#### Disaster Risk Reduction Assessment in Dessie Zuria October 2006

Summary report for Concern Ethiopia by William Devas with thanks to Mesafint, Yeshi and Ahemd for their support and work in carrying out the assessment.

# Aims of the study

Although there was no formal TOR, as agreed with the desk and in country the aims of the study were as follows:

#### **Overall Aim**

To learn how DRR can and should be incorporated into future programme design and
implementation in Dessie Zuria through carrying out a Hazard and Vulnerability
analysis with the focus very much on the community's viewpoint, understanding and
perceptions of the issues involved.

# 1) Hazard Analysis Aim:

- Identify hazards faced by the selected Kebele's in Dessie Zuria
- Understand those hazards in relation to their intensity, type, seasonality, frequency and trends
- Understand which of those hazards pose the greatest threat to the livelihoods of the community
- Appreciate Kebele understanding of the causes of those hazards and to what extent they believe they are controllable.

# 2) Vulnerability Analysis Aim:

- Understand if and why the community is vulnerable to the identified hazards
- Learn what coping strategies they adopt when faced with the hazards

## Methodology

The study was carried out in four Kebele's selected from the 11 Kebele's in which Concern has decided to focus their initial programme intervention for Dessie Zuria. These four were chosen based on their agro-ecological and topographical representation of Woreda as a whole and their ease of access given the time limitations. Qualitative participatory data collection methods were used in each Kebele's with the following tools selected.

- 2 Transect Walks (to try and cover as much of the Kebele as possible and reach more distant Gots.
- 4 Focus Group Discussions with members of the men's association, members of the women's association, members of the youth association and Kebele Leaders. A timeline with proportional piling was used as a focus for discussion looking at good and bad years, why they were so, comparing them and examining how things have changed over time and what currently are the major problems that they face as women, youth etc... and how they feel these issues could be addressed.
- Semi Structured interviews carried out during the transect walks with deliberate targeting of the poorest households and especially female headed, elderly, disabled and youth.
- Staying 2 nights in each Kebele

Although the study was most interested in hazards, both natural and man made, the FGD's and interviews deliberately avoided asking direct 'hazard' questions so as to reduce the possibility of prompting answers to natural hazards such as floods or snow, when the community may feel that other issues were more important or to which they are more

vulnerable. Therefore questions used words such as problems, difficulties and challenges rather than, hazard or disaster that it was felt might exact less wide ranging responses.

# Limitations of the study

The focus was very much on the Kebele's understanding of hazards and their vulnerability and therefore only provides one element to understanding why the community is vulnerable to identified hazards. However this study can be well supplemented to gain a deeper understanding of the vulnerability with the livelihoods analysis, feasibility study, needs assessment, gender analysis, and nutrition survey that have all been carried out in Dessie Zuria in the last few months a long with the HIV / Aids Kubs survey that is due to take place in the near future as well. These studies combined with continued wider political, economic, social, environmental and institutional analysis should help to provide a fuller picture of the vulnerability context of Dessie Zuria.

Although the selected four Kebele's give a reasonable representation of Dessie Zuria as a whole due to time constraints part of their selection criteria was based on easy access and therefore proximity to roads. This was negated as much as possible through the transect walks attempting to get as far away from the road as possible but only in one Kebele, Dajolie, did we have to walk to actually get to where we were due to stay and conduct the Focus Group Discussions even though there a number of Kebele's in Dessie Zuria that do not have roads that pass through them.

Despite asking for a good proportion of the Focus Group Discussions attendees to be from the poorest households this often did not materialize and therefore is one reason why the poorest were specifically targeted for interviews when on the transect walks.

A final limitation is the fact that children were not consulted through either group work or as individuals due to time constraints and lack of available skills at facilitating discussions with children being available.

## **Key Findings**

The key findings below are grouped under headings that reflect the most important issues that arose during the research and often focus on possible ways to address the vulnerability of the community.

## Adaptation to climate change:

The land is unable to support the population of Dessie Zuria now. The population is rising, the land degrading and the rain becoming more erratic overtime and predicted by some only to get worse (FewsNet, 2005 & Devereux, 2004)<sup>1</sup>. As the land available is not going to increase there seems little hope, whatever agricultural help is given, that farming is going to support the community in 10 years time.<sup>2</sup> People need to find other sustainable livelihood options aside from farming, especially the youth and women and those with small plots of

<sup>&</sup>lt;sup>1</sup> Climate change predictions are difficult as the ones mentioned here outline that Africa and Ethiopia specifically will suffer reduced rainfall. However Peter Crichton has mentioned that other predictions predict greater rainfall in Africa, although this may not be the right rain for crop production. These sort of difficulties make it increasingly important that climate change is thoroughly investigated for Ethiopia specifically so that informed decisions can be made.

<sup>&</sup>lt;sup>2</sup> It is possible if kand tenure laws were to change to allow the buying and selling of land that a few people that are able to acquire large ares of land could secure a sustainable and secure livelihood but of course would reduce everyone else to be landless workers unless they have other skills with which to pursue other livelihood options.

land. Cross cutting programmes should be asking the question; how will this help people adapt to climate change? There is need to link research and work in this area with government policy, if there is any<sup>3</sup>, and consideration should be given to consulting the community with clear and understandable information about the possible changes that will occur where they live and therefore allow them to consider the best options to take for their future.

