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# The use of wealth ranking in nutrition surveys in Sudan

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There are few practical examples of the use of RRA in the field of health and nutrition described in the literature. This paper describes the use of wealth ranking as part of rapid nutritional assessments undertaken in Darfur by an Oxfam nutrition team led by myself. The assessments were unique in approach as they combined two complementary techniques; wealth ranking (Grandin, 1988) and measurements of the rates of malnutrition in the community.

Wealth ranking showed us the peoples' perceptions of differences in wealth between families who had malnourished children. This provided us with a useful framework in which to interpret the rates of malnutrition that we found in the community. Contrary to our expectations we found that malnourished children were from both rich and poor families in the community. Thus poor nutritional status did not correspond with the low 'wealth status' as perceived by the people themselves. This has important implications for targeting food at poor families as a means of alleviating malnutrition in a community.

This work has shown that wealth ranking has an important role to play in developing new methods of nutritional assessment.

### • Background

Over a 12 month period between 1988 and 1989, we undertook eight separate rapid nutrition surveys of the worst drought affected areas of the North Darfur in close collaboration with the Ministry of Health and other NGO's in the region. The surveys contributed information to the Regional Planning Unit in El Fasher, Darfur. Rates of malnutrition and other household data from the surveys were used to confirm the effects of

food insecurity on some of the worst drought affected communities in North Darfur.

Our initial surveys carried out in May-June 1988 reported alarmingly high rates of malnutrition in three communities in North East Darfur, namely Malha, Mareiga and Cuma. By September malnutrition had further deteriorated to more than 25% of children malnourished. Malnutrition is defined as below 80% of the reference median weight for height (NCHS/WHO reference population (WHO 19-86)).

For Darfur as whole a reasonably good harvest was expected in November 1988. However, for Malha, Mareiga and Cuma the harvest rarely produces sufficient to last the whole year and substantial locust damage had been reported. The poor harvest prospects were confirmed by the continued high price of millet in the markets of Malha and Mareiga, while elsewhere in Darfur prices were dropping rapidly in anticipation of a good harvest.

In the light of this situation, a one-off targeted food distribution was undertaken. Food was provided by the Regional Government and Oxfam and distributed by the local Red Crescent Committees to all families who were likely to have malnourished children.

We carried out further assessment of the situation in early 1989 and used wealth ranking as a way to look at the wealth characteristics that people in the community assigned to those families who had malnourished children. The aim was to find out whether it was the poorer families who were more likely to have malnourished children.

The team for this assessment included myself and two Sudanese women field workers (high

school graduates). They undertook the wealth ranking interviews. In each village we had local volunteers to help us.

### • **The wealth ranking method**

In the first two villages (Malha and Cuma) the wealth ranking was undertaken at a meeting of the Sudanese Red Crescent Committee (SRC) members, while in the last village (Mareiga) the SRC committee were asked to identify three members of the community who would undertake the wealth ranking exercise individually. The latter method was preferred as it allowed cross-checking between the ranks assigned by different people. Their rankings were found to be very similar. Grandin (1988) recommends that individuals from the community undertake the wealth ranking exercise separately. However, I did not obtain a copy of her Field Guide on wealth ranking until the third village was visited. Apart from this the wealth ranking procedure was the same in all three villages.

The differences between rich and poor were discussed briefly and an appropriate local phrase to describe wealth was decided.

The households to be ranked were those whose children had been found to be malnourished in the September/October surveys. The number of households ranked in Malha were 68, in Cuma 87 and in Mareiga 45.

The fathers' names were written on cards. The informant or committee sorted the cards into groups according to their perceptions of differences in wealth. If any group contained more than 40% of all families the informant was asked to split it again. After checking that no mistakes had been made, the wealth characteristics of each group were discussed. The informant was also asked whether the richest and poorest families who were ranked, corresponded to the richest and poorest families in the whole community (who were not ranked).

In Mareiga an average wealth score was calculated for each family based on the rankings of all three informants. First, a wealth score was calculated based on the individuals grouping of households;

Group Number  
(Richest Group = 1)

----- x 100 = Household score  
Total number of  
groups

This was repeated for each of the other informants in Mareiga and the average score of all three informants was calculated. Families were listed in order of their wealth score and divided into four wealth strata (rich, medium, poor or very poor). In Cuma and Malha it was not necessary to calculate wealth score as the wealth strata were the same as the wealth groups assigned by the Red Crescent Committee.

### • **Results of wealth ranking**

In all three communities there were similarities between the wealth groups. In Malha the SRC committee placed the families into three groups (rich, medium and poor), while in Cuma and Mareiga four groups were finally chosen.

#### **The richest wealth group**

The richer groups obviously had more resources, in particular more livestock. In Cuma most rich families had 30 to 40 sheep, but some owned more than 100 these families did not grow millet. They also had other means of livelihood - they were merchants with shops in the market or owned vehicles used for transport. Not all merchants were in the richer wealth group. In Cuma and Mareiga the richest wealth group was thought to correspond to the wealthiest members of the total community. In Malha the households in the richest wealth group were not as wealthy as the most affluent members of the total population, but were similar.

#### **The medium wealth group**

In the medium wealth group it was common to find that the head of the household was in employment, for example as a teacher, policeman, soldier or council officer. The number of dependants influenced the wealth ranking, so a man with regular employment but a large family was in a lower wealth group. Number of wives was particularly

important. The medium group also owned livestock; maybe one or two camels, 15 goats and two or three cows, and also had farms, where they grew millet.

### The poorest wealth groups

The poorest groups were generally considered to 'have nothing', in some cases not even farms. Livestock were lost during the 1984 drought and there were few other opportunities for maintaining a livelihood, except collecting and selling grass for fodder or wood for fuel, casual labouring and charcoal cutting.

Charcoal cutting was only undertaken by Zawgawa 'blacksmiths', who immigrated to the area. In Cuma several Meidop families had also immigrated some 20 years previously and others came during the more recent drought in 1985. All were considered to be very poor.

In Cuma and Mareiga where the poorest had been subdivided into two groups, the least poor group owned a few animals, say seven or eight goats (insufficient for subsistence). In the poorest wealth group there were several women-headed households as a result of the husband migrating to Libya in search of work, or divorce, or being widowed. Several of the men migrating to Libya had been absent for more than two years and their families were in the poorest wealth group. There were some women headed households in the medium group where the husband had found work in Libya and was able to send money back, indicating that absence of the man didn't automatically lead to poverty.

### • Relation between wealth ranks and nutrition status

In all three communities rich and poor families were found to have malnourished children and even some of the richest households had malnourished children. This indicates that on an individual level poor nutrition status did not correspond with low socio-economic status of the household as perceived by the community and so its use for targeting poor or 'needy' families would have been inaccurate. The original aim of the distribution had been to alleviate the high rates of malnutrition which were considered to be a health risk, particularly as children in Malha and Mareiga

were not immunized against measles. An emergency immunization against measles was undertaken by the Ministry of Health and Medecins Sans Frontiers Holland.

### • Comments

The wealth ranking was considered by the team to be a great success. It was far quicker than the household interviews in previous surveys and automatically gave an idea of wealth differences based on a whole range of indicators that corresponded to the local perceptions of wealth. The more passive role of the team and the more active role of the informants was greatly appreciated and the latter clearly enjoyed the exercise. Much hitherto unexpected or unknown information was learnt.

It would have been possible to follow up the wealth ranking and interview households within the different wealth groups although time did not allow us to do so.

The team was fairly well known by the communities which may have made wealth easier to undertake. Also the selection of households to rank was made easier by choosing those where a malnourished child was found in previous surveys.

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### REFERENCES

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