



Feinstein International Center, Tufts University

PLI Policy Project, Ethiopia

## **Rapid Review of the Cash-for-Work and Natural Resource Management Components of the RAIN Project**

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## **SUMMARY**

The project *Revitalizing Agricultural/Pastoral Incomes and New Markets* (RAIN) is a three-year project implemented by Mercy Corps and Save the Children UK (SCUK) in parts of Somali and Oromiya Regions in Ethiopia. The project aims to protect, build and diversify assets in food insecure households. The donor is the Office for Foreign Disaster Assistance (OFDA) and the project budget is US\$17 million.

In July 2010, approximately at the mid-point of project implementation, Mercy Corps worked with the Feinstein International Center of Tufts University to review specific elements of the RAIN project viz. cash-for-work (CFW) and related natural resource management (NRM) activities, and explore opportunities for reshaping project strategies and activities to achieve greater impact. The review process included the collection and review of case studies from Somali pastoralist areas, focusing on asset transfer approaches such as cash distributions during drought, and restocking after drought. Specific areas of interest in these previous approaches were the levels of asset transfer relative to the livelihoods impact, and the time period needed to achieve impact.

Complementary to the review of case studies, simple economic modeling was used to predict how different levels of one-off cash transfers would impact on different types of destitute and poor agropastoral and pastoral households. Spreadsheets with the model were provided to Mercy Corps for further adaptation and to assist revision of project strategies.

The overall RAIN project objectives were reviewed, albeit briefly, together with options for assessing the impact of the NRM activities.

### ***Key findings and recommendations***

#### *Project design and strategies*

- At the overall level of project design, general implementation strategies, and M&E needs, Mercy Corps staff had already started to review and reshape specific RAIN activities and question the likely impact of CFW and NRM activities. However, given the complexity of RAIN and the project budget, a radical reworking and clarification of project objectives is needed. The current project design needs to be clarified using sub-objectives and made SMART viz. Specific, Measurable, Achievable, Realistic and Time-bound. Revised activities should fit clearly under, and directly contribute to the sub-objectives. At present the RAIN project document lacks a clear causal pathway, from activities to objectives to impact, and seems not to fully differentiate strategies or activities according to the characteristics of different households, in different areas. There seemed to be common agreement in the workshop with Mercy Corps that these changes were needed.
- In its current form, RAIN provides one-off cash transfers which are likely to be very short-lived in terms of impact, as the cash is probably used mainly to meet immediate food needs. Therefore, while RAIN might be contributing to a typical (but unstated) humanitarian/food security objective, impact on the more development-orientated objectives of asset protection, asset building and livelihoods diversification is unlikely. In terms of asset protection, this objective has to be tailored to the pre-existing assets of households and does not apply easily to households which have no productive assets to protect.
- At the level of CFW activities, the review showed a need to revise these activities if asset building objectives are to be achieved within the timeframe of the project. Relative to RAIN, previous and reasonably successful asset transfer approaches in Somali areas have channeled far greater resources to fewer households, or, have expected impact to last for only two months or less. Simple economic modeling should help Mercy Corps to reshape CFW approaches, and tailor different approaches to different types of destitute and/or poor agropastoral and pastoral households. These approaches need to be clearly defined and justified. There was wide variation

in the level of cash transfers within project areas. RAIN is currently has a very complex design, whereas the difficult operational context of Somali Region calls for simplicity and focus.

- For the NRM-related activities, approaches such as pond and gully rehabilitation, check dam construction, terracing and soil bunds have been used in Somali and parts of Oromiya regions for many years. For example, these approaches were widely used by the South East Rangelands Project in Somali Region. For RAIN NRM activities, potential impacts are currently outlined at community level and are not specific to destitute or poor households i.e. the most vulnerable groups. Questions to look at include: How, specifically, will destitute or poor households benefit from these structures? Given the repeated need for repair or rehabilitation, what local management systems can be supported to ensure the long-term maintenance of the structures? Which structures are susceptible to private ownership with possible exclusion of poorer users? Is private ownership necessarily a bad thing? Similar questions apply to bush clearing (Prosopis control), given the rapid reinvasion of cleared areas. Impact assessment of these activities is likely to be hindered by the good rainfall in 2010 and the likelihood that RAIN-related water points or grazing areas might not be used if there is ample ground water available or good grazing elsewhere.
- The review did not look at issues such as the effectiveness or relevance of CFW compared with, for example, direct cash distributions (without work) or food distributions. While different approaches are likely to result in different impacts and acceptance within communities, there are also questions about the organizational costs and efficiencies of transfers, including operational and transaction costs. For example, in the case of RAIN the CFW approach requires agencies to plan, support and monitor the tied NRM activities, and at a cost. At some point, an evaluation of RAIN should assess the 'delivery costs' of different asset transfer approaches. Long-term, the administrative and operational costs of international NGOs are likely to far exceed those of some other service providers.
- RAIN is but one project among many, and its objectives and strategies should fit within a broader, long-term Mercy Corps framework for development in pastoralist areas. The review touched on some of the issues. As a 'high livestock export' area, Somali Region and neighboring Somali areas are subject to long-term but gradual commercialization. This is reflected in the robust nature of the export trade and simultaneously, rising levels of destitution. As commercialization advances, herds are likely to increase and poorer herders will struggle to stay in pastoralism. If correct, these trends have major implications for Somali areas and development policy, and the strategic directions of RAIN.

#### *Implications of change*

- Mercy Corps staff expressed concerns over donor expectations, and pressure to maximize the number of project beneficiaries in RAIN. Despite these concerns, as a humanitarian donor OFDA may want to revisit the concept of achieving development objectives via asset transfers which are spread widely but thinly, and which are one-off transfers. Should OFDA support a radical reshaping of the CFW component of RAIN, it may be acceptable to use different approaches in similar livelihoods zones, and compare impacts. This might involve a continuation of the CFW in some areas as is, but piloting more intensive transfers to fewer households in other areas.
- By using a CFW approach in RAIN, Mercy Corps has become engaged in debates and negotiations in and around the Productive Safety Net Programme, especially on wage rates. In its current form in pastoralist areas, the CFW approach is probably contributing to a short-term food security needs for some households but having limited impact on asset growth. This in itself might be a lesson to feed into the PSNP and wage rate discussions. In the face of the next shock or drought, households are still likely to deplete assets rapidly and require assistance. The economic modeling tool developed as part of this review might be further developed and used with government partners to predict the impacts of cash and/or food transfers, and the levels and duration of transfer needed to achieve meaningful asset building objectives.

## Introduction

The project *Revitalizing Agricultural/Pastoral Incomes and New Markets* (RAIN) is a three-year project implemented by Mercy Corps and Save the Children UK (SCUK) in parts of Somali and Oromiya Regions in Ethiopia. The project aims to protect, build and diversify assets in food insecure households. The donor is the Office for Foreign Disaster Assistance (OFDA) and the project budget is US\$17 million.

