Notes and Reflections on Participatory Methods
used in South Nyanza, Kenya 14-16 December 1991
with MAD (Mobilisation Against Desertification)

This was a field visit with team members (Peter Ochare, Francis Odhiambo, Peter Omondi, Charles Onyango, and Sister Dolores Rauch) of MAD, a small NGO which works in South Nyanza. We visited some of their Model Farmers who have been intensifying agriculture, especially through fencing, composting, double-digging, agroforestry and crop diversification. We also visited Luanda, a dramatically eroded area near Karungu, and had discussions with people living there.

Here are some notes and reflections on four of the methods and experiences.

1. Seasonal analysis: increase in women's labour with agricultural intensification

Promilla Adhiambo, whose husband was identified as a model farmer, indicated for us, at our request, how the intensification of their farming system had changed the amount of work she did. As has become one common practice in seasonal analysis, 12 stones were placed on the ground for the months, and seeds were used for estimating. For their farming before intensification, Mrs Adhiambo scored each month with black and white niger seeds, giving ten to the busiest month as a benchmark. She then used white pigeonpea seeds, of roughly the same size as the niger seeds, to indicate how labour had changed (in every case increased) with intensification (see appendix A). Her husband, who until then had been dominant in discussions, fell quiet. The MAD staff said they were struck at how much the labour requirements for a woman were shown to have increased.

Reflections:

The exercise was salutary in educating us, as outsiders, about some of the implications of technological change.

It was straightforward to facilitate. Mrs Adhiambo had no difficulty making the estimates. This method could probably be used widely to enable people to estimate labour requirements of technologies and mixes of technologies. It was useful in indicating the peak months, both before an after the intensification.

As so often on field visits, we were short of time. There were other farmers waiting for us. So we did not "interview" the seasonal estimates as they lay there on the ground. That was a pity, as it might have led to brainstorming about how to reduce the extreme labour peaks, and perhaps how to exploit better the labour slacks, such as they were.
It would be good to explore further the potential of this basic method for enabling farming women and men to refine their own analysis of labour peaks and slacks, and how to manage and exploit them.

2. participatory mapping

At Luanda we invited men whom we met casually on our arrival to map where people lived, using stones for household compounds. To do this, we moved to a place with a good view and flattish bare ground without many stones already on it. As the household compounds were scattered, so too were the stones which were placed to represent them, occupying a larger area than is usually the case with nucleated villages of similar population in India. When the stones had been placed, we asked the mappers if they could indicate the numbers of adults and children, using two sorts of seed. This they did for the nearby households, but they said they were not sure of the numbers of children in some of the more distant ones.

Reflections

Social mapping of scattered settlements is feasible on the ground, but the maps require a larger area than do nucleated settlements. My only other experience of social mapping of scattered settlement was at Nainital, in India. There, a farmer indicated households effectively and clearly by placing chips of wood on the ground. At Luanda, the stones used did not stand out as clearly as did the chips of wood. There is room for inventiveness and improvisation in the choice of material to represent households.

With participatory mapping of scattered settlements, it may be especially important to ensure that participants come from different geographical areas so that their knowledge covers the whole.

If women generally know more about people, especially children, than do men, they will be better presenters and analysts for census mapping.

3. matrix scoring of trees

Since Luanda was very badly eroded, trees seemed a suitable subject for matrix scoring. So in a bit of a hurry before dark, a discussion with a few men farmers elicited seven "trees" which they considered important. (Trees are in inverted commas because their list included sisal and the local euphorbia). Bits of three of the trees could be found nearby, and our driver went off with a guide in the vehicle to collect bits of the four others. He returned with these in about a quarter of an hour. Criteria were elicited in the simple "what's good
about? what else? what else?...what's bad about? what else? what else?..." manner. The seven bits of trees were put on the ground to make the top of a matrix, and then the twelve criteria which had been expressed were written on slips of paper and placed at right angles down the side. The villagers and MAD staff then drew in the grid of the matrix. A farmer, Bernard Owaka, came forward and with some advice from others scored each box out of 10 (see appendix B). Once he started scoring the operation only took 15 - 20 minutes. The maize used for scoring (and which we had brought) was repeatedly raided by hungry hens, diminishing scores which then had to be restored. At the conclusion of the exercise, they ingested all the scores in a matter of seconds.

Reflections

Beware maize and hens. For all the jokes, goat droppings do decidedly have inedibility to recommend them. With maize and hens, mount guard and at the same time record scores durably on paper as soon as they are made.

It helps to have the items - in this case small branches of trees - physically present for the scoring (or ranking).

Scoring has some advantages over ranking. It gives all the information provided by ranking, but adds weights to values. I have the impression also that analysts find it more interesting, and like the implied authority and discretion (like a schoolteacher) of marking out of ten. There is much still to be learnt about the relative advantages of ranking, scoring out of a fixed total (such as ten) and free scoring in which analysts put down as many counters as they wish.

