and trajectories of change. The attribution of environmental degradation to human activity, for example desertification on the fringes of the Sahel, has been questioned with increasing frequency during the past decade. Nonetheless, there are conditions such as parts of Samburu District in Kenya, where a combination of rising human population, unrestricted grazing, steep slopes and fragile soils have led to spectacular erosion, fewer livestock and human impoverishment. There are other conditions where cultivation on steep slopes has been unsustainable, leading to erosion, and irreversible loss of soil, short of replacement over geological time. The conventional wisdom, as reflected in the UNICEF report, is that these conditions are universals.

Let us examine evidence from parts of three countries- Kenya, Guinea and Nepal.

In Kenya, carefully detailed research in Machakos District has shed a contrary light on the relationships between population and the environment. Researchers from the Overseas Development Institute, London and the University of Nairobi (Tiffen and Mortimore 1992; Tiffen 1993; Tiffen, Mortimore and Gichuki 1993), investigated changes over a 60-year period, 1930-1990. During this period the population of Machakos District rose six-fold, from 240,000 in 1932 to 1,393,000 in 1989. During the first three decades, there was acute official alarm at soil erosion. Describing the condition of the District in 1937, Colin Maher (1937:3 quoted in Thomas 1991) wrote:

> "The Machakos Reserve is an appalling example of a large area of land which has been subjected to uncoordinated and practically uncontrolled development by natives whose multiplication and the increase of whose stock has been permitted, free from the checks of war and largely from those of disease, under benevolent British rule. Every phase of misuse of land is vividly and poignantly displayed in this Reserve, the inhabitants of which are rapidly drifting to a state of hopeless and miserable poverty and their land to a parching desert of rocks, stones and sand"

With 240,000 people, the District was believed already to have exceeded its human carrying capacity.

By 1990, erosion was sharply reduced; the density of trees had increased, almost all cultivation was on terraced land; stall-feeding of cattle and composting were common; and agricultural output (in maize equivalents) had risen more than threefold per caput and more than five-fold per square kilometre. The explanations identified by the researchers include infrastructural investment, capital inflows from earnings outside, the proximity of the Nairobi market, and marketed crops (coffee, horticulture etc). Perhaps most, though, they stress a rapidly rising population and labour force. Indeed, the principal researchers entitled their book More People Less Erosion: Environmental Recovery in Kenya (Tiffen et al 1993).

In Guinea, meticulous research conducted by James Fairhead and Melissa Leach with their co-researchers Marie Kamano and Dominique Millimouno (Fairhead and Leach *et al*1992a and b; Leach and Fairhead 1992 and 1993) in the Kissidougou Prefecture in 1992-3 has led to one of the most dramatic reversals of professional wisdom in the history of rural development.

The Kissidougou Prefecture consists largely of savannah grassland with islands of forest. In 1992, the researchers reported that:

> "Ecologists, botanists, agronomists and social scientists, whether expatriate or Guinean, all share the view that Kissidougou Prefecture is undergoing rapid and potentially disastrous environmental change. Their various works are mutually reinforcing in this conviction. The region is believed to be undergoing a transition from forest to savannah, with the relics of its once extensive humid forest cover now found only as small islands around villages, in small reserves, and in inaccessible places.
>
> These forest islands have been believed by botanists, foresters, ecologists, development planners and policy-makers to be relics of a recently much more extensive humid forest cover. This degradation is considered anthropogenic, and to be aggravated by economic and social modernity and by increasing population pressure." (1992a:1)

Their in-depth research methods included archival research, analysis of aerial photographs, oral histories, and extended participant observation. They were shocked (ibid 33) to find that archival evidence, aerial photographs and oral histories alike all contradicted the professional view.

They conclude that the woody vegetation cover of savannahs has been increasing during the period when policy-makers have believed the opposite (Fairhead and Leach et al 1992a; Leach and Fairhead 1993); that far from the island forests being remnants they have been created by people around their settlements; and that people have sophisticated and labour-saving ways to protect forests from fire by grazing cattle and cultivating near forest fringes, and by pre-emptive burning of grass when it is short and damp with dew and the fire is less hot (ibid:32). During periods when this controlled early burning has been banned, fires have come later in the season, have been hotter and worse, with higher grass and drier conditions, and have done more damage. The presence of people, and their use of controlled burning, has, then, created and preserved, not destroyed, the forest, which was threatened less by local people than by fire control policy, at least in the North. When people moved to larger settlements near roads, as part of government policies, protection of old forests became less effective, but new forest islands were formed around the new sites. It was not population pressure that limited the forest area, but lack or absence of people; and it was not the people's management practices that were the problem, but those of government.