At around the mid-point of the implementation of RAIN, in May 2010, Mercy Corps approached the Feinstein International Center (Tufts) to seek support for an impact assessment of specific RAIN activities viz. cash-for-work (CFW) and related natural resource management (NRM) activities of the project. When deciding if an intervention should be assessed and when, experience from the Pastoralist Livelihoods Initiative (PLI) in Ethiopia from 2005 has shown that impact assessment is not always appropriate. For example, a desktop review of project design and implementation strategies might indicate that limited impact would be expected and if so, a reshaping of project design can be more useful than impact assessment<sup>1</sup>.

With this experience in mind, Tufts reviewed the RAIN project proposal to OFDA and following discussion with Mercy Corps, agreed to support a technical review of the project aims and strategies, and with a focus on the CFW and NRM components. In part this focus was also influenced by wider debates around safety net programs in Ethiopia, and the role of cash and/or food transfers as a means to reduce vulnerability to livelihoods crises.

## Review process

The overall purpose of the review was to examine what level of income/assets are required to enable households to maintain or improve their livelihoods, especially in the face of pressures such as drought.

Activity	Type of information and analysis
Desk review (Tufts)	<ul style="list-style-type: none"> <li>• Review lessons from other assessments in Somali Region related to the Productive Safety Net Programme (PSNP) and/or CFW (e.g. Save the Children US, World Bank), other cash transfer programs</li> <li>• Review lessons from restocking programmes e.g. the herd growth rates and core herd sizes required to maintain or grow herds</li> <li>• Review of trends in pastoralist livestock holdings</li> <li>• Review of existing CFW and wage rates (public and private sectors) in target areas</li> <li>• Review of food economy baseline data for RAIN areas</li> </ul> <p>Based on the above, develop a number of 'real' profiles or case studies, of different household economies. This could include profiles of a pastoralist household in a rural area, a female-headed household, an agro-pastoralist household, a destitute or 'drop out' household etc. and will include households likely to have been targeted by CFW/ PSNP programs.</p>
Workshop/seminar with RAIN staff	<ul style="list-style-type: none"> <li>• Based on the different household profiles, current asset status and lessons learned, with Mercy Corps staff develop scenarios to illustrate and compare the potential livelihoods impact of different development options over time.</li> <li>• Variables could include: different types and levels of inputs (CFW vs. restocking); livelihood shocks (price rises, drought); different timeframes etc.</li> <li>• Using the scenarios, identify a) the inputs/ support needed to protect current financial assets and b) the different economic options (including those targeted by RAIN) for improving/ diversifying livelihoods in the short to medium term.</li> <li>• Discussion on the extent to which RAIN objectives and strategies fit with higher-level donor or Mercy Corps strategies in pastoralist areas of Ethiopia.</li> </ul>

<sup>1</sup> For example, a review of the Mercy Corps activities in Afar Region under PLI was conducted in late 2006 in preference to an impact assessment.

Potential next steps	<p>This could lead into a discussion of the current RAIN cash for work strategies and possible options for strengthening the approach.</p> <p>Based on the discussions during the workshop but could include field work to develop additional case stories (for example, of households that have successfully recovered/ diversified) and/or identifying key questions for examining the potential impact of RAIN's NRM work, for example in relation to different household economies/ scenarios.</p>
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It was expected that the process, especially the workshop, would include an element of capacity building of Mercy Corps staff in the use of simple scenario analysis.

The workshop was held at the Mercy Corps office in Addis Ababa 28<sup>th</sup> to 29<sup>th</sup> July 2010, with Mercy Corps staff (Annex 1). There were no participants from SCUUK.

Some of the key background documents which were reviewed by Tufts and used during the workshop were as follows:

- Evaluations of previous asset transfer/asset-building projects in Somali areas – these were summarized and used as case studies during the workshop (see Annex 2).
- Food economy baselines for the Harshin Degahbur East Pastoral Livelihood Zone and the Jijiga Agropastoral Livelihood Zone, published by SCUUK and Disaster Prevention and Preparedness Agency; the reference year was 2004-5.

The review had initially intended to examine PSNP reviews in pastoralist areas, particularly those supported by SCUS and the World Bank. However, these documents were not available at the time of the RAIN review.

## Review workshop

### ***Rapid overview of cash-for-work and natural resource management activities***

Mercy Corps presented a rapid overview of CFW and related NRM activities in three project areas viz East Hararghe, Jijiga and Degabur.

#### East Hararghe office

Beneficiaries - the emergency CFW targeted destitute households; the NRM CFW targeted poor households.

Table 1. Cash transfers in East Hararghe

Type of CFW	Total transfer (ETB)	Number of beneficiaries	Average total cash transfer (ETB) per household <sup>1</sup>
Emergency CFW	957,220	803 (607 female, 803 male)	696 (~US\$26)
NRM CFW	557,243	1010 (284 female, 726 male)	1372 (~US\$51)

<sup>1</sup>Based on two workers receiving cash per household; EB 13.4 = US\$1.

Table 2. NRM activities in East Hararghe

Type	Number	Volume
Ponds (water pans)		
- New construction	2	1,600m <sup>3</sup>
- Rehabilitation	9	2,500-4,000m <sup>3</sup>
Gully rehabilitation, including reshaping, check dam construction, plantation and cut-off drains	4	37,088m <sup>3</sup>

Expected outcomes from emergency CFW:

- Cash necessary for beneficiaries to purchase vital food supplies (i.e. no need to sell assets)

- Population stayed in area
- In good/favorable position to benefit from seed fail activities
- Improved access to water

#### Expected outcomes from NRM CFW

- No need to sell assets for food
- Asset building: purchase of livestock (small ruminants)
- Improved access to water
- Improved environmental services
- Livelihood diversification through income generating groups

### Jijiga office

Table 3. Cash-for-work by activity in agro-pastoral areas

Location and type of work	Women	Men	Total amount paid (EB)	Average total payment (EB) per person
Gursum; wage rate EB 20/day:				
- shallow well construction	20	30	50,000	1,000
- hillside terracing (10km)	30	280	50,000	161
- pond rehabilitation (1800m <sup>3</sup> )	40	180	72,000	327
Kebribayah; wage rate EB 25/day:				
- hillside terracing (33km)	116	234	212,500	607
- stone check dam (4318m <sup>3</sup> )	66	260	431,800	1,324
- soil bund (27km)	89	284	101,250	271

Note – targeted poor agro-pastoral households with no cereal in store.

