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Using Rapid Rural Appraisal to formulate a village resources management plan

Notes on RRA and a Meeting (4 August 88) of National Environment Secretariat, Mbusyani Women's Groups, and Division Technical Officers

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· Background

Over a period of two weeks (total of 6 working days), a field team of 6 officers from the National Environment Secretariat (NEB) and Clark University as well as 7 technical officers from the division/location level joined with formal and informal leaders from Mbusyani Sublocation, Kakyuni Location, Kangundo Division, Machakos District. The goal of the exercise was to use Rapid Rural Appraisal (RRA) to formulate a sublocation Village Resource Management Plan (VRMP). While the process is still incomplete, there has been sufficient learning and insights gained to circulate an interim report. A more detailed final paper will be prepared in a few months time when the process is more fully developed.

Mbusyani Sublocation is a large area, approximately 30 km 2 in Machakos District. The population in 1979 was 5,000; estimates for 1988 are about 7,000. People derive their livelihoods mostly from subsistence agriculture and remittances though there are about 20 prosperous farmers who sell coffee as their primary source of income. Rainfall is sparse, averaging between 400 and 600 mm per year; soils are generally rocky; vegetation is scrub grasses, acacia trees, and succulents for much of the sublocation. The area is classified mostly in Kenya's agroecological zones 3 (marginal coffee) and 4 (oil seeds and sorghums) though a small part is zone 2 (coffee). Elevation is 1360 to 1520 metres.

The NES team first visited Mbusyani in May, 1988 as the result of a NES training course sponsored in the nearby sublocation of Katheka. NES has conducted three short visitation seminars at Katheka in the last few months to inform village leaders and extension officers about technologies and management systems to improve productivity of the natural resource base. Mbusyani sent 10 women's group leaders, a senior chief, an assistant chief, and the chair of the Farmer's Cooperative Union to one of these courses to see what aspects of Katheka's natural resources management achievement might be applicable to Mbusyani.

NES followed up with a site visit to Mbusyani and after extended discussions, recommended that an RRA be carried out, the result of which would be a Village Resource Management Plan (VRMP). Mbusyani leaders agreed.

NES modified RRA systems, as described in notes and papers by Conway, Pretty and McCracken. The NES version of RRA, as used in Mbusyani, included:

- Sketch map of entire sublocation - derived from 1:50:000 topographical map and a tour of the area with the Chief;
- Time Line - derived from interviews with 14 elders, meeting in two groups;
- Trend Lines in Food Production, Soil Erosion, Population, and Water Availability - derived from interviews

Source: RRA Notes (1988), Issue 2, pp.4–11, IIED London

with 18 randomly selected residents, meeting in two groups;

- Village Transect - derived from three teams of two people each, one technical officer and one NES officer. Each walked through one of the three micro ecological zones in the sublocation noting vegetation, soils, water, etc.;

- Seasonal Calendar, including rainfall/water availability, crop activity and labour demand, migration, diseases, resource management practices, and food shortages - derived from group interviews with four separate groups;

- Institutiona1 Relationships - derived from interviews with four discussion groups, totalling about 60 people;

- Nine Farm Sketches - derived from individual team members visiting specific farms - 3 each per micro zone; and,

- Sixteen Household Interviews - derived from individual team members meeting heads of households: 5 to 6 interviews per micro zone.

While the NES RRA is under continuing revision, officers are generally satisfied that the above eight exercises provided sufficient data upon which to base discussions to create a VRMP.

· Creating the VRMP

Of particular interest is conversion of RRA data into a VRMP. A number of steps are involved and warrant careful consideration as this sequence may be the single greatest contribution of RRA to stimulating improved village resources management.

The NES/Clark team met for a full day following the six days of field data collection. The purpose of the meeting was to prepare for a village discussion (baraza). The team organized the following items on large poster boards:

- a sketch map of the entire sublocation, for display on a wall. The map identified sites of different natural resources in the sublocation (i.e. water) and also noted the boundary lines of micro ecological zones;

- a list of resource management problems, as identified through the RRA and, on the same poster board, a list of possible opportunities (optio ns) to resolve the problems;

- a sketch graph of trends in population, soil, water, and food production, all superimposed on a common axis;

- a seasonal calendar, presented on one chart, with multiple colours representing different agricultural, employment, and land use activities; and,

- a blank matrix noting options (best bets) in the left hand column as well as horizontal column headings of productivity, equity, stability, sustainability, time to benefit, social feasibility, technical feasibility, priority ranking (see Annex A).

The following day the team convened a meeting in the sublocation, which included:

- the six team members from NES

- nine technical officers (some had been only one day with the RRA team):

  Mrs. Rachael Moya, Location Community Development Officer;
  Mr. Mageto, Division Water Engineer;
  Mr. Kinyua, Division Forest Officer;
  Mr. Kioko, Division Forest Assistant;
  Mr. Njoroge, Location Livestock;
  Animal Production Officer;
  Mr. Ondari, Agriculture Officer;
  Mrs. Ndonye, Nurse and Public Health Researcher; and,
  Second public health researcher .