In 1993, writing, workshops, discussions and other forms of dissemination led to the increasing acceptance by officials, researchers and technical co-operation personnel of the validity of these findings (pers comm Melissa Leach).

In Nepal (for this section see Gill 1992, 1993 and Tamang 1992, 1993) the received professional wisdom is that increasing population has led to the cultivation of more land and the degradation of forest. A 1991 report bearing the authority of the National Agricultural Research Council and of the Asian Development Bank put it thus:

> "Continued population pressure on land resources in the hills and mountains has resulted in expansion of farming onto marginal cultivable land, with ensuing environmental degradation - soil erosion, losses of soil fertility, a deterioration of forests and forest covers" (NARC-ADB 1991:15)

Official statistics support this statement, showing a steady annual increase for cultivated area. This trend has an origin both curious and spurious. The figures derive from two sources for cultivated land: the decennial National Agricultural Census and the on-going Cadastral Survey. Each year the Cadastral Survey covers one or two more hill districts and gives higher figures, on average 3.7 times as large (the range is 1:2.2 to 1:8.5 for the hill districts in the five Development Regions. In Khotang District, the most extreme case, the Cadastral Survey raised the cultivated area by a factor of 20 (from 7,955 to 157,187 hectares)). Each year the new Cadastral Survey figures replace those of the National Agricultural Census for the districts surveyed. This, then, is the source of a steady rise in the reported cultivated area. The source of the upward trend in agricultural area is not field reality but professional method and ignorance.

The field reality is reported by Tamang (1992,1993) and Carson (1992 cited in Gill 1993), both of whom had travelled very extensively in the hill areas, in Tamang's case conducting a 400 km transect through the hills. They found that cultivated land was not increasing, but declining, as a consequence of loss of organic matter, soil acidification, build-up of aluminium toxicity, and outmigration. Shortage of labour with seasonal or permanent outmigration meant less organic matter collected from forests, less maintenance of terraces, and abandonment of land which was marginal because distant from the homestead, difficult to work, or infertile. Cultivation was then concentrated more intensively on smaller areas. Terraces broke and eroded for lack of maintenance. Causality was complex, but one link was between lack of labour and environmental degradation.

The evidence from these three countries and case studies suggests a counter reality to that conventionally held. It also suggests a hypothesis, that in some fragile and marginal environments sustainable agricultural livelihoods may be feasible only below and above certain thresholds of density of agricultural labour power.

This hypothesis resonates with the insights of Ester Boserup (1965). Let us characterise conditions as low, medium and high density, referring to the density of labour power per unit resource (usually land). The low density condition is sustainable. With low labour power, extensive and shifting cultivation make sense, together with grazing on common land, and use of forests for non-timber forest products. But as population increases, so fallows shorten, grazing intensifies and non-timber forest products become scarce and distant. Erosion, exploitation of the forest, and grazing pressure contribute to environmental degradation and threaten livelihoods. This is an unsustainable medium-density condition. The problem at this stage may be too few people, a population which does not increase fast enough through this transition.

At this point there may be a parting of the ways. Outmigration, especially of male labour, whether permanent or seasonal, may perpetuate and aggravate the unsustainable system; or if people remain and labour power density rises quickly enough and economic conditions are favourable, labour may be invested in physical works (terracing, tree planting and protection, stall feeding, composting, the concentration of soil water and nutrients in micro-environments etc), resulting in labour-intensive sustainable livelihoods. This is the sustainable high density condition. Ultimately, there has to be a fourth stage of bio-economic limits, if population continues to increase, where subdivision of land and diminishing marginal returns to labour lead to a socially unsustainable situation with immiserisation and outmigration.