Table 4. Cash-for-work by activity in pastoral areas

Location and type of work	Women	Men	Total amount paid (EB)	Average total payment (EB) per person
Aware - wage rate EB 30/day:				
- stone check dams (500m <sup>3</sup> )	5	75	60,000	750
- soil bund (36km)	10	110	162,000	1,350
- Protopis clearing (100ha)	5	55	99,000	1,650
Gashamo - wage rate EB 30/day:				
- stone check dam (2000m <sup>3</sup> )	10	90	240,000	240
- water diversion channel (40km)	5	85	180,000	2,000
- soil bund (80km)	6	97	198,000	1,900
- pond rehabilitation (91,200m <sup>3</sup> )	0	50	72,000	1,400

Note – targeted poor pastoral households with < 50 sheep and goats. Maximum 2 workers per households, though this was unusual; most households had only 1 worker in the project.

### Degahabour office

Table 5. Cash-for-work by activity

Kebele	Activity	Quantity	Number of workers	Total amount paid (EB)	Average total payment (EB) per person
Ararso	Pond rehabilitation	5,250m	350	262,500	750
Lafgaloli	Pond rehabilitation (incomplete)	1,250m	182	67,125	368
Obale	Gully rehabilitation	1,000m	100	50,000	500

- The project sought the most vulnerable households, but left the selection to a “CFW committee”; this led to occasional mis-selection, which led to disagreements over wage rates (EB 25/day).

- The activities aimed to deal with water shortages, particularly in Obale.
- Preliminary findings at field level were that cash was used to buy food; for example, a household of 7 people might buy 50kg wheat, lasting 1 week and costing EB 100; with an average weekly CFW wage of EB 150, wheat could be purchased to last about 1.5 weeks.

### **Asset transfers in Somali pastoralist areas – lessons from other projects**

This session was based on Mercy Corps staff reviewing a series of short case studies from previous restocking projects and cash distributions in Somali pastoralist areas. The full case studies are shown in Annex 2. An important part of the review was to examine the levels of asset transfer relative to the reported impacts and benefits in these projects (summarized in Table 6), and then compare to the levels of asset transfer in pastoralist areas of RAIN (Table 4).

Table 6. Previous evaluations and impact assessments, Somali areas<sup>2</sup>

	SC Isiolo, Kenya	SC Fik, Ethiopia	NORDA, Kenya	Horn Relief, Sool
Context	Drought-related	IDP rehabilitation	Drought-related	Drought-related
Type of transfer	Cash	Livestock, food, other	Livestock	Cash
Key objectives	Long-term herd reconstitution; diversified livelihoods	Return of IDPs to pastoralist livelihood	Resumption of pastoralism	Short-term emergency assistance, for 1.5 to 2 months
Value of asset transfer	US\$490/hh	US\$321/hh plus food ration	~US\$450	US\$50/hh
Frequency of asset transfer	One-off	One-off	One-off	One-off
Achievement of objectives	Partial at 7 months after cash input; up to further 2 years needed to build herds	75% hhs resumed pastoralism 2.5 years after asset transfer	Most hhs attained minimum herd size 1.5. years after restocking	Yes, but impact of assistance lasted only 1 month

Table 4 indicates that the average total cash transfer per household in pastoralist areas of RAIN was US\$122 (EB 1677). A comparison of this figure with Table 6 indicated that the cash transfers provided by RAIN:

- would last a family of around 7 people about 2 to 3 months if all cash was converted to food;
- would probably have minimal impact on asset building if the strategy was to ensure that pastoralists acquired a minimum herd. The restocking case studies used transfers of US\$321 to US\$490 per household, with the lower figure supplemented with a food ration.

These findings indicated a need to redesign the asset building approach for pastoralist households and specifically, to provide a higher level of cash transfer to a smaller number of target

<sup>2</sup> Sources for Table 6:

Acacia Consultants Ltd. (2004). Evaluation of cash relief programme implemented by Horn Relief, commissioned by NOVIB/Oxfam Netherlands. Acacia Consultants, Nairobi

Ali, D., Toure, F. and Kiewied, T. (2005). Cash relief in a contested area: Lessons from Somalia. Humanitarian Practice Network Paper 50, Overseas Development Institute, London

Croucher, M. et al. (2006). Initial Impact Assessment of the Livelihoods Programme in Merti and Sericho. Save the Children Canada, Nairobi

O'Donnell, M. (2007). Cash-based Emergency Livelihood Recovery Programme, Isiolo District, Kenya – Project Evaluation draft report, by Michael O'Donnell, Save the Children, Nairobi.

Lotira, R. (2004). Rebuilding herds by re-enforcing *gargar/irb* among the Somali pastoralists of Kenya: evaluation of experimental restocking program in Wajir and Mandera Districts of Kenya. African Union/Interafrican Bureau for Animal Resources, Nairobi and Feinstein International Center, Tufts University, Nairobi

Wekesa, M. (2005). Terminal evaluation of the restocking/rehabilitation programme for the internally displaced persons (IDPs) in Fik Zone of the Somali Region of Ethiopia. Save the Children UK, Addis Ababa and Acacia Consultants, Nairobi



households. Plus, given the remaining time in RAIN for implementation it was noticeable that even with relatively high asset transfers it would take around two to three years to rebuild pastoral herds.

**Household profiles and simple economic modeling to predict the impact of asset transfers**

Another way to examine the likely impacts of cash transfers to pastoralist and agro-pastoralist households is to develop simple economic models which show patterns of asset growth over time, and in the face of different pressures on livelihoods such as drought. Simple modeling can be used as a tool to answer questions such as:

- For different levels of asset transfer, how long will it take a destitute pastoralist household to develop sufficient assets to resume pastoralism as the main means of livelihood?
- For different levels of asset transfer, how long will it take a poor pastoralist household to ‘move upwards’ into a medium wealth group category?

A first step in the modeling process was to characterize different types of agropastoral and pastoral household by asset ownership, bearing in mind that the objectives of RAIN focused on asset protection, asset building and asset diversification. The profiles in Table 7 were suggested by Mercy Corps staff for RAIN project areas.

