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Comparing transect walks with experts and local people

Ishmail Mahiri

• Introduction

A transect walk in PRA is normally conducted by a mixed group of local people and visiting professionals. As part of a study of the interface between 'locals' and 'experts', I walked the same two transects on different occasions with a 'local' group and an 'expert' group, recording their reactions to the same walks and similar questions. Such an approach can illuminate areas of agreement, disagreement and conflict. This paper compares the transects with 'experts' and local people.

My study concerns fuelwood use in Nyando Division, Kisumu District, Kenya, and the interface between rural people and local advisory services. I organised two separate transects with an interdisciplinary team of 'experts' and a group of local people in September 1996. The 'expert' team consisted of three foresters, including the District Forest Officer (D.F.O.), one soil conservation officer, one agricultural officer, one rural sociologist and myself, as the team leader and convenor. Also in the team were three forestry college students (including two women) on field attachment to the D.F.O.'s Station.

The two transects with local people each comprised a group of three men from each of the two villages. The teams were chosen for their interest in the environment, their long-term residence in the villages and for their availability. The transects were undertaken on bicycles. I failed to find any women who either owned or knew how to ride a bicycle, so these teams, sadly, were all male. However, I hope that the in-depth interviews and focus

groups which I conducted subsequently with women will redress this imbalance in my final study.

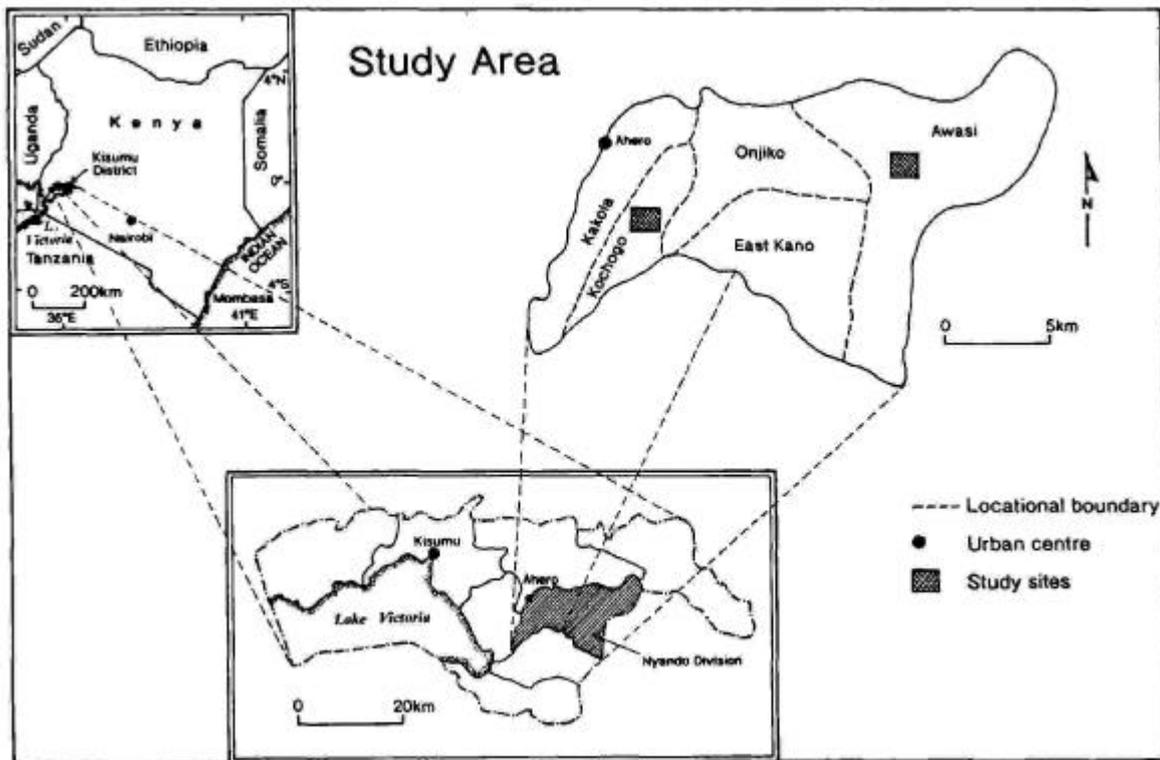
The transect with 'experts'

The transects with 'experts' were arranged to take one full day. We set off from Kisumu Town using a borrowed government vehicle. The first transect was to cross Awasi Location in the Eastern edge of Nyando Division, and the second was to cross Kochogo Location. Each transect measured a distance of about 8 km. The two transect sites were about 12 km apart (Figure 1). Altogether, there were four stops along each transect, the stops being about 2½ - 3 km apart.