- Assistant Chief Kaku, Mbusyani Sublocation

- Mbusyani Women's Group Committee, consisting of officers of Mwethya Groups (total of eight)

Source: RRA Notes (1988), Issue 2, pp.4–11, IIED London

The meeting enabled the varied constituencies to discuss and eventually to formulate a VRMP including: (1) priority activities; (2) institutional responsibilities to do the work; (3) a schedule; (4) needed training for villagers; (5) external inputs, if needed; (6) duties of technical extension officers.

Although the discussions foundered a number of times and the group dealt with only one problem - water - the feeling by the end of the day was indeed positive. The commitment to join together to solve the village's problems was as strong as anyone in Mbusyani could remember; the exchange among technical officers from different ministries had never happened before. Discussions among the Assistant Chief, women's group leaders, and technical officers opened a vista of institutional perspectives and needs not previously considered; all endorsed a series of steps to increase water harvesting and storage that would double the village's water supply. Perhaps the most interesting aspect of the discussions was that the recommended activities could be accomplished for very little external cash.

The steps that opened up the discussion emerged from the RRA matrix (Annex A). It enabled the entire group to rank each possible intervention on the basis of eight criteria. Though the definitions were loose and the weighting arbitrary, the matrix worked extremely well to focus discussion, rank options, and enable consensus to emerge. The group narrowed choices to three and appointed a technical advisory group to come up with feasibility studies for each option. A date is set in two weeks time for the technical group to review sites and make recommendations; a second date is set for the full committee to reconvene and make decisions.

As people were leaving the meeting, the Division Water Engineer commented, "Now Mbusyani will have water. Before we knew what technical steps were needed but had no money to hire outsiders and no means to mobilize the village groups. Now the village is ready to help itself and little outside money is needed."

While many problems continue for Mbusyani and much hard work lies ahead, it is clear that RRA has helped the sublocation to identify its problems and reach consensus on what to do about at least some of them.

Discussions are still needed on problems of income generation, lack of tools, marketing, bilharzia, tree planting, and crop diversity. Yet the progress achieved in dealing with the sublocation's number one need has created a climate of trust and cooperation, has instilled an attitude of ownership among the villagers who will do the actual work, and has exacted a public pledge of commitment from the technical officers and Assistant Chief who will be responsible for managing the implementation.

· Findings about the process of the discussion

A number of lessons about RRA emerged from the meeting:

- *Gender*. Women in Mbusyani are not accustomed to speaking out in the presence of men. On several occasions the women were clearly holding back, even though they felt strongly about the issue of water. At one point the Assistant Chief said he was embarrassed that the women's leaders were not speaking more directly about their needs. Just before the lunch break, the NES team leader encouraged the women to express their feelings noting that the meeting would be a failure if their views were not heard.

  Lunch provided an informal opportunity for the different elements of the group to talk on relaxed and casual terms. After lunch, discussion picked up considerably - the women had held a short caucus - and some intense exchanges erupted. Women did speak; their priorities were heard; their recommendations accepted. While one meeting will not reform the role of the woman in village decision-making, it has set precedent in Mbusyani that provides confidence for the women's group leaders and an example for other meetings to follow.

- *Language.* The discussions moved quickly from Kikamba (local language) to

Source: RRA Notes (1988), Issue 2, pp.4–11, IIED London

Kiswahili (one of two national languages) to English (other national language). Several were fluent in all three; all were not comfortable in a least two. Yet Kiswahili and Kikamba do not lend themselves to abstractions such as "social feasibility" or "sustainability" and they are deficient in technical terminology such as distinguishing among five different types of dams or measuring productivity of different soil management systems.

The NES team needs to develop more visually graphic means to represent the technical and conceptual terms of natural resources management. Villagers, even those with little formal education and limited language skills, have no trouble comprehending the idea of, for example, sustainability. But it must be represented in symbolic form other than or at least in addition to language.

- *Data presentation.* RRA data collected during the previous weeks were indispensable for stimulating discussion. Information about trends in food production and water availability set the stage for discussing water problems. The data, even though only approximations, helped technical officers and village leaders rank their problems from severe to least severe. Having a large map which designated different agricultural zones for the sublocation also helped, especially when considering specific sites as well as issues of equity. Finally, the emphasis on visual presentations such as charts, diagrams, and maps made a difference in stimulating exchange as the diagrams provided common ground that all could understand, regardless of language. NES plans even more emphasis on visual materials in future RRAs.

- *Involvement of extension officers.* Using extension officers in the RRA and VRMP process turned out to be very important. There are several reasons why. First, the extension officers are frequently office-bound because they lack petrol. The RRA data exercise provided the opportunity to meet leaders and examine the resource base in areas where they are assigned to work anyway.

  Second, RRA created an arena in which officers from several sectors were able to analyse and discuss common problems. For example, while the sublocation identified water as the greatest problem, the discussions indicted that combined soil control, tree planting, water management, and access control would be needed to resolve it. Such cross-sectoral plans are not normally devised through the traditional operations of extension services.