Table 7. Households assets in RAIN project areas

Destitute agropastoral household, East Hararghe	Poor agropastoral household, East Hararghe	Poor agropastoral household, Gursum	Poor pastoral household
<ul style="list-style-type: none"> <li>• No grain stores</li> <li>• No livestock</li> <li>• Basic household items e.g. cooking utensils, bedding</li> <li>• Clothes</li> <li>• Qat in fields but crop not suitable for sale</li> <li>• Land</li> <li>• Exhausted social support</li> <li>• Children probably not going to school</li> </ul>	<ul style="list-style-type: none"> <li>• 2-3 sheep or goats</li> <li>• Perhaps 1 oxen</li> <li>• No cash</li> <li>• Small seed reserve</li> <li>• Basic household items e.g. cooking utensils, bedding</li> <li>• Clothes</li> <li>• Qat in fields but crop not suitable for sale</li> <li>• Land</li> <li>• Better ability to labor</li> <li>• Better social support networks</li> </ul>	<ul style="list-style-type: none"> <li>• About 5 sheep or goats</li> <li>• About 2 cattle</li> <li>• No cereals stored</li> <li>• No cash</li> <li>• Qat in fields but crop not suitable for sale</li> <li>• Basic household items e.g. cooking utensils, bedding</li> <li>• Clothes</li> </ul>	<ul style="list-style-type: none"> <li>• Less than 50 sheep or goats</li> <li>• Cattle ownership rare</li> <li>• Basic household items e.g. cooking utensils, bedding</li> <li>• Clothes</li> </ul>

Even before using these profiles for modeling, they pointed to some basic questions in terms of the objectives of RAIN. For example,

- *For different types of household, which type of assets – specifically- is RAIN trying to protect and why?*
- *For destitution households, does the objective of asset protection apply if these households have so few assets to start with?*

For the purpose of illustration, an initial model was developed for a Somali household of 7 people, being 2 adults and 5 children. The models used livestock herd dynamics data, data on human nutritional requirements and energy content of foods, and data from household economy surveys on the proportional contribution of different foods to household diets. The models focused on asset growth and separate models were developed for two different types of household viz:

- Destitute pastoralist households - with starting pre-project livestock assets of 6 sheep/goats.
- Poor pastoralist households – with starting pre-project livestock assets of 40 sheep/goats, 3 cattle and 3 camels.

For each model, two common assumptions were made:

- All scenarios assumed a drought every four years which depleted livestock assets by 30%.
- All scenarios assumed food aid receipts of 50kg maize/hh/year.

Five scenarios were developed as follows:

- For destitute pastoralist households three models were developed:
  - one model assuming no external asset transfer;
  - one model assuming cash transfer of US\$75 (EB 1030);
  - one model assuming livestock transfer valued at US\$350 (EB 4795).
- For poor pastoralist households two models were developed:
  - one model assuming no external asset transfer;
  - one model assuming cash transfer of US\$75 (EB 1030).

The initial modeling results are shown in Table 8.

Table 8. Results from simple economic modeling of Somali pastoralist households

Type of household and input	Scenario result	Notes
Destitute pastoralist, pre-project livestock of 6 sheep/goats.		
1. No external asset transfer	After 5 years this household will have livestock assets of ~25 sheep and goats only, well below the minimum herd size for pastoralism.	These households will rely heavily on social transfers and external assistance e.g. food aid.
2. One-off cash transfer of US\$75	After 5 years this household will have livestock assets of only ~39 sheep and goats, still below the minimum herd size for pastoralism.	These households will rely heavily on social transfers and external assistance e.g. food aid.
3. One-off cash transfer of US\$350 (or livestock equivalent)	After 2 years livestock assets are ~ 60 sheep and goats, and 2 cattle; this is above minimum herd size.	As above, assumes 50kg maize as food aid per year. Transfer is equivalent to that used in more successful restocking programs.
Poor pastoralist households, pre-project livestock of 40 sheep/goats, 3 cattle and 3 camels		
1. No external asset transfer	After 3 years, livestock assets reach 'middle' wealth group category	As above, assumes 50kg maize as food aid per year. Removing this food aid has limited impact on asset growth.
2. One-off cash transfer of US\$75	After 3 years, livestock assets reach 'middle' wealth group category	As above, assumes 50kg maize as food aid per year. Removing this food aid has limited impact on asset growth.

Note that:

- For destitute pastoralist households, initial transfers of value approximately US\$350 plus food are required if they are to acquire a minimum herd size within a typical program time period.
- For poor households which already own a minimum herd, low cash transfers of around US\$75 have limited impact on asset growth.

This kind of information reflects the lessons and challenges from restocking programs in pastoralist areas, from the 1970s viz. *for a given budget is it better to channel relatively high livestock (or cash) transfers to a relatively small number of households, or, provide small transfers to a large number of households?*

Excel spreadsheets with the basic model were provided to Mercy Corps staff, who started to adapt the models for agropastoral households and test the impact of different levels of asset transfer. Together with the case studies, simple modeling seems to be a useful approach to help staff think through project strategies and for given levels of asset transfer, likely impacts on different types of household within the project timeframe.

### ***Linking RAIN to long-term strategic frameworks for pastoralist areas***

For agencies supporting various projects in pastoralist areas, there are coordination and strategic issues around the ways in which project outputs combine (or not) to achieve long-term strategic development objectives. In PLI, there has been initial discussion around the use of the livelihoods framework as a tool for developing strategic plans with NGO partners, and related capacity-building options. In April 2010, Mercy Corps supported a combined livelihoods-conflict analysis in Shinile Zone of Somali Region, leading to a proposed strategic framework for that area<sup>3</sup>. Recent research in Somali areas also shows the trends towards commercialized pastoralism and the implications for development policies.<sup>4</sup> In summary, commercialization is associated with a gradual transfer of livestock from poorer to richer households, making it increasingly difficult for poorer herders with fewer animals, to stay in the system.

With these issues in mind, a review of RAIN asset protection/building/ diversification objectives and strategies could take note of the main trends which affect livelihoods in Somali Region, and the concept of 'moving up and moving out.' Those people moving up are able to acquire and maintain large herds, are characterized as middle-wealth or wealthy, and increasingly engage in commercial export markets. Those people moving out are gradually selling out to bigger herd owners. For these people the livelihoods options will include some potential for employment and service provision around the livestock sector. For many others, the options are limited in pastoralist areas, and this partly explains increasing destitution and increasing migration. One line of argument is that safety nets and similar approaches, with relatively low levels of asset transfer, may encourage poorer people to remain in pastoralists areas, when long-term, non-livestock based economic opportunities are limited.

A brief presentation was made on these issues (Annex 3) followed by discussion with Mercy Corps staff. Issues included the RAIN focus in productive assets, implying economic/financial assets, whereas as key strategy for diversification in pastoralist areas is improving education i.e. a form of human capital.