The process was typically male-dominated, and larger-farmer dominated. This was partly because we were short of time and had not made prior arrangements to meet women. It would have been good to have repeated the process and elicited criteria and analysis with women. Once again, the lesson is to take more time, and especially with women, to arrange in advance a time convenient for them.

One person did all the scoring. This seems natural (it happened also in June with a group of women matrix scoring six banana varieties on Kilimanjaro), especially when there is a bowl or bag of seed which one person carries, and a crowd would mess up the matrix if they walked on it. In this case, the other men who were present did make a few comments, but did not participate fully. If a group view is sought, it may be necessary to involve others deliberately. The combination of hurry (it was getting dark) and of Bernard Owaka's enthusiastic participation denied us much crosschecking or debate, and the insights they might have generated.
idea of asking villagers to "play" - with stones, seeds, chalks, sticks, the ground, or whatever. But these, after all, are "their" media. Farmers all over the world draw on the ground, but "we" sometimes find it difficult. They are empowered. We perhaps fear that we will be devalued, or disabled. Yet when these barriers of fear are overcome, a whole new world of learning opens up. I now wonder what on earth I have been doing, wasting the opportunities of the past thirty years, not knowing this.

How can we help others to avoid all that waste of opportunity? How on a large scale, can professionals in NGOs and Government be enabled to break the barriers?

The answer may be to start not with methods, but with behaviour and attitudes; to add to a personal repertoire or menu of methods; and to share experiences and encouragement with others. One isolated person can be trapped and impotent; a critical mass of people can provide mutual support. But even without support, anyone can start, at any time, piecemeal, and bit by bit. Anyone can invite farmers, women, men to put down the stones and seeds for seasonal analysis; or to make a participatory social map or resource map; or to score a matrix for trees, or varieties of a crop, or conservation measures; or to show us their experiments and what they are already doing. And anyone can then learn how to do better, as with these experiences in Kenya.

The important thing is to start, and learn by doing.

Finally, let me thank the MAD team, and those we met in South Nyzana, for sharing their knowledge and sparing their time.

3 January 1992

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Socio Analysis: Increase in a woman's labour with agricultural intensification

Estimates using seeds as contours

Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb

\( \text{\#} = \text{Before intensification (MAX 310)} \)

\( \text{\#} = \text{Increase with intensification} \)

Analyst/Producer:
Mas Promilla Dan Odhiambo
Kogweno/Kiwan Sublocation
South Nyanga District, Kenya
14 December 1991
## Matrix Scoring of Seven Trees

By farmers at Kwanda, near Karungu

South Nyariga District

15 December 1991

Utility scored 0 to 10

<table>
<thead>
<tr>
<th></th>
<th>Owino</th>
<th>Ali</th>
<th>Ojukok</th>
<th>Otho</th>
<th>Tundo</th>
<th>Ongono</th>
<th>Lecoma</th>
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<td><strong>Drought Resistant</strong></td>
<td>10</td>
<td>6</td>
<td>4</td>
<td>7</td>
<td>9</td>
<td>6</td>
<td>8</td>
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<td>10</td>
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<td>-</td>
<td>8</td>
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<td><strong>Furniture</strong></td>
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<td>-</td>
<td>-</td>
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</tr>
<tr>
<td><strong>Firewood</strong></td>
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<td>10</td>
<td>6</td>
<td>9</td>
<td>2</td>
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<tr>
<td><strong>Building</strong></td>
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<td>8</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>9</td>
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**Owino**: Cassia Senna  
**Ali**: Cassia Soggal  
**Ojukok**: Euphorbia  
**Otho**: Balantus Argentaria  
**Tundo**: Sisal  
**Ongono**: Cassia polycanthusa  
**Lecoma**: Leucemia lanceolata

**Analysts**  
Bernard Owuka  
Jim Ojiambo  
and others
### Matrix Scoring of Six Varieties of Banana by Eight Women Farmers

**Varitie of Banana:**

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<thead>
<tr>
<th>Variety</th>
<th>Ironwood</th>
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<th>Noisi</th>
<th>Kitoke</th>
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<td>500</td>
<td>400</td>
<td>300</td>
<td>200</td>
<td>FREE</td>
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**Women's Reference:**
- 2
- 1
- 4
- 3
- 5
- 6

**Men's Reference:**
- 2
- 1
- 3
- 4
- 5
- 6

**Scored with Manje Seeds on the Ground:**
- Felista Mparu
- Eva Machai
- Veronica Machai
- Alice Malimo
- Naimo Makuoma
- Regete Makuoma
- Kita Makuoma
- Elangiendo Makuoma

**Analysis:**
- Naimo Makuoma
- Regete Makuoma
- Kita Makuoma
- Elangiendo Makuoma

**Date:** 1 June 1991