This interpretation is supported by the Machakos case. D.B. Thomas (1991) notes that the practice is to conserve and terrace first the land near the homestead, which leaves other cultivated land unprotected. Since terracing is labour-intensive, one can speculate whether with more people (perhaps because of a better market for produce induced more to remain and not migrate), more terracing might have been undertaken more rapidly with consequently less erosion. For the

long-term prospects for sustainable agriculture in Machakos it may have been a boon that at one stage population grew as fast as it did; had growth been slower, it might have been longer before the terraces were made.

This hypothesis, and any facile extrapolations of the "more people, less erosion" insight, must be heavily qualified, as they are in the Machakos book. These findings are far from supporting a pro-natalist position. Rapid growth in population remains a massive problem, carrying with it many environmental threats. Each set of conditions requires to be examined in its own right, and by those with local knowledge. Population pressure leading to irreversible erosion of steep slopes, for example, is a widespread locally significant problem. What matters is to recognise that conditions differ, that professional beliefs and impressions are often wrong, and that the potentials for sustainable livelihoods in some marginal and fragile environments may be greater than many have supposed.

Belief No 2: Poor people live hand-to-mouth and cannot take a long view

This view is also expressed in the PPE spiral (UNICEF 1994:25). The line from poverty to environment carries two statements:

* difficulty in meeting today's needs means that short-term exploitation of the environment must take priority over long-term protection

* lack of knowledge about environmental issues and long-term consequences of today's actions

There is scope for much argument about both these statements, and cultures, communities, households and individuals differ. Both statements no doubt have some truth. Against them, however, must be set the tenacity with which people faced with famine often take the long view and preserve their livelihood assets, and the evidence that local people are usually very knowledgeable about their local conditions.

More specifically, two other sets of evidence question these beliefs: the planting and protecting of trees on private land; and the investment of labour in creating sustainable agricultural systems.

First, tree planting and protecting on private land has become widespread in many countries, environments and conditions (see e.g. Chambers, Conroy and Leach 1993). This has been especially well researched and documented for parts of Kenya and Nepal.

In Kenya, research conducted by the Kenya Woodfuel Development Programme (Bradley, Chavangi and van Gelder 1985; Bradley 1991) in the 1980s in three densely populated districts - Kakamega, Kisii and Murang'a - used a careful combination of methods, including aerial surveys, questionnaire surveys, and less formal RRA-type investigations. Especially but not only in Kakamega District, it found denser population associated with more, not fewer, trees. The denser the population and the smaller the farms, so the denser were the trees per unit area: "As farm sizes become smaller with increasing population density, the proportion of the farm devoted to tree management increases" (ibid: 134-5). Further, not only did the gross quantity of woody biomass increase, but a greater proportion of it was deliberately cultivated. No summary can do justice to the detailed variations revealed by the research, but the conclusion was that the pattern of more woody biomass as population density increased was likely to prevail in most of the high-potential lands of the Kenya highlands (Bradley 1991:280), as was found also in the Machakos research, in an area which was agriculturally more marginal (Mortimore 1991: Tiffen, Mortimore and Gichuki 1993: 213-225).

In Nepal, as supplies of non-timber forest products, especially fodder and fuelwood, from forests and common property sources have diminished, farmers have planted and protected trees on their own land to provide substitutes (Gilmour 1988; Carter and Gilmour 1989; Gilmour 1989). Gerard Gill delights in teasing audiences by showing two aerial photographs of the same land in Nepal, taken ten years apart, asking which is the later. It is the one with more trees.

Second, the investment of labour to create sustainable agricultural systems is so widespread that it is easy to overlook. The paddy fields of Asia (including the astonishing feats on steep land in places as far apart as Bali and Nepal); the deposition fields of Mexico, India, Ethiopia and elsewhere; the digging of ponds and dams; the diversion and concentration of run-off water in fields; the gradual levelling of rainfed fields over generations, the building of embankments or stone retaining walls; and the more conspicuous and better recognised stone bunding (as in northern Burkina Faso) to slow surface runoff and trap water - these are some examples, not to mention fencing, animal shelters, water supplies, compost pits and many other farm works.