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<sup>3</sup> Catley, A. and Iyasu, A. (2010), *Moving Up or Moving Out? A rapid livelihoods and conflict analysis in Mieso-Mulu Woreda, Shinile Zone, Somali Region, Ethiopia*. Mercy Corps and Feinstein International Center, Addis Ababa (in press)

<sup>4</sup> Aklilu, Y. and Catley, A. (2009). Livestock Exports from the Horn of Africa: An analysis of benefits by pastoralist wealth group and policy implications. Feinstein International Center, Tufts University, Addis Ababa <https://wikis.uit.tufts.edu/confluence/display/FIC/Livestock+Exports+from+the+Horn+of+Africa>

## ***NRM activities and impact***

This part of the workshop used a selection of three RAIN NRM activities, with discussion on proposed indicators for assessing the impact of these activities. The activities and proposed indicators from Mercy Crops were as follows:

<b>Pond rehabilitation</b>	<b>Gulley rehabilitation</b>	<b>Bush (Prosopis clearing)</b>
Increased access to water <ul style="list-style-type: none"><li>- Distance to closest water point</li><li>- Length of time during which water can be accessed</li><li>- Number of animals using water point</li><li>- Change in expenditure for water</li></ul>	Cash transfers <ul style="list-style-type: none"><li>- Reduced rate of land loss</li><li>- Increased arable land for agriculture and grazing</li><li>- Increased potential in food self-sufficiency or income generated</li></ul> Reduced risk of flood damage (if overall water management considered in design)	Output/outcome: <ul style="list-style-type: none"><li>- Improved rangeland condition</li><li>- Improved access to grazing</li></ul> Impact: <ul style="list-style-type: none"><li>- Improved household food security (contribute to)</li></ul> Could be measured by: <ul style="list-style-type: none"><li>- Number of households who have got access to improved grazing</li><li>- Body condition of animals</li></ul>
Improved sanitation – number of people using clean water		

Some general issues arising from these indicators were as follows:

### *Causal pathways and defining where impact should happen*

Who, specifically, is supposed to benefit? RAIN objectives refer to ‘food insecure’ households, but this could be more clearly defined. Food economy surveys define poor, and in some cases, destitute households, each with different levels of assets. Is it these households who might benefit from the NRM inputs and if so, how? Do the potential benefits vary depending on whether a household is poor or destitute? In other words, for each type of target household in a given area, what is the causal pathway between the repair or creation of a structure, and specific livelihoods impacts at household level?

### *Meaningful indicators*

Quantitative indicators need both a numerator and denominator. An indicator such as ‘1000 people access clean water’ is potentially misleading if the number of people who need clean water is, for example, 20,000. A better indicator would be ‘50% of households within 5km of clean water source’.

### *Targets*

Targets are useful. If an indicator is intended to measure a change, the degree of change can be specified e.g. ‘clean water availability improved from 8 months/years to 11 months/year’. The target here is 11 months of availability.

### *Language*

Avoid terms in indicators which are difficult to define or measure e.g. what do the following terms mean: ‘improved grazing’, ‘increased potential’, ‘reduced risk’?

### *Methods*

Many indicators for NRM activities can be defined and measured using participatory mapping. Where maps have already been produced e.g. for planning purposes, the same maps may contain useful baseline information.

### *Management and access*

An important aspect of NRM activities is the long-term management of new or repaired structures. This is reflected in the apparent need for external support to repair or rehabilitate some structures. There are also issues around who, specifically, can access water, improved grazing or land for

cultivation. Can these resources be used by poorer households and if not, why not? What are the risks of appropriation of resources by wealthier or more influential people? It follows that NRM activities should include a set of indicators around local management capacities and systems.

#### *What if it rains?*

If structures are intended to improve access to water or grazing during dry periods or drought, they might not be used if years of good rainfall. If so, it becomes more difficult to assess impact. This is relevant to RAIN because 2010 in particular is likely to be a year of high rainfall in much of Somali Region.

In part, useful indicators can flow naturally from well-defined project objectives and/or sub-objectives. The project objectives are discussed in the following section.

#### **Revisiting the RAIN objectives**

A project document should describe a logical flow of activities to objectives. Tools such as logframes and/or the use of SMART objectives<sup>5</sup> help to ensure that the technical and programming logic of a project is clear. For project working in different areas with different socio-economic characteristics (or livelihoods zones), the project document should also specify how activities and strategies vary by area. It is also important to define target groups, and to do this as specifically as possible.

The RAIN project document has two objectives:

1. Food insecure households protect their agricultural and pastoral productive asset base and prepare themselves for participation in more profitable markets (budget US\$5.1 million).
2. Food insecure households increase and diversify their asset base via immediate economic opportunities and the development of high impact agriculture and non-agricultural markets that spur private sector investment and local economic growth (budget US\$11.9 million).

Neither of these objectives are SMART. However, it seems that in OFDA proposals objectives are sometimes broadly written because a change of objectives requires OFDA approval, which takes time. It follows that one approach to clarifying RAIN would be to develop SMART sub-objectives.

Options include:

- Replace the term 'food insecure' with a more specific description of target households in terms of the wealth of the households (e.g. poor, destitute), the livelihood system (e.g. agropastoral, pastoral), and the physical location. This approach immediately helps to focus attention on specific types of household in specific areas; also see the household profiles in Table 7.
- Sub-objectives under Objective 1,
  - o Consider the meanings and measurement of terms like 'prepare', 'participation' and 'more profitable'. What, specifically, do these terms mean and how might they be measured? If terms are vague or difficult to measure, they should be replaced with terms which are easier to define and measure;
  - o Be careful to relate 'asset protection' to household type; destitute households may have no productive assets to protect and if so, does the objective apply to these households?
- Sub-objectives under Objective 2,
  - o Increases in, and diversification of assets need to be defined by targets and quantified measures, again, by household type and area;

---

<sup>5</sup> SMART – Specific, Measurable, Achievable, Realistic, Time-bound.

- Is the development of high impact agriculture achievable during the three years of RAIN and if so where, specifically? – it seems not to apply to pastoralist areas;
- Are non-agricultural markets relevant to pastoralist areas, given the major role of livestock in pastoral economies?
- What is the meaning of ‘...spur private sector investment’ and how will this be measured? – private sector investment in what, specifically?
- How is ‘local economic growth defined’ – on an area or household basis? If an area basis is used, it implies inclusion of all households, including the wealthy. If so, a project which targets the wealthy may achieve local economic growth while making the poor poorer.

Having reviewed the RAIN objectives against SMART criteria, there seemed to be common agreement that RAIN needs substantial, perhaps even courageous, reshaping and focusing if asset protection and asset building objectives are to be reached. Even then, these objectives are likely to be achieved in far fewer households than described in the project document. So far, RAIN staff have worked to adjust some of the activities. However, higher-level changes at the Objective/Sub-objective level are needed to rationalize the project. Revised activities can then evolve from the revised objectives.