I used the transects both to gather basic evaluations of the environment, and as a forum to elicit 'expert' opinion on a range of issues. At each stop, we left the vehicle and walked across the surrounding area for between 45 minutes and 1 hour. We noted features, such as soil type, trees, landuse and vegetation, while I asked questions on policy and practice. I tape recorded the discussion, to ease the pressure of taking notes. However, both note taking and recording were difficult because there were arguments, often with more than one person speaking at once.

During the walks, the 'experts' posed questions to each other, to iron out disciplinary assumptions which each held in their own fields of expertise, or to clarify specific viewpoints. This sometimes generated such heated debate that I had to intervene and cool tempers!

Figure 1. Location of the study area [Source: Author 1996]



The transects with local people

The transect with local people took a slightly different format. We cycled, made stops and walked along the same routes I had taken with the 'experts'. I adopted the same approach and line of questioning with the local people as with the 'experts', except for language: these discussions were conducted in Dholuo (the local dialect). At some points, I was lost in their use of certain terminologies to refer to particular environmental concepts. On the other hand, I learnt, to my greatest surprise, that I could not find suitable words in the local dialect of my childhood to explain key research concepts, such as 'environment', 'sustainable management' and 'conservation'. The reason was that these words in Dholuo had multiple meanings, some of which would not convey the message I desired. I was, therefore, forced to go through the ordeal of long-winded explanations.

The local people displayed great enthusiasm in discussing their environment and were most

often in agreement with each other's opinions. They also seemed to have many plans regarding various environmental issues, but further probing revealed that most of these ideas were not being practised because of inadequate finance and poor organisation among themselves. For instance, local people in one village identified a type of soil which they said could be used to make bricks. They emphasised that the sale of bricks could generate substantial finances for local self-help development groups, as well as help improve the building standards of houses within the locality, yet no one explored this potentially lucrative opportunity.

Local people showed how various resources serve multifunctional, but often little recognised, purposes. For example, one group of local people said that Luos (the local tribe) use trees such as *Euphorbia tirucalli* for live fences around homesteads and that these serve as a wind-break and boundary marker, and are traditionally planted as a sign of a new homestead. They provide a handy fuelwood source when there are many visitors (such as

during funerals) because of their proximity and fast drying capability. This had been discussed earlier by two foresters during the transects with 'experts', with one stating that 'The Euphorbia makes a very good hedge. But we have a lot of problems with it customarily...if my father did not have it as a hedge around his home, then I cannot have it'. The other forester stated that, 'Foresters do not consider *Euphorbia tirucalli* highly as fuelwood species because it has low calorific value'.

Knowledge interface and policy implications

The walks revealed that 'experts' have limited knowledge on the land management practices adopted by local people. Because of their highly specialised scientific knowledge, with limited practical application, the experts' approach to the environment stems from a technical and an intellectual standpoint. For example, the foresters attached no special importance to scattered bushes and thickets. Yet, as was established during the walk with 'locals', bushes serve as reservoirs for wood which can be used for firewood, boundary markers, and as places left for small ruminants, such as goats or sheep, to browse (see Box 1). These uses may not be recognised by foresters.

The policy of transforming traditional subsistence farming to mechanised cash-cropping, by clearing such bushes to create large farms, results in changes in the environment and distortion of traditional practices. The D.F.O. narrated one incidence in Kenya's Bura Irrigation Scheme, for large-scale cotton farming, where bushes were cleared to create space for cotton farms. Later, when the villagers were consulted, it was realised that those bushes had served as their source of fuelwood. The project ended up changing the livelihood system of the local people, resulting in increased inward migration to the irrigation water points. This increased pressure on the natural resources, such as fuelwood and water, as well as on public services, such as health. These hardships may have been avoided if the policy makers tried to understand the local community, their needs and value systems.

The apparent monopoly of knowledge by 'experts' has often led to local people being reticent to freely express their knowledge and viewpoints, particularly in the presence of 'experts'. The issue of knowledge and power came up many times during interviews.

BOX 1 KNOWLEDGE INTERFACE	
<u>'EXPERTS'</u>	<u>'LOCALS'</u>
1. Clear the bushes and plant trees to get fuelwood and wood for timber and building poles.	1. Retain the bushes to get fuelwood, sticks for building granaries, frameworks for walls and roofs of huts, and browse for goats and sheep.
2. Plant two trees where you cut one.	2. Manage coppice growth from stumps of trees that have been felled.
3. Working on the fuelwood problem.	3. Use wood from farm trees, e.g. Euphorbia hedges, sticks from bushes, dry sisal leaves, crop residues, cow dung etc.
4. Scientific naming of trees, e.g. 'Thevetia peruviana'	4. Derivative naming based on function, e.g. 'Mafua' (Luo name for Thevetia peruviana), meaning 'flower', because the tree is used as ornamental hedge.
5. Soil lacks nitrogen.	5. Soil lacks manure.
6. Working on irrigation plans.	6. Harvest rain water through diversion into farms by digging trenches and ponds.
7. Researching on chemical weed control of Striga weed.	7. Using cultural method of uprooting the Striga weed before flowering: burn or place on footpaths to be trodden on.