What is remarkable is not so much that resource-poor farm families make these long-term complicating investments, but that professionals so often overlook them. There are, as usual, many qualifications, and many individual variations, not least arising from whatever alternative livelihoods and forms of investment are available. The common reality though seems to be that poor people want to take a long view and will usually do so when their rights are secure and livelihoods adequate.

When they take the short view, for example in cutting down trees on private land, it seems often associated with perceived insecurity of rights (Chambers, Saxena and Shah 1989:170-196) or unpredictability of government policy. This would explain the contrast between the planting and protecting of trees on small farmers' lands in Kenya, and the stark absence of trees on most farmland in Ethiopia. It would also explain the cutting and sale of trees by farmers in Yunnan Province in China when they were allocated individual farms: it must have seemed prudent to cash the assets while they could, and not risk yet another change of policy.

Belief No 3: poor rural people lead simple lives and need simple solutions

Professional power and distance combine to stereotype the lives of the poor as simple. In one of the more famous lines of English poetry, Thomas Gray wrote in his Elegy Written in a Country Churchyard of "the short and simple annals of the poor". The simple life styles of holy ascetics, whether Buddhist, Christian, Confucian, Hindu or Muslim, who embrace poverty, reinforce this stereotype, as they cut out complication, minimise distraction, eat little, and make alms their single strategy for subsistence. More generally, looking down from a distant height, poor people look alike:

> The World Bank, highest of us all
> looks down to see poor people small
> like atoms all the same, a size
> for which it's right to standardise

This reflects some of the rationale of the standard Model T (any colour as long as it is black) programmes so often sponsored by the Bank and by other donors. The view remains widespread, in the mid 1990s, that the lives and strategies of poor people are simple and similar. This is, though, being questioned not least in the Bank, through its Participatory Poverty Assessments, initially in Ghana, Guatemala and Zambia, in which poor people define their own criteria of well-being.

A recent statement of the classic top-down professional belief comes from Norman Borlaug. He writes of:

> "the new complicated and sophisticated "low-input, low-output" technologies that are impractical for the farmer to adopt. Such misguided development strategies will not only cost the rich nations wasted donor aid but could put the future survival of Africa's small-scale farmers and their families in jeopardy."
>
> (Borlaug 1993)

This fails to understand the skills, ingenuity and management capabilities of poor families, and their livelihood and farming strategies. Most of them already have complicated and sophisticated farming systems. Most of them seek not simple or single packages or means of living, but to diversify and complicate their relationships, activities and sources of subsistence goods and income. Resource-poor farmers in difficult environments, as now so widely documented (see e.g. Richards 1985; ILEIA; and contributions in Chambers et al 1989; de Boef et al 1993; Scoones and Thompson 1994) complicate and diversify their farming systems in order to reduce risk and increase productivity. They experiment with and test new practices; they intercrop, add new enterprises, crops and species of livestock, create and maintain microenvironments, diversify the range of useful plants, and multiply linkages between different parts of their farming systems; as labour power per unit land increases, they intensify, diversify and complicate more and more, to make their farming systems both more productive and more sustainable.

Blaming the Victim

Combined, the three conventional beliefs are comforting to development professionals, the rich and the powerful. Directly or indirectly, they blame the poor - for having too many children, for short-sightedness and for not adopting standard agricultural packages, and so for degrading the environments in which they seek a livelihood.

Psychologically, all three can be seen as evasions, as professionals projecting their own faults onto others.

First, the environmental damage done per person by the rich is far higher than that by the poor (see e.g. Durning 1992), and far less justifiable in terms of human need. So often tropical deforestation is the work of the rich; the poor come in and cultivate when their diverse indigenous forest has been decimated, and then get the blame. However much green books blame the rich, their publishers prefer to point the finger at the feckless poor through the photograph on the dust cover (e.g. of Harrison 1992) of a poor farmer standing by the charred and smoking tree trunks of what is emotively termed "slash-and-burn" agriculture.

Second, and paradoxically, it is less the poorer and weaker (who wish to be able to take the long view) and more the richer and more powerful (who lack the incentive and do not need to bother), who have short time horizons: contractors and businessmen extract natural resources fast for quick gain; donors are driven by disbursement deadlines and the targets set in exercises of GOPP, ZOPP, and other forms of logical framework; politicians plan as far ahead as the next election; and myopic bureaucrats fix their eyes on the end of the financial year, by which time money must be spent or lost, and works must have been completed. Poor farmers patiently build up their terraces, deposition fields, and anti-erosion works year by year: government engineers build all at once, and leave them for others to maintain.