#### Livestock:

It was clear that livestock are critical for surviving in Dessie Zuria as they facilitate ploughing the land, are the most common form of income generation, and selling livestock is considered the most important coping mechanism during periods of stress. However livestock rearing and fattening is also very dependent on rain, which ensures or otherwise that grazing and fodder production is sufficient and therefore climate change is potentially a serious issue for livestock management as well.

# **Migration:**

The poorest migrate most years to be able to cope with shortage of food. If farming is not the future then other activities are needed that will require markets and will probably require some people to have to migrate to find an income and therefore should not necessarily be considered as a bad thing. Often those that we met that had acquired other skills such as carpentry had learnt these when they were forced to migrate and therefore that period in their lives is a positive one for their current livelihood security.

A start could be to talk to people from Dessie Zuria in the towns of Combolcha and Dessie, frequently mentioned migration destinations, to ask questions like: Why they migrate? Where to? What do they do? Are they able to send money home? How long do they stay away? What risks are they exposed to? We met very few people that did migrate because they were away at the time and seeing as it is usually the poorest that migrate then understanding their situation better would seem to be very important. It is conceivable that supporting those that do migrate could be as good as way as any of helping Dessie Zuria.

However it was clear that migration was perceived negatively, usually related to being very poor and fear of contracting HIV/AIDS was mentioned. Also there was clear discontent with the government's plans to resettle the poorest members in the community in 2005, and that youth and others started to support the opposition CUD who were against this policy. Fear of resettlement was still evident and is an added factor in the general dislike of migration.

## **Diversification:**

This is very much linked with the above two points. Although everyone had a preference for making their livelihood from agriculture and related activities, even those with other skills such as carpenters, all groups felt that skills training, such as carpentry, metalwork, sewing and weaving would greatly help improve their livelihoods if combined with access to credit or capital to help start up a small enterprise. Diversification is clearly needed, but so are markets for other skills and therefore the two need to go hand in hand to ensure that those that receive training have an outlet for their skills.

Credit was also often cited as necessary to help improve livelihood security and generally people had greatly benefited from credit with one or two exceptions, who are now very vulnerable due to not being able to pay back loans. However youth and women in particular

<sup>3</sup> From a brief search on the internet it was not clear that Ethiopia has adopted a National Adaption Plan of Action as other countries are and therefore research needs to be done to find out what, if anything the government are doing.

struggle to get access to credit but all expressed a wish to be able to in order to help them make a start for themselves. This is certainly something that should be looked into.

The few people that we met that considered their livelihood to be secure all had diversified livelihood options. Either skills such as carpentry, running a shop, having a family member living and working in Dessie who sends back money, or having a wide range of agricultural related activities including petty trading. This is added evidence that diversifying is necessary. However these few people are still vulnerable if, for example, the man that was a carpenter became ill his household would once again be entirely dependent on agriculture whose sustainability is marginal.

#### Gender:

To varying degrees all women's groups have received some training in the last year on gender awareness and rights as well as extension training regarding health and sanitation, family planning and HIV. The enthusiasm from the women that had received this training and the stated improvement in their lives suggests that this urgently needs to be continued.

However it is clear that many had not benefited from this training, invariably the poorest and most vulnerable women such as female-headed households, the elderly and poorly educated and therefore the benefits at the moment are more confined to the better off. It was also clear that the training could go further. Even though many women felt that they now had equal rights with their husbands comments like 'our husbands are less likely to hit us now', 'we are on our own feel free to talk and express your opinions' and a whole group laughing at the incredulity of one woman claiming she was able to lend out the households agricultural tools (normally the husbands responsibility) indicate that the training has been a good start but clearly deficient in many areas. It is probable that believe in attainment of equality is down to the fact that the training and awareness raising has been insufficient.

Interestingly it was always the women's groups that were far quicker to come up with ideas about how their lives could be improved whereas the men and leaders groups often tended to focus more on bemoaning the erratic nature of the rain and took longer to think more laterally. Women's ideas need to be harnessed more and their empowerment and training and can only help in this and should be one of the main components of the programme in Dessie Zuria if household risk is to be reduced and livelihood security attained.

## 'Natural' hazards are not their biggest problem – Health and Education are:

Aside from erratic rain, other nature related hazards such as wind, frost, snow, livestock disease, and crop pest were not their major problems. Every group highlighted education and health service deficiencies as their next major concerns after the rain including access to clean and protected drinking water. This helps to explain their vulnerability to hazards and offers suggestions as to how their vulnerability can be reduced.

Extension training on sanitation, HIV, contraceptive use and use of latrines has clearly had a benefit but was still not widespread enough and further training in these areas was often asked for by women. Criticism was also given of the inconsistency of the training given so far and knowledge of HIV was clearly limited. The lack of health centres was also a problem; in Dajolie there was a newly built health post but nothing inside it at all. Further training on family planning and contraception use would likely be of great benefit especially considering that Dessie Zuria is already one of the most highly densely populated Woreda's in Ethiopia and that population is estimated to continue to rise dramatically, thereby further compounding the likely agricultural production problems in the future.