Note: The interface may be a 'gap', conflict or agreement in their own terms

Whenever I asked questions concerning what local people could do to tackle certain problems, they threw the same question back to me and said 'You experts should tell us what to do'. This suggested to me that rural people believe that environmental knowledge is an exclusive preserve of 'experts'. Such 'received wisdom' obscures a plurality of alternative and legitimate knowledge about the environment (Leach and Mearns, 1996). Organising separate transects for 'experts' and 'locals' was a deliberate move to counteract these prejudices. The local false respect and dependency on 'experts' is dangerous as it may lead to forced consensus in discussions.

On many occasions, 'experts' play an advisory role in the development and sustainable use of land resources. But in practice, there may be a dearth of applied knowledge among 'experts' of local activities in managing the environment. By contrast, rural people have developed a broad-based knowledge of the environment and its management which is an accumulation of practical experience and experimentation. Nonetheless, I established during the transect with 'locals' that local knowledge is not common knowledge between and among local people. Local knowledge is uniquely innovative and dynamic, exhibiting differences which are locality-specific, depending on ecological variabilities and existing local circumstances.

It is my firm opinion that the complementarity between 'expert' knowledge and local knowledge is a potential avenue to overthrow the myth of the superiority and dominance of scientific (read 'expert') knowledge. I would argue that it is not the exclusive knowledge held by 'experts' that holds the key to understanding the environment, but the interface and mutual interdependence of both expert and indigenous knowledge bases.

The challenges

I had to confront several challenges in making the transects take place. These included:

- logistical challenge, in planning and organising the transects and finding a day that suited everyone. It took me two weeks to mobilise the team of 'experts' and get them out in the field.
- Explaining the objective of the approach to the participants, particularly the 'experts', presented an enormous challenge, since most PRA transects are conducted with local people in attendance. The 'experts' seemed uneasy. The question 'why' could be seen on their faces the moment I said that local people were not coming on the team. For the local people, who apparently were not well versed with the technique, it was only a matter of explaining.
- For comparability, a systematic and consistent line of questioning was necessary for both 'experts' and local people. This was the advantage of making a tape recording of the proceedings. Following the transects with 'experts', I listened to the tape and was able to follow the same line of questioning with local people. This provided a fair means of evaluating the knowledge interface between the two groups.
- The final transcription of the tapes for further analysis presented a daunting, yet vital task. This is not a 'quick and dirty' method.
- Last, I had to buy lunch for 12 people on the 'expert' team and provide honoraria for the local people. In addition, I had to contend with the cycling prowess of the local people!

Lessons learned

- Mobilising and getting professionals out of their offices and into the field is a difficult task. It requires zeal, determination and lots of patience. With the local people, a pragmatic approach to who is available on the day to complete the task is required.
- Rural people express great enthusiasm in sharing their knowledge about their environment. There is also a sense of competition amongst local people and a desire to prove who knows most about the topic. The transect provided them with an opportunity to display their knowledge about environmental issues.
- The 'expert' transects provided a forum for the various government and non-governmental officers to interact, discuss, analyse, and exchange views on diverse environmental issues. The 'experts' sometimes held different views despite

being of the same profession, for example foresters.

- The transect was a forum for the 'experts' to learn from each other, including the four forestry college students. For the local people, the transect created a point of contact with fellow villagers and an opportunity to learn about what others do to tackle various issues.
- The presence of the women students provided a more gender balanced transect for the 'experts'. It enabled women's perspectives to be gained, for example, during the discussion on fuelwood issues. Cycling was the only practicable option with local people, but it excluded women.
- The presence of government agents at the district and divisional levels created an arena conducive to discussing matters of policy and their impact on local people. By contrast, the absence of government officers afforded the local people a less threatening environment to comment freely on matters of policy and its impact on them.

• Conclusion

PRA approaches are useful and effective tools for exploring rural issues in a rapid and more cost-effective manner. The transects described here, which were conducted separately with the 'experts' and local people, were a novel departure from conventional participatory transects and provided a fresh means of evaluating the knowledge interface between 'experts' and 'locals'. The local transects created an open and free atmosphere for people to express their knowledge and views without the influence of, or intimidation from professionals.

The local people displayed an impressive repertoire of environmental knowledge. It is not, however, the aim of this paper to portray local knowledge as mutually exclusive from, or preferable to, 'expert' knowledge. On the contrary, the paper seeks to address the prevailing general assumption that 'expert' knowledge holds the key to environmental matters. The dominance and inappropriate 'mandate' given to the 'experts' regarding all issues pertaining to the environment needs re-examining (Chambers, 1997). Local

knowledge should share the platform, and have a place in policy formulation.

- **Ishmail Mahiri**, PhD student, University of Durham, Department of Geography, South Road, Durham, DH1 3LE, UK . Email: I.O.Mahiri@durham.ac.uk

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