## **Findings and recommendations**

### *Project design and strategies*

- At the overall level of project design, general implementation strategies, and M&E needs, Mercy Corps staff had already started to review and reshape specific RAIN activities and question the likely impact of CFW and NRM activities. However, given the complexity of RAIN and the project budget, a radical reworking and clarification of project objectives is needed. Sub-objectives are needed which are SMART viz. Specific, Measurable, Achievable, Realistic and Time-bound. Revised activities should fit clearly under, and directly contribute to the objectives. At present the RAIN project document lacks a clear causal pathway, from activities to objectives to impact, and seems not to fully differentiate strategies or activities according to the characteristics of different households, in different areas. There seemed to be common agreement in the workshop with Mercy Corps that these changes were needed.
- In its current form, RAIN provides one-off cash transfers which are likely to be very short-lived in terms of impact, as the cash is probably used mainly to meet immediate food needs. Therefore, while RAIN might be contributing to a typical (but unstated) humanitarian/food security objective, impact on the more development-orientated objectives of asset protection, asset building and livelihoods diversification is unlikely. In terms of asset protection, this objective has to be tailored to the pre-existing assets of households and does not apply easily to households which have no productive assets to protect.
- At the level of CFW activities, the review showed a need to revise these activities if asset building objectives are to be achieved within the timeframe of the project. Relative to RAIN, past and reasonably successful asset transfer approaches in Somali areas have channeled far greater resources to fewer households, or, have expected impact to last for only two months or less. Simple economic modeling should help Mercy Corps to reshape CFW approaches, and tailor different approaches to different types of destitute and/or poor agropastoral and pastoral households. These approaches need to be clearly defined and justified. There was wide variation in the level of cash transfers within project areas. RAIN is currently has a very complex design, whereas the difficult operational context of Somali Region calls for simplicity and focus.
- For the NRM-related activities, approaches such as pond and gully rehabilitation, check dam construction, terracing and soil bunds have been used in Somali and parts of Oromiya regions for many years. For example, these approaches were widely used by the South East Rangelands

Project in Somali Region. For RAIN NRM activities, potential impacts are currently outlined at community level and are not specific to destitute or poor households i.e. the most vulnerable groups. Questions to look at include: How, specifically, will destitute or poor households benefit from these structures? Given the repeated need for repair or rehabilitation, what local management systems can be supported to ensure the long-term maintenance of the structures? Which structures are susceptible to private ownership with possible exclusion of poorer users? Is private ownership necessarily a bad thing? Similar questions apply to bush clearing (Prosopis control), given the rapid reinvasion of cleared areas. Impact assessment of these activities is likely to be hindered by the good rainfall in 2010 and the likelihood that RAIN-related water points or grazing areas might not be used if there is ample ground water available or good grazing elsewhere.

- The review did not look at issues such as the effectiveness or relevance of CFW compared with, for example, direct cash distributions (without work) or food distributions. While different approaches are likely to result in different impacts and acceptance within communities, there are also questions about the organizational costs and efficiencies of transfers, including operational and transaction costs. For example, in the case of RAIN the CFW approach requires agencies to plan, support and monitor the tied NRM activities, and at a cost. At some point, an evaluation of RAIN should assess the 'delivery costs' of different asset transfer approaches. Long-term, the administrative and operational costs of international NGOs are likely to far exceed those of some other service providers.
- RAIN is but one project among many, and its objectives and strategies should fit within a broader, long-term Mercy Corps framework for development in pastoralist areas. The review touched on some of the issues. As a 'high livestock export' area, Somali region and neighboring Somali areas are subject to long-term but gradual commercialization. This is reflected in the robust nature of the export trade and simultaneously, rising levels of destitution. As commercialization advances, herds are likely to increase and poorer herders will struggle to stay in pastoralism. If correct, these trends have major implications for Somali areas and development policy, and the strategic directions of RAIN.

#### *Implications of change*

- Mercy Corps staff expressed concerns over donor expectations, and pressure to maximize the number of project beneficiaries in RAIN. Despite these concerns, as a humanitarian donor OFDA may want to revisit the concept of achieving development objectives via asset transfers which are spread widely but thinly, and which are one-off transfers. Should OFDA support a radical reshaping of the CFW component of RAIN, it may be acceptable to use different approaches in similar livelihoods zones, and compare impacts. This might involve a continuation of the CFW in some areas as is, but piloting more intensive transfers to fewer households in other areas.
- By using a CFW approach in RAIN, Mercy Corps has become engaged in debates and negotiations in and around the Productive Safety Net Programme, especially on wage rates. In its current form in pastoralist areas, the CFW approach is probably contributing to a short-term food security needs for some households but having limited impact on asset growth. This in itself might be a lesson to feed into the PSNP and wage rate discussions. In the face of the next shock or drought, households are still likely to deplete assets rapidly and require assistance. The economic modeling tool developed as part of this review might be further developed and used with government partners to predict the impacts of cash and/or food transfers, and the levels and duration of transfer needed to achieve meaningful asset building objectives.

**Annex 1. Mercy Corps participants at review workshop, Addis Ababa, 28 to 29 July 2010**

- Talew Dheresa
- Emma Proud
- Jeff Shannon
- Abdinasir Mohamed
- Ahmed Osman
- Tsegaye Hagos
- Fasil Demeke
- Mark Dwyer
- Retta Aklilu

Facilitator – Andy Catley, Tufts University



## Annex 2. Case studies of previous cash distribution and restocking projects

### Isiolo, Kenya Case Study for Review of the Mercy Corps RAIN Project

July 2010

- Read the case study below, from a pastoralist area of northern Kenya.
- Note the similarities between the objectives of the Kenya project and RAIN in terms of building assets and alternative/diversified livelihoods.
- Note the level of cash transfer per pastoralist household, at ~US\$490/hh; this is equivalent to ~Eth birr 6713 using exchange rates in July 2010.
- Note the modest food security impacts after seven months.
- What questions might this raise in terms of the design of RAIN and options for reshaping strategies and design?



#### **LEGS Livestock Emergency Guidelines and Standards**

<http://www.livestock-emergency.net>

#### *Case Study 9.1: Herd reconstitution using cash transfers, Kenya*

Isiolo District in Kenya's Eastern Province suffered from a severe drought in 2005 that resulted in high livestock deaths and elevated acute malnutrition rates among infants. Following improved long rains in April/May 2006, Save the Children Canada provided 750 households in 22 communities with a one-off cash transfer of KSh 30,000 (approx. US\$490; this is equivalent to ~Eth birr 6713 using exchange rate in July 2010). The cash was intended to assist families to reconstitute their herds with animals of their choice or to invest in alternative productive uses, and also to have some cash to meet pressing immediate needs.

On average, livestock prices at local markets did not change significantly as a result of the cash distribution, although sellers did attempt to charge exorbitant prices because of the sudden increase in demand. Beneficiaries adopted a variety of methods for dealing with this attempted inflation, including purchasing as groups with a representative, travelling to more distant markets, and delaying their purchases.

An evaluation was carried out seven months after the distribution, which found that recipients appreciated the cash-based intervention because it gave them the choice to purchase the specific animals of their choice and exert more quality control than is possible with in-kind restocking. It also allowed recipients to spend some of the cash on other needs. In total, 85% of the cash was spent on livestock – mainly goats, sheep and cattle, with some donkeys. The remaining 15% was split between items such as shelter construction, investing in business/petty trade, debt repayments, veterinary care, healthcare, education and food. Children's attendance at school, especially for girls and at the secondary level, has increased for the recipients compared to non-recipients.