Third, the supposed need for simple systems for poor people is the most remarkable projection. For it is mainly the better off who have a single and simple means of support, in employment and a job; most of the rural poor have multiple sources of food and income, with different family members doing different things in different places at different times of the year. And it is

"modern" farming, with its machines, monocultures, few enterprises and uniform practices over extensive areas, and where farm managers struggle to standardise for ease of management, which is at once simplifying and unsustainable, contrasted with the complexity and diversity of much resource-poor farming.

Draconian Reflexes: the pathology of policy

The three beliefs are not only flawed but are sometimes used to argue for direct and draconian policies which are self-defeating or inhumane or both.

The belief that population pressure is the problem can, as in Indira Gandhi's India and still in China, lead to a punitive approach to population restraint, which is either eventually self-defeating in a democracy like India, or inhumane in the authoritarian conditions of China. It can also lead to impractical prescriptions for population transfer (as rather unsuccessfully in Indonesia, and as seriously proposed in the World Bank in the late 1980s for the Sahel).

The belief that poor people cannot and will not take the long view can lead to prohibitions and restrictions on use of forests, or on cutting and selling trees on private land, measures which perversely encourage the poor to cut and sell while they can, and deter the planting and protecting of new trees (Chambers, Saxena and Shah 1989). It can also be used to justify state ownership of land, undermining those local or private rights which encourage and enable communities and households to take a long view in protecting and managing their trees.

The belief that poor people lead simple lives and need simple solutions leads to attempts to transfer standard simple packages of technology. These are usually either rejected or unpacked. They are then tried out in bits, adding to and diversifying previous practices. Small and poor farmers rarely want to risk simple standard practices, or to become dependent on a monetized market for a single product. It is too risky. So they diversify. Simplicity is a luxury they cannot afford.

Beyond Professional Reductionism

It is not the poor, but professionals, who seek to simplify, and who create for themselves a simplified reality. As in these examples, normal professionals in central places are easily wrong about peripheral realities. It is sobering to list some of the reasons:

* the reductionism of modern science
* the standardising tendencies of top-down development
* distance and lack of contact
* the biases of special visits and of rural development tourism
* simplifying and standardising biases in questionnaire surveys
* the fixation on statistics and their fictions
* the manner in which insight and policy shift through speeches written for ministers and "sound-bite" slogans, and the simplistic messages required for "good" television
* the psychological and practical need for simple and universal truths
* the reluctance of the rich and powerful to recognise bad effects of their actions
* the convenience and comfort of stereotyping and blaming the victim.
* the manner in which all power deceives (Chambers 1994)

In contrast, the reality of most poor rural people is local, complex, diverse, dynamic and uncontrolled (LCDDU), the opposite of the universal, simple, uniform, and controlled conditions of much scientific work and contrived by most high status professions. Starting with the local and particular perspectives of poor rural people challenges the reductionism of thinking based on single measures - of reducing poverty to poverty lines (of income, or of consumption); of

reducing agriculture to production, sometimes only of foodgrains; and of reducing livelihood activities to employment. It leads to questions about how we learn about, and respect, the values, priorities and preferences of those who are deprived and weak; and perhaps will quite often lead to substituting some concept of well-being for poverty, of resource entitlements and flows for production, and of livelihood for employment, as these are analysed and expressed in a participatory manner by poor people themselves[2]

Faced with LCDDU realities, universally valid policy conclusions are difficult to draw. Most of the statements that can be made are of the form "Often it seems quite likely that... A common tendency may be... Elsewhere, where similar conditions prevail, it will be wise to investigate whether...". The point is not that conventional views which generalise are always wrong. It is that they often are and that each set of conditions needs to be examined in its own right.

Implications for policies,research and methodology

Implications for policy, research[3] and methodology are linked. The overarching policy strategy implied is local differentiation and empowerment, identifying conditions in which it is feasible and desirable to enable more poor people to gain more of what they want and need, including better and more sustainable rural livelihoods, and controlling more of their own resources.

