

### Camel introduction

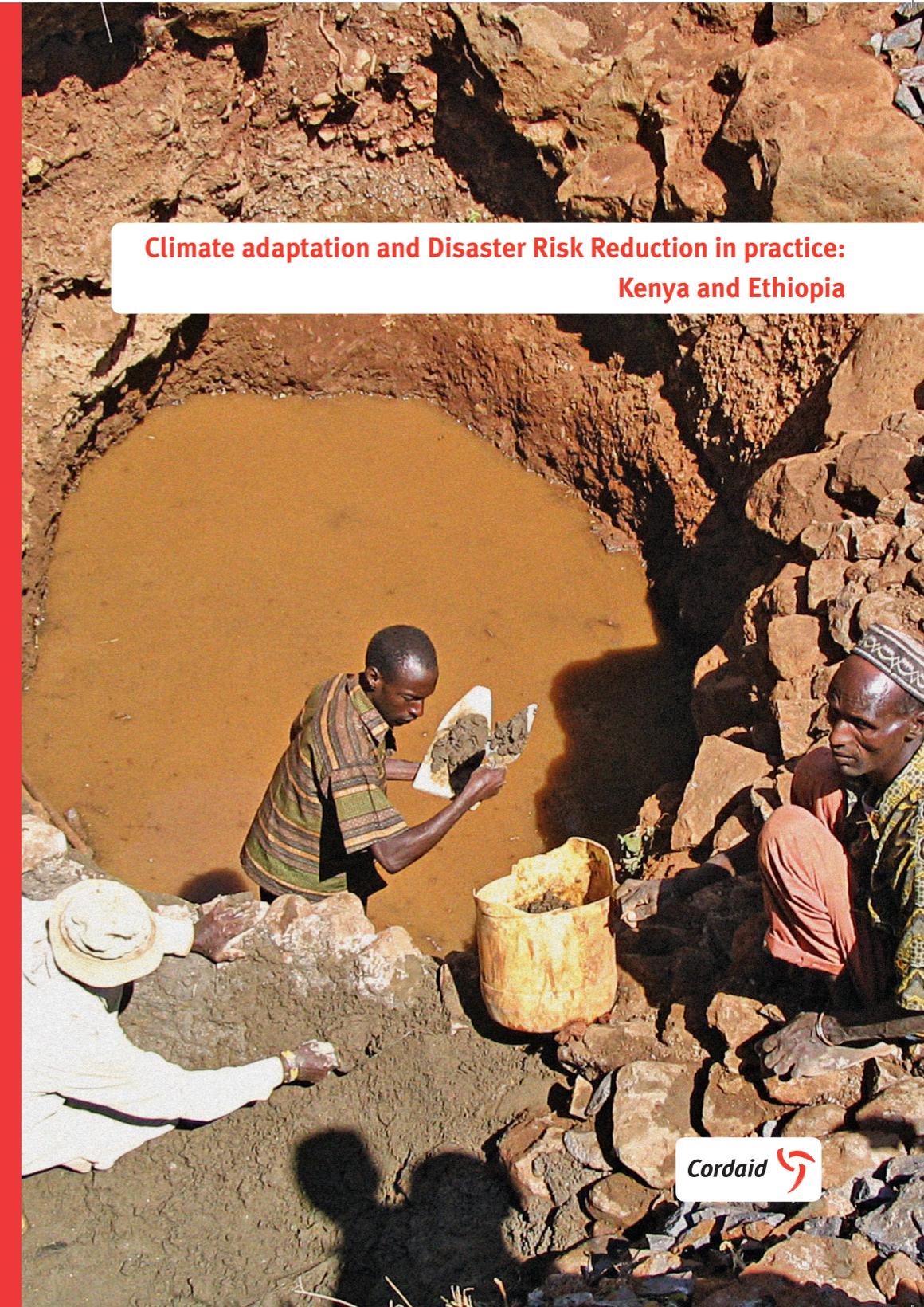
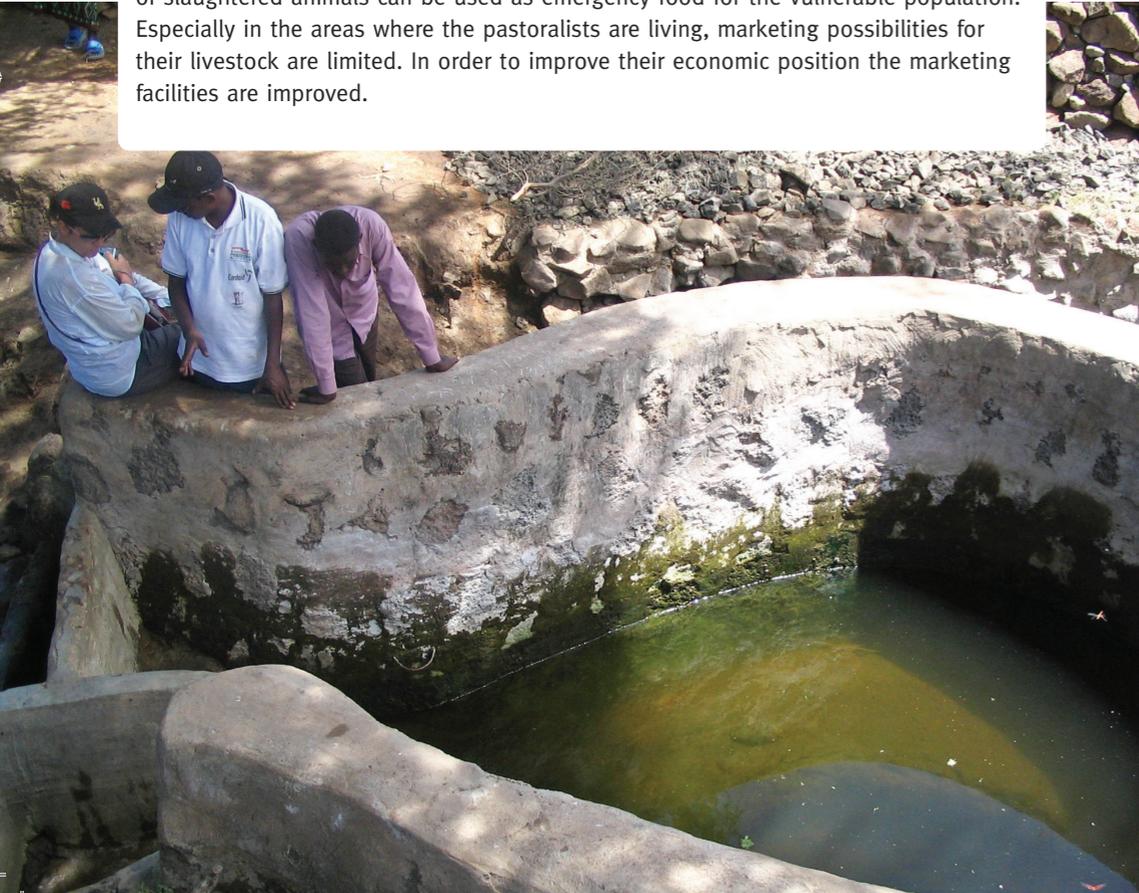
Instead of cattle camels are introduced. Camels survive longer without water, are better adapted to the change in pasture quality and continue producing milk under the harsher conditions of the present. Also, they can be used to transport water over greater distances.

