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Diagrams

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- ### Diagrams: General theory and practice

What is a diagram?

A diagram is any simple, schematic device which presents information in a readily understandable form.

Which diagrams?

There are many types of useful diagrams, including maps, transects, seasonal calendars, historical profiles, decision trees, activity profiles, venn diagrams, histograms, graphs, bar diagrams, decision trees etc.

Why use diagrams?

- Diagrams can capture and present information which would be less precise, less clear, and much less succinct if expressed in words.

- Diagrams are shared information which can be checked, discussed and amended, thus they create consensus and facilitate communication between different people and disciplines.

- The constructors of diagrams must continually be asking questions during the process: these questions are more open-ended than in formal surveys.

- The act of constructing a diagram forces exploration of extremes in space (e.g. to the periphery of a village or community) and in time (e.g. unusual events within and years). Helps to discover surprising and unexpected.

- Helps in the development of interviews.

- Rural people understand, and can contribute to, diagrams.

- Illiterate people can understand diagrams.

- Sometimes a humbling experience when diagrams are shown to rural people and are found to require many changes.

- Drawing diagrams is fun.

Where and when to draw

- In the field: best on the ground or on large pieces of so that the diagram is shared with all; second best in notebook, because information is private.
- In the workshop: on large pieces of paper or on overhead transparencies.

How to draw

- Drawing diagrams is neither art nor technical drawing.

- Do not use a ruler: it encourages excessive and unnecessary care.

- If the diagram is too pretty then the constructors may be disinclined to change it when new information comes to light: never be afraid to scribble over something that is incorrect.

- Be bold, clear and quick.

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• Profiles and matrices

Resources and benefits profile

We know that communities are not homogenous groups of people. Likewise, households cannot be seen to be undifferentiated units. Technological innovation, or intervention causing change, will affect the rich and poor, the male and female, the old and young in different ways. Two key areas in which people and households are affected by change are in their access and control over (a) resources used in production, and (b) the benefits derived from production. Access is defined as the use of a resource, control is defined as the capacity ultimately to decide about the use of that resource. Diagrams I and II depict a way of recording this information. The activities noted in the left hand column were taken from a previously compiled Seasonal Calendar. The codes in the two right hand columns identify relationships of access and control both within and between households.

Decision making: matrices and trees

Decision making *is* a complex process. It can be thought of as having three stages, (i) Initiation of Discussion, (ii) Discussion, (iii) Execution of Decision. There may be one or more actors involved at anyone of these stages. Diagrams III and IV illustrate how to record this information using a matrix.

Once again these show how patterns within and between households can be understood and documented. This understanding has proved useful in uncovering some of the social and economic relationships surrounding productive activities that have been the focus of project work.

The 'three stage matrix' can also be used in conjunction with the familiar Decision Tree diagram. This to date has only been used to conceptualise flows of decisions or to present semi-aggregated information in a report. Diagram I gives an outline example of a model which identifies critical points at which decisions have to be made about a range of choices. In surveys in which this tool has been used the patterns of (a) paths that households take at any point, and (b) the actors involved in the decisions at that point have tended to vary according to the resource position of households.

TABLE I

RESOURCES PROFILE

Activity	Resources Used	Access	Control
eg. Growing Maize	Medium Land	MA	VC
	Draught Animals	MA	LL
	Labour (HHLD)	MA/FA	MA

MA = Male Adult
FA = Female Adult
VC = Village Committee   LL = Landlord
C = Child

TABLE II

BENEFITS PROFILE

Activity	Benefits	Access	Control
Lowland Rice	Consumption	FA/MA/C	FA
MV Rice	Cash	MA	MA
Millet	Consumption	FA/MA/C	MA
	Beer	FA	MA

TABLE IV

Area/Subject	Initiation	Discussion	Execution
(Group 1) PADDY – MV	MA	MA/HL	HL
(Group 3) PADDY – MV (sc) – Local	LL/MA, MA	MA/MAR, MA/FA	MA, MA
(Group 5) PADDY – Local	MA	MA/FA	FA/C

Decision Making : Three Different Patterns

MA = Male Adult
FA = Female Adult
C = Child
LL = Landlord
HL = Hired Labour

TABLE III

Area/Subject	Initiation	Discussion	Execution
Firing Water	FA	MA/FA	MA
Pack	MA	-	MA
Buying Saddle	MA	"	MA
Buying Donkey	MA	MA/FA	MA

Decision Making Matrix

MA = Male Adult
FA = Female Adult

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General note

These descriptions are very short. They do not describe original tools, rather adaptations of the work of other development practitioners. Additionally no comment is made on the power of the tools or of their use and abuse. What is presented is therefore a brief introduction to ways of recording information and an indication of a conceptual framework which gives rise to the questions of intra and inter household dynamics that the matrices structure.

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• Diagrams and cartoons

See RRA Notes No.6, pages 26-29, June 1989.

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• Diagrams for training

We recently ran a course *in* project identification for local government officers *in* Nigeria, using the RRA philosophy, methodology and techniques. These techniques included diagrams such as maps, seasonal calendars, transects, historical profiles and impact diagrams.

Teaching

Course participants were shown an example of each of these diagrams, followed by a discussion of how to construct them and their usefulness in terms of project identification. Course participants divided into their respective village teams and interview pairings and constructed these diagrams on the basis of their knowledge of their own villages. Finally, participants presented their diagrams (prepared with marker pens on large cardboard sheets) in plenary and this occasion was filmed.

Unfortunately, we made the mistake of not asking them to tell us how they could make use of these diagrams for project identification purposes. Nevertheless, the participants thoroughly enjoyed the experience and were so proud of their diagrams that they took them home.

The uses of RRA techniques for project identification purposes

It was intended that the seasonal calendar should be used to indicate seasonal trends in activities and problems so that critical bottlenecks or times for project intervention could be identified.

The transect was used because we hoped that the problems and opportunities listed would correspond to possible agro-ecological project ideas.

The reason for including the historical profile was to highlight the nature, direction and pace of development in the village concerned, so that gaps within this pattern of development could be identified.

Although the primary purpose of the course was to improve project identification skills, the fieldwork was also used as an opportunity to get feedback from the villagers about various facilities and services provided there by local government and others. The impact diagram was therefore selected as a useful tool for structuring and presenting the analysis of these facilities and services.

Diagrams were selected from those available in the IIED Notes (1988) and the Khon Kaen Conference proceedings (1985), on the basis of their expected usefulness for project identification purposes.

As far as I know, these techniques have not yet been discussed specifically in terms of the project cycle before. I think that a discussion of when these and other RRA techniques could best be used in the project cycle and what kinds of operational information could be expected from them would constitute a useful development in the RRA literature or at least one which would interest me particularly.

The fieldwork

All the above mentioned diagrams took less than an hour to complete in the field. One or two individuals from each of the five village teams were assigned to complete one or two diagrams (not necessarily the same ones which they had chosen during the teaching week) with different groups of villagers which varied in size from two to more than a dozen people.

The historical profiles were done with a group of people that included some elders. Similarly, the transect was done with a group of farmers, while the impact diagram was done with people who were directly affected by the service or facility in question. The seasonal calendars, finally, were not done with a specialised group of villagers.

Although the trainers did not accompany the participants on these tasks, the reports show that none of the participants had understood the intended operational purpose of the diagrams.

In addition, many of the diagrams were skimpily filled out and others were treated more as pretty pictures than useful schematic devised. On the other hand, there was a wide range in terms of quality amongst the 30 participants.

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