There is a normal agenda of macro policy actions to support this strategy, many of them concerned with promoting economic growth and sharing its fruits. They include the priorities in health, education and population advocated by UNICEF (1994). In this normal agenda the following deserve mention for their relevance to the strategy:

1. terms of trade. Improved international and rural-urban terms of trade, to favour the rural produce of countries in the South, and so to raise rural incomes and make rural life more attractive

2. redistribution. Tenure reform and transfers with compensation, redistributing land, water, trees and other resources securely to those who are resource-poor to enable them to gain adequate and decent rural livelihoods.

3. stability, rights and information. Stable government; stable continuity in policies which vest land and other natural resource rights equitably in local people and in communities; abolition of restrictions which allow rents to be extracted by officials and others, for example abolishing restrictions on the cutting of trees on private land, and on their transport and sale; and widely publicised information about such rights.

4. infrastructure and services. Rural infrastructure, especially for transport and communications, and basic services for health, education, water and marketing.

Beyond these, this paper raises other issues. These concern policy, research and methodology for three sets of actions:

* differentiating local conditions
* analysis by local people
* professional change

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2 Points in this paragraph are also elaborated in Poverty in India: Concepts, Research and Reality, IDS Discussion Paper 241, 1987, and another DP, jointly with Gordon Conway, Sustainable Rural Livelihoods: Practical Concepts for the 21st Century, IDS Discussion Paper 296, February 1992

3 For a wide-ranging analysis and review identifying research priorities see Leach and Mearns.

These present points of entry which support each other: their potential impact combined is greater than the sum of their impacts pursued alone.

(i) differentiating local conditions

For policy, the challenge is to differentiate according to local conditions, and to follow different policies in different places according to different local priorities. This means to decentralise, democratise and provide support and services for diversity. In turn this implies more local participation, especially that of the poorer, in planning and in identifying priorities. It requires shifting from top-down targets and disbursement deadlines, and moving at varying paces depending on the speed and nature of local participation. The implications for donor, Government and NGO cultures, and for their procedures for financial accounting and control, staff management, reporting, monitoring and evaluation, are radical.

To inform and support this policy, research aims and topics then include

* to evolve a practical typology of types of socio-agroecological conditions, histories and trajectories

* to identify and understand the boundaries between conditions in which more people and a denser population contribute to more sustainable livelihoods, and those in which more people and a denser population make things environmentally worse, and weaken or destroy livelihoods

* to identify, study and draw practical conclusions from any cases where sustainable livelihoods have been achieved in conditions where more people and a denser population normally tend to make things environmentally worse

* to understand sequences and transitions. An example is to understand whether and when cultivation which is sustainable with a low-density population becomes unsustainable with medium-density and then sustainable again with higher density.

* investigate the limits of intensification for supporting sustainable livelihoods in high potential as well as less-well-endowed environments

* to understand the relationships between government policies for tenurial rights and poor farmers' time horizons and behaviour, especially the effects of instability and uncertainty as in Ethiopia and China.

For methods, the question is how best to distinguish and understand types of situation, socio-agroecological histories, and trajectories. The Machakos and Guinea research case studies were deeply detailed, and had to be. They were also researcher-intensive, expensive, and took a matter of years. That was necessary for learning and for credibility at that stage. The danger now is over-generalisation from them in the absence of other studies. The need therefore is approaches and methods which can cost less, take less time, and yet be similarly reliable and credible. These could then generate a wider range of comparative insight, including a practical typology of local histories and conditions. Local analysis could and should then lead through into policy, supporting a realistic diversity for a good fit of programmes and action between the national and subnational levels, and the local. One option could be a network of local NGOs trained in plural methodologies, including participatory rural appraisal (PRA), conducting comparable participatory research in the different environments in which they find themselves working.

(ii) Analysis by local people

The policy challenge is political and administrative: to decide to empower local people to conduct more appraisal, analysis and planning themselves, and to set up procedures and institutions to fit in with their disparate demands. The challenge is also to ensure that those who are empowered include those who are normally left out, especially the poorer, more vulnerable, women, the disabled and those of low social status.