As for education, the main problem was the fact that most of the schools stop at grade 4 and therefore it is very expensive to travel and get education to a higher level. Cost was also

clearly a huge problem for the poorer households we talked to and contributed to increased vulnerability in a number of cases. For others education was not considered important enough to sacrifice the money and therefore children worked for their parents or were sent to live with other households to work as servants and therefore considerably reducing their options in later life, especially if agriculture is unlikely to be sustainable for most people in the future.

Wind, crop pest, livestock disease, frost and snow were all identified as hazards but in general their impact was not considered to be hugely significant but it was clear that for certain households they have had serious consequences over the years.

## **Vulnerability increased by multiple hazards:**

This was only really evident from interviews but a number of women that we talked to were now very close to destitution after having suffered the impacts of a number of hazards and shocks. A common source of the problem was losing a husband through death or divorce. This meant sharing of land and therefore loss of half of their production and has led to one lady having to sell alcohol and sex, another taking out a loan, buying sheep, losing some to disease and now unable to pay off her debts or repair her house. Another lady had her husband's land taken away from her, was not able to repair her house and it collapsed and now lives with her brother-in-law who wants her and her son to leave their house. All these and many others are only one small shock from destitution, be it illness to someone in their family, a poor harvest or loss of livestock.

Every group said that female headed households, along with the elderly and disabled, were often the most vulnerable of all and this highlights this and ways need to be found to support them in particular. Concern's livestock credit programme that targeted the poorest women was well received and seems to have been a good step in the right direction in that it focused on women and gave them independent responsibility of their own.

# Agricultural Support is of benefit but probably limited to the relatively better off and short term in outlook:

Areas such as irrigation, terracing, improved farming techniques, helping provide access to inputs can all help to improve productivity. However it is likely that only those that are relatively better off, who for example live near springs that could be used for irrigation are going to benefit from these sorts of interventions and the poorest and most vulnerable will only become further marginalised. This could be an important strategy as a way to prevent more people falling into more extreme poverty but not really as a lift to the vulnerable, especially if crop production is only going to become more and more difficult. These types of infrastructure-focused development should not be ignored but are certainly not the principle way of reducing risk and vulnerability in Dessie Zuria.

### **Mainstreaming DRR:**

This is relevant for Concern Wollo more than the community. As the discussion above shows, 'classic' DRR measures of building infrastructure is unlikely to secure adequate risk reduction, and therefore the focus needs to be on building on the strengths of the people and tackling the root causes of their vulnerability, such as inequality and institutional failings. To do this Concern in its programming work needs not just to be aware of DRR but for it to underpin all the work that they do so that analysis of a situation is always seeking answers to why people are vulnerable, what strengths exist to resist that vulnerability and what threats are present that will potentially undermine their capital asset base and therefore their livelihood security. If the ability to analyse is good then in conjunction with the community mitigation work and activities are likely to be effective and seek out the root cause of the

vulnerability addressing the political, social, institutional and human elements rather than just focusing on the hazard, for example erratic rain, and its immediate consequences, such as poor crop production.

## Conclusion

As Dessie Zuria is almost entirely dependent on rain-fed agriculture and that that has not been able to support the population for many years it seems logical to conclude that climate change is the hazard to which they are by far the most vulnerable. Why they are vulnerable is the most important question though and here it is clearly a social and human issue, problems endemic within Ethiopian society and political structure (Lautze, 2003) and not an act of God or natural phenomenon against which nothing can be done.

All of the community are vulnerable to the affects of climate change, but the landless, youth, women, female headed, disabled and elderly are the most vulnerable. The community needs to know about this threat and be supported in ways to adapt to it, which has to be primarily through support in diversifying their livelihood options which for some is probably going to have to require migrating. Focus on these groups in particular combined with continued empowerment of women, skills training, and improved education and health services are key to ensuring that diversification is possible, vulnerability likely to be reduced and livelihoods made more secure. Welfare assistance is certainly needed for those that are not able to work. The government seems to be making efforts in some of these directions so Concern can either support that work or supplement it. A brief search on the internet has not revealed much evidence of Ethiopia genuinely trying to tackle climate change and this needs to be investigated as it seems clear that this threat above all others will cause greatest human, social and physical damage than any other in Dessie Zuria in the years to come.

#### References

Devereux, S. & Edwards, J. (2004) 'Climate Change and Food Security', *IDS Bulletin* Vol 35, No. 3, pp 22-30

FewsNet, (2005) 'Recent Drought Tendencies in Ethiopia and Equatorial Sub-Tropical Eastern Africa' in *Vulnerability to Food Insecurity: Factor Identification and Characterization Report*, no. 1

Lautze, S; Aklilu, Y; Raven-Roberts, A; Young, H; Kebede, G & Leaning, J. (2003) Risk and Vulnerability in Ethiopia: Learning from the Past, Responding to the Present, Preparing for the Future, USAID