  Third, participation of technical officers in the RRA brought them into the VRMP conversations. During the initial VRMP meeting, the forestry, water, and community development officers were particularly active; livestock and agriculture moderately active. Given interest and backing in the planning stage creates high probabilities that extension officers will be present and supportive during implementation. Further, as in the case of the water engineer, the officers will bring resources from individual ministries such as cement, tools, seedlings, wire, pipe, or hand pumps - all vital ingredients in the sublocation's quest for support.

- *Role of NES or other external agents as catalyst.* No matter how much self-help is present in a rural community, villages cannot make major improvements in resources management simply on their own initiatives. On the other hand, substantial infusions of capital or technology will almost certainly bring adverse impacts. What seems to work best is a slight external nudge or stimulus to make the existing systems work better. The role of RRAs and external agents such as NES, NGOs, or other outside forces is significant to the extent that it can stimulate existing leaders or institutions to perform more effectively.

  The extension officers are a case in point. By and large, Kenya's extension staff are well trained in their respective technical specialities. But they lack transport to visit their villages and have little experience or training in mobilizing communities. As a

Source: RRA Notes (1988), Issue 2, pp.4–11, IIED London

result, much of their technical expertise falls on deaf ears, not because people are indifferent, but because the institutional setting is not prepared to act on advice given.

Through the motivating influences of external agents, village visitations, RRA analyses, and VRMP planning, the technical officers gain a stronger position and create a stronger community with which to work. Because the extension staff are the single greatest contact between rural communities and outside resources, the RRA increases their effectiveness.

· Conclusions

1. Visits to exemplar village such as Katheka turn out to be an all important part of getting an RRA started. They should be included in subsequent RRA exercises.

2. The participation of technical officers in RRA data collection and village-wide discussions is critical. It assures follow-up and backing from those who are in the best position to do it.

3. The participation of both formal (e.g. chief) and informal (e.g. women's group) leaders is equally important. One of the most significant aspects of RRA is the way in which it encourages local leaders, many of whom lack formal education, to express their views.

4. The greatest virtue of RRA is use of visually comprehensible charts and diagrams to stimulate participation and exchange among local leaders, technical officers, and outside elements. The villagers relate to visuals more readily than to written reports.

5. RRA is fast and inexpensive and can be carried out almost totally by individuals in the rural community or assigned to work in that area. Only small (but important) outside help is required from NGOs, donors, central ministries, etc.

6. The process also permits formulation of a VRMP in a relatively short period of time. The plan serves several purposes: (1) plan for village; (2) clear list of priorities for extension officers to use; (3) systematic and orderly list of needs to be communicated to the District Development Committee and donor/NGO agencies; (4) schedule for village leaders to measure their own progress; (5) assignment of work tasks to specific village institutions.

7. RRA is a splendid vehicle to use natural resources management as a means to integrate soil, water, health, education, population, trees, pasture, etc. at the village level.

8. In order to make RRA happen, a small budget for transport for the team including local residents, extension officers, and outside elements is required. This is one area where donor support is extremely important and helpful.

9. In order to implement a VRMP, a community needs:
   - commitment of labour from village groups (no budget needed);
   - commitment of technical advice from extension officers (no budget needed);
   - small transportation support for technical officers to carry out their work (small fund of perhaps $200 to $400 needed);
   - approval and backing from DO or other local administrative officer (no budget needed);
   - small budget for inputs such as tools, equipment, or farm supplies, not to exceed $1.00 per person in village per year - in the case of Mbusyani, this would be no more than $7,000 per year;
   - small budget for training of village leaders which would include short visitation or exchanges to nearby villages where institutional or technical elements are already functioning effectively. Training costs are limited almost entirely to local transport to move village trainers, villagers, and a few extension officers. Probably no more than $1,000 per village per year; and,

Source: RRA Notes (1988), Issue 2, pp.4–11, IIED London

- commitment from the Assistant Chief, leader of village groups, and other village/community leaders to make the VRMP happen (no budget needed).

The sum total of needs is high on leadership and community support as well as help from extension officers. Almost every village in Kenya is well endowed with these resources. They simply need to be mobilized and trained. While external funds and inputs are required, the need for this help is modest. NES is convinced that the link of village visitation, RRA, and VRMP can significantly improve the way natural resources are managed in Kenyan villages as well as achieve increases in sustainable production.

- **Charity Kabutha** and **Richard Ford,** National Environment Secretariat Interim Report**.**

Annex A

BEST BET OR INNOVATION	PROD.	STAB.	SUST.	EQUIT.	COST	TIME TO BENEFIT	TECHNICAL FEASIBILITY	SOCIAL FEASIBILITY	PRIORITY
1.	+	++	++	○	□	□	■	◪	
2.									
3.									
4.									
5.									
6.									

KEY : PROD = PRODUCTIVITY
STAB. = STABILITY
SUST. = SUSTAINABILITY
EQUIT. = EQUITABILITY

− = Negative impact
0 = Zero impact
\+ = Positive impact
++ = Very positive impact

	Cost	Time	Feasibility
□	High	Long	Low
◪	Med.	Med.	Med.
■	Low	Short	High

Note : Row 1 is completed for an imaginary innovation

Source: RRA Notes (1988), Issue 2, pp.4–11, IIED London