The research agenda is to study, understand and evaluate both current participatory approaches and methods, and those which are being evolved. This should include who takes part in participatory analysis, and who is marginalised or left out. University-based research has lagged in recognising and meeting these needs. In the meantime, NGOs which have shifted their priorities towards research appear well placed to act.

The methodological challenge is further to develop and spread approaches and methods to enable local people, especially those who are disadvantaged, to conduct their own appraisals, analysis and planning, to take command of their own resources, and to negotiate with and drawn down on Government, NGO and other sources of support. PRA (Mascarenhas et al 1991; Chambers 1992; Cornwall et al 1993) is one family of approaches and methods with promise, and which in early 1994 is spreading in at least 40 countries and in hundreds of organisations, although the quality of what is done often leaves much to be desired.

PRA methods can be used in two modes. First, they can be and frequently are used in rapid rural appraisal (RRA) as a means for outsiders to collect data and to learn from local people, who share their knowledge and analysis. As with some of the Participatory Poverty Assessments sponsored by the World Bank, and notably the one in Zambia, the outcome may be an additional or different agenda, for example the need to reschedule the payment of school fees from the time of year when parents find it hardest to pay, the need to train health staff not to be rude, or the value of all weather bridges and roads for marketing and so that victims of accidents or illness can get to treatment during the rains.

The second mode is PRA proper, which is empowering, enabling local people to take over and carry through the processes of appraisal, analysis and action themselves, and to own the outcomes. PRA is one family in a community of participatory approaches and sets of methods within which there is scope for sharing and mutual learning.

(iii) Professional change

The policy challenge here is to accept that "we" - professionals, are easily and often wrong. The Machakos, Guinea and Nepal cases teach humility. They also warn that one set of misleading generalisations about poor people and the environment could be replaced by another. The policy implied is to support and implement measures for professional learning and change, with attention to behaviour, attitudes, methods and beliefs. There are implications for the introduction of participatory management in donor, government and non-government organisations, and for participatory learning to replace conventional top-down teaching in universities, colleges and training institutes. New organisations are needed which provide experiential learning for professionals (Pretty and Chambers 1993).

The research required is to understand better how personal behaviour, attitudes and beliefs are formed in the development professions, how they evolve with life-cycle and career sequences, how they interact with organisational cultures and procedures, and how they can be changed from more authoritarian, hierarchical, male-dominated forms to become more democratic, egalitarian and gender-balanced While this may appear a huge and impossible agenda, it is vital. That so

much remains to be known and understood in this area reflects on our strange specialisation, our choices of easy subjects for research, and the lack of psychologists and management trainers in development studies.

The methods to be adopted and developed are to enable professionals to change. There is scope for transfers from management training and from humanistic and experiential psychotherapy, as well as for innovation. One key element is for powerful professionals to learn from and about those who are powerless and poor. PRA methods offer one means for making this less difficult.

Whose Reality Counts?

On the relations between poverty, population and the environment there are many realities, differing by locality and by person. As we have seen, the reality of professionals can be dramatically wrong. For sustainable development, and if poor people are to become better off, gaining livelihoods which are more adequate and more sustainable, their reality has to count more. This applies widely, but especially where economic growth is slow or negative. Three reasons for this stand out. First, if the priorities, analysis and preferences of rural people are known and acted on, there is a better chance of good programmes meeting their needs, and having sustainable outcomes. Second, when people's varied priorities are known, those which cost less can be met even if the more costly cannot. Livelihood-intensive economic growth remains vital. But in addition, poor people can be better off in terms of some of their own priorities even when their real incomes do not rise. Third, where rural life is experienced to be better there is less pressure for migration to urban slums.

For the diverse realities of the poor to count more entails big reversals for professionals. It means that they must learn how better to learn from those who are poor, peripheral and weak, and how to empower them to define and assert their own reality of problems, preferences and opportunities. Some professionals find such reversals threatening. Others experience them as a liberation. The challenge is to find ways to enable more and more development professionals, whether policy-makers, practitioners or researchers, to "flip", to stand on their heads, to see the world the other way round, and then to act on that new view. It is when the reality of poor local people comes first that a balanced search can lead to adequate, decent and sustainable livelihoods, and these promise to be win-win solutions for the poor, the environment, and future generations.

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