### Income diversification

In the past the pastoralist population was for their livelihood merely dependent on the income from animal production. Nowadays in order to survive many communities have started to search for alternative sources to add to the family income. E.g. rain-fed and irrigated agriculture, charcoal production, honey production, maize milling, small handicrafts. Some families send their children to school, so they will be able to earn a living outside the traditional ways.

### Destocking and marketing

Since feed is becoming scarcer, especially in the drier period, all animals compete with each other for the little feed available. Instead of all animals losing condition or even dying, it is better to select some animals and sell or slaughter them. The meat of slaughtered animals can be used as emergency food for the vulnerable population. Especially in the areas where the pastoralists are living, marketing possibilities for their livestock are limited. In order to improve their economic position the marketing facilities are improved.



Climate adaptation and Disaster Risk Reduction in practice:  
Kenya and Ethiopia



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## Climate adaptation and Disaster Risk Reduction in practice Kenya and Ethiopia

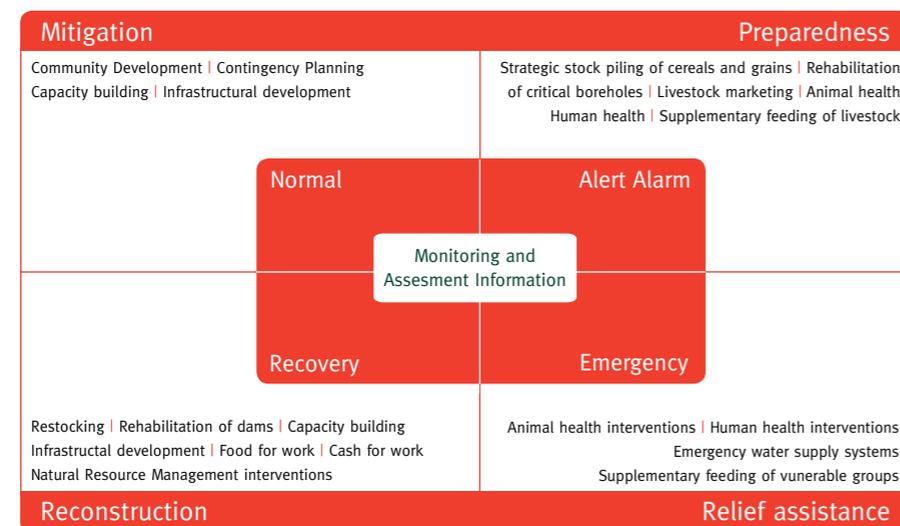
Due to climate change drought is a constant factor in many of the communities in Kenya and Ethiopia. As a result traditional ways of living are in danger. In order to survive, the communities have to take adaptation measures. The Cordaid interventions with the communities are based on the principle of Drought Cycle Management and include training in disaster risk reduction.

### Background

In the past in arid and semi arid areas severe droughts appeared once every 8 to 10 years. Due to climate change the frequency has increased and in some places drought is now occurring every two years. As a result the livelihood of the pastoralist people living in these areas is threatened. Due to the changing rainfall patterns agricultural activities are more difficult to plan and more at risk of failure. Also the availability of water for human consumption and livestock is in danger. Good pasture for the animals is becoming scarce and the recovery of these pastures after a drought period is insufficient. As a result the quality of the pasture declines and unpalatable bushes infest the fields. During a severe drought many animals die and the recovery period for the herd between two droughts is too short.

### The Cordaid approach: Drought Cycle Management

In the Drought Cycle Management (DCM) approach drought is accepted as a recurring hazard in the lives of communities living in the arid and semi arid areas. Drought is therefore included in the planning and implementation of all development work.



The Drought Cycle is divided in 4 phases, each having their own types of interventions. This approach requires a flexible attitude of all the stakeholders, because if the situation for the pastoralist community changes the interventions must follow. The figure next to this text gives a schematic impression of the DCM.

### Working together

Cordaid cooperates in both countries with ECHO, FAO, Postcode Lottery and IIRR on one side and local governments and partner organisations on the other side. In total 18 Cordaid partner organisations work with several communities each. Together with the communities they assess the risks for their livelihood, the capacities within the communities to cope with these risks and the possible measures to be taken to increase the capacities (disaster risk reduction). Based on these assessments different activities are developed and introduced in the respective communities. Much attention is given to the exchange of experiences between the partners, but also with organisations outside the partner network. As structural changes cannot be realized by the communities alone, the cooperation of local and national authorities is required. Therefore at all levels the information is shared with the responsible authorities. Cordaid also connects with knowledge institutes and trade and industry, in order to learn from their experiences and involve them in efforts to improve the livelihood of the people living in the arid and semi arid areas.



### DCM in practice: adaptation measures

#### Water harvesting

Availability of water for human consumption and livestock is one of the major problems for the communities during the dry period. In order to increase the availability of water several methods of rainwater harvesting have been introduced like underground water tanks, water collection from roofs, sand dams and the construction of water ponds. These measures have an additional advantage for the women, bringing the water closer to the communities.

#### Flood dams

Apart from the more frequent droughts climate change has also intensified rainfall. Together with degradation of the soil cover in the arid and semi arid areas this intensification of rainfall has caused an increase in flash floods, damaging the fields and properties of the communities. In order to protect these properties trees are being planted on hill sides to hold the water and the soil and dams and canals are being built to divert the fast rising riverbeds.

#### Early warning systems

In most of the communities Disaster Risk Reduction committees are established. These committees coordinate the activities in their respective communities, but also monitor the living conditions in their environment. Simple and practical tools have been developed. In case of an approaching hazard, the committees are in a position to contact the local authorities and other stakeholders and together they propose intervention strategies, in order for the community to be able to cope with the threat.