The programme targeted only 11% of all households, and hence clearly did not reach all of those in need. However, this was linked to the availability of funding, and it was agreed that it was better to provide larger amounts of cash to a smaller number of people than to spread the available money more thinly across all those in need.

Seven months after the cash distribution, the impact on food security has been modest. Recipients have improved the diversity of their diet, especially because of increased access to milk; however their reliance on food aid has not been significantly reduced. Based on herd growth in the first 5-7 months (+ 3% for cattle, + 16% for goats and + 25% for sheep), it has been estimated that herds should be large enough to ensure food security within 2 years, which is substantially faster than if there had been no intervention. However, the final impact of the programme will only be clear in the longer-term and in particular during the next drought when the beneficiary households' resilience will be put to the test.

*Sources: Cash-based Emergency Livelihood Recovery Programme, Isiolo District, Kenya – Project Evaluation draft report, by Michael O'Donnell, Save the Children, May 2007*

*Initial Impact Assessment of the Livelihoods Programme in Merti and Sericho by Matthew Croucher, Victor Karanja, Rukia Wako, Abdikadir Dokata and Jillo Dima. Save the Children, 2006*

## Fik Case Study for Review of the Mercy Corps RAIN Project July 2010

- Read the case study below, from Fik in the Somali Region of Ethiopia.
  - Note the similarities between the objectives of the Fik project and RAIN in terms of building assets.
  - In the case study note the level of asset transfer per household.
  - Note the recommendations of the evaluation in terms of increasing the value of the initial asset transfer to 50-70 sheep and goats, while also providing food for at least six months.
  - What questions might this raise in terms of the design of RAIN and options for reshaping strategies and design?
- 

### *Case Study: Restocking in Fik, Somali Region, Ethiopia*

- A one-year project, implemented between March 2002 and August 2003.
- Objective of re-integrating 500 vulnerable IDPs in Fik Zone into their home communities through improved capacity to build assets for a pastoral life.
- The project was funded and implemented by SCUUK, in collaboration with other stakeholders, notably government partners, CRDA and UNICEF.
- The package comprised 30 small stock, 1 donkey, 1 plastic sheet, 1 blanket, 250kg of maize and provision of animal health services through the training of 10 animal health workers. The cost of the project was Eth birr 2.2 million, or ~Eth birr 4400 (US\$ 321) per household.
- The project was implemented in 11 sites in Fik Zone, based on a detailed participatory scoping study undertaken in early 2002.

#### Some results:

- The contribution of livestock to food sources rose from 2% before restocking to 40% after restocking. At the same time food relief dropped from 50% before restocking to 7% after restocking. This means that livestock and by products had effectively replaced food relief as a source of food, signifying increased self-reliance and improved household food security.
- Of those beneficiaries interviewed, a total of 75% (38 out of 51) of restocked IDP households claim to have moved out of IDP camps and gone back to a pastoral lifestyle, one and a half years after the end of the project (that is 2.5 years after the project started).
- Most restocked households pointed out that *“food aid is very important but it does not reproduce like livestock. Livestock is a better food source because it builds up during the good years and gives the family some dignity and respect from other community members”*.

#### Lessons:

*‘From this project, the lesson is that the restocking package was useful but too small and should comprise of the following:*

- *At least 50-70 sheep and goats in preferred proportions and right age for immediate breeding*
- *An adequate food ration comprising of cereals, oil, sugar and tea leaves for a period of at least six months*
- *Provision of adequate veterinary services by trained CAHWs and basic animal health knowledge and skills to be given to beneficiary households.’*

Note that increasing the package to 50-70 sheep and goats/hh would increase the value of the initial asset transfer to ~Eth birr 7500/hh (US\$ 547).

#### Source

Wekesa, M. (2005). Terminal evaluation of the restocking/rehabilitation programme for the internally displaced persons (IDPs) in Fik Zone of the Somali Region of Ethiopia. Save the Children UK, Addis Ababa and Acacia Consultants, Nairobi

## Wajir-Mandera *Irb* Case Study for Review of the Mercy Corps RAIN Project July 2010

- Read the case study below, from Somali areas of northern Kenya.
- In the case study note the level of asset transfer per household.
- What questions might this raise in terms of the design of RAIN and options for reshaping strategies and design?

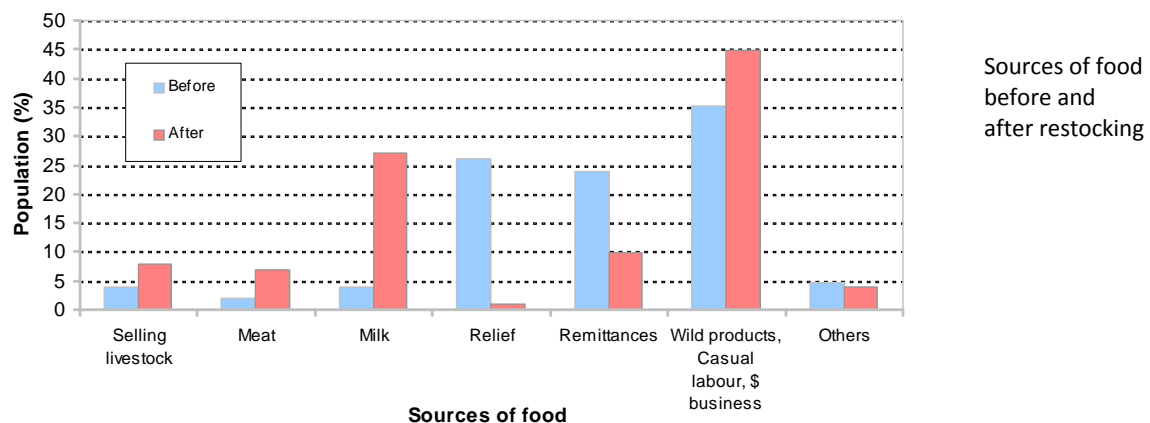
### *Case Study: Using traditional Somali restocking to assist asset building in Kenya*

- Implemented by NORDA after drought; aimed to between March 2002 and August 2003.
- 400 poor pastoralist households targeted.
- Beneficiaries already owned 5 to 10 sheep and goats, and 2-3 cattle or camels; the project provided an additional 15 sheep and goats and 1 donkey per household; through the traditional *irb* system, the community provided an additional 5 sheep and goats per household i.e. the total asset transfer was 20 shoats and 1 donkey per household.

Some results:

An evaluation was conducted 1.5 years after households had been restocked.

- *Most of the surveyed beneficiary families had attained the “minimum survival” flock/herd size of 40 shoats.*
- *Diseases were a major threat to herd growth. Common diseases included Fever (Qano/Tuya) and CCPP (Ferefekle/Riwein).*
- *The restocking significantly contributed to reduction in dependence on other sources of food from 84.1% to 57.9% and increased access to food through livestock from 15.9% to 42.1%.*
- *Dependence on other sources of income dropped from 91.3% to 60.3% and this was compensated by increased reliance on income from sale of livestock and livestock products from 8.7% to 39.7%.*
- *The surveyed beneficiary families had substantially re-established themselves as pastoralists albeit from a small restocking package.*
- *The beneficiary families were not only afforded the chance to return to pastoral lifestyle but also the opportunity to re-unite and strengthen social ties with family members they separated from during drought.*
- *The willingness of the community to contribute for and support beneficiary families was widely and hugely unreserved.’*



### Source

Lotira, R. (2004). Rebuilding herds by re-enforcing *gargar/irb* among the Somali pastoralists of Kenya: evaluation of experimental restocking program in Wajir and Mandera Districts of Kenya. African Union/Interafrican Bureau for Animal Resources, Nairobi and Feinstein International Center, Tufts University, Nairobi

## Sool Cash Relief Case Study for Review of the Mercy Corps RAIN Project July 2010

- Read the case study below, from areas neighbouring Somali Region of Ethiopia.
  - In the case study note the level of asset transfer per household and compare to the average incomes received by beneficiary households under RAIN.
  - Note the duration of the impact/benefits provided by the Horn Relief programme.
  - What questions might this raise in terms of the design of RAIN and options for reshaping strategies and design?
- 

### *Case Study: Cash relief program in Sool and Sanaag regions, Somalia/land*

- Implemented by Horn Relief during drought, December 2003 to March 2004.
- 13,380 pastoralist households targeted; cash grant of US\$50 per household.
- Food was available in local markets, but limited purchasing power of households.
- The objective was *'Increase the purchasing power of vulnerable populations to meet food and essential non-food needs with the provision of a one-time grant of US\$50.'* This grant is equivalent to Eth birr 685 using exchange rates in July 2010.
- The impact of the transfer was expected to be time-limited, to about 1.5 to 2 months.
- Targeting was based on criteria for excluding households, being those with more than 60 sheep and goats, and ownership of assets such as *berkads* or water tanks.

Some evaluation results:

- 97% of beneficiaries met the targeting criteria.
- Main uses of the cash grant were meeting needs in food and water, health and debt repayment.
- Although the benefits were viewed as substantial in terms of food security, these benefits were estimated to have lasted only 1 month – a larger cash grant would have been needed to extend the benefits.
- Impacts on local markets and businesses were positive, but again, short-lived.


### Sources

- Acacia Consultants Ltd. (2004). Evaluation of cash relief programme implemented by Horn Relief, commissioned by NOVIB/Oxfam Netherlands. Acacia Consultants, Nairobi
- Ali, D., Toure, F. and Kiewied, T. (2005). Cash relief in a contested area: Lessons from Somalia. Humanitarian Practice Network Paper 50, Overseas Development Institute, London.

### Annex 3. Trends in 'high export' pastoralist areas: linking RAIN strategies to broader development strategies

Livelihoods and trends:  
Somali pastoralist areas

Andy Catley  
July 2010



### Development theories ...

*"Economic growth and development should be driven by trade. Pastoralists need to be more integrated into export markets to reduce poverty"*.

A common narrative of major donors and others.



### Somali areas

Despite protracted conflict, 'under development', drought and trade bans the livestock export trade to the Gulf is both robust and growing.

At the same time, levels of destitution in pastoralist areas is thought to be increasing.

*This doesn't fit the common theory of 'export trade for development'. Why not?*

### Central rangelands of Somalia, mid-1980s

*"Economic parameters calculated for differently sized pastoral, support the evidence that herders with undersized herds are subject to a displacement process..."*

*...households organize and utilize their resources to achieve not only subsistence, but also a surplus for commercial use; the latter however is only possible for pastoral households with large herds"* (Abdullahi, 1993).

### Somali Issa pastoral herd size and composition over 60 years, Ethiopia

Wealth groups over time	Average livestock ownership per household (n=300)				
	Cattle	Sheep	Goats	Camels	Donkeys
<b>30-year period before 1974:</b>					
- wealthy households	400	200	250	50	20
- medium households	200	100	150	20	10
- below-medium households	80	50	80	10	5
<b>30-year period after 1974:</b>					
- wealthy households	100	350	500	120	10
- medium households	50	150	300	60	5
- poor households	3	10	22	1	2
- very poor households	0	5	12	0	1

(Kassahun et al., 2008)

\* Note the emergence of the 'poor' and 'very poor' wealth groups after 1974.  
\* Note that wealthy and medium households maintain or even increase their assets, but with changes in herd composition.

## Trends

### Changes

- Human population – doubling every 25-35 years
- Decreasing access to productive rangeland
  - bush encroachment
  - cultivation
- Commercialization of pastoralism – livestock assets from poor to wealthier groups

Outcomes → Increasing impact of dry seasons and drought

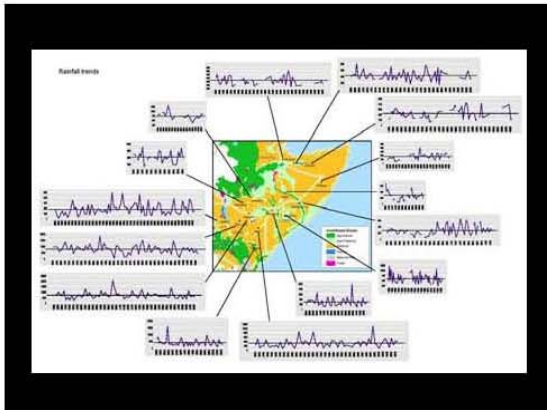
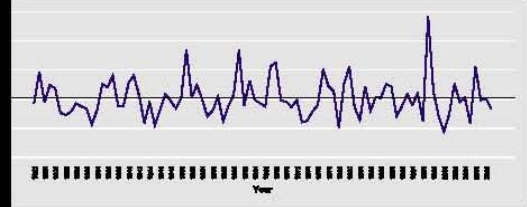
People moving up

People moving out

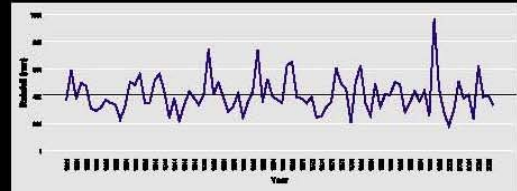
### Constants

- Rainfall variability
- Conflict

Share price for company x, adjusted for inflation, 1922 to 2008.



Average annual rainfall data, Somali areas, 1922 to 2008



## Implications

- Commercialization
- Livestock asset shifts, from poor to rich
- Increasing impact of dry seasons and droughts on poor – further asset shifts to rich
- Options for the poor – try to stay in the system or, move out
- Social protection and safety nets