



**Disaster Risk Reduction in
Drought Cycle Management: A Learning Companion
Oxfam Disaster Risk Reduction and Climate Change
Adaptation Resources**

Learning Objectives

After reading this Companion, you should:

- know what DCM is and how it can be used for programming in dry land areas;
- understand the range of interventions that are appropriate for different stages of the drought cycle;
- understand the importance of promoting risk reduction in your work on drought cycle management;
- know how DRR relates to Oxfam's 'One Programme Approach' and how it can be integrated across departments in programming for dry land areas;
- understand the importance of information management systems in DCM and how to develop them;
- understand the importance of advocacy in applying DRR approaches within drought cycle management; and
- know where to go to learn more.

1. About this Companion

This Companion aims to support Oxfam staff to integrate **disaster risk reduction** (DRR) into programmes where drought is a significant hazard. In East Africa, this work is commonly called drought cycle management (DCM). For more on this approach, please see the Oxfam DCM briefs available on the Intranet and from phd@oxfam.org.uk. If you need definitions and more information on key terminology used in DRR, please see the first Companion in this series: *An Introduction to Disaster Risk Reduction*.

2. What is drought cycle management?

Droughts have traditionally been viewed as one-off disasters requiring an emergency response. Typically, emergency responses focused on the delivery of food aid and life-saving humanitarian support including rehabilitating boreholes, emergency vaccination campaigns and so on. Following a drought, agencies tended to move onto rehabilitation programmes, such as restocking, and then back to 'normal' development activities in various sectors such as health and education. However, given the frequency of droughts in many regions, development work is increasingly disrupted and often undermined by the shift to emergency response.



During the late 1980s and 1990s, drought became increasingly accepted as a normal occurrence in pastoral/dryland areas and not a rare or intrinsically disastrous event. The DCM model emerged from this thinking and improved programmes that recognised the cyclical nature of drought.

The DCM model acts as a guide to development agencies supporting pastoral communities in planning for and responding to droughts. By putting the drought cycle as the central reference point, it ensures that appropriate interventions are implemented before, during and after droughts. This ultimately reduces the risks and consequences of drought.

Oxfam’s DCM learning: Wajir Pastoral Development Programme, Kenya

The periods when the Wajir Pastoral Development Programme is not involved with drought response or recovery are few and far between. From 1996 to date, a response- and/or recovery-related programme has been ongoing in Wajir, in relation to either drought or flood and interspersed with conflict and human health issues (excluding a short respite in 2002–3). Concentrating on development and mitigation activities has, therefore, been very difficult. This reinforces the notion that we cannot look at the drought cycle in discrete phases; rather, we must find ways to increase DRR efforts at all stages – but particularly as part of our response and recovery efforts.

Below: Pastoralists in Wajir migrating in search of new pasture. Photo: Brendan Cox/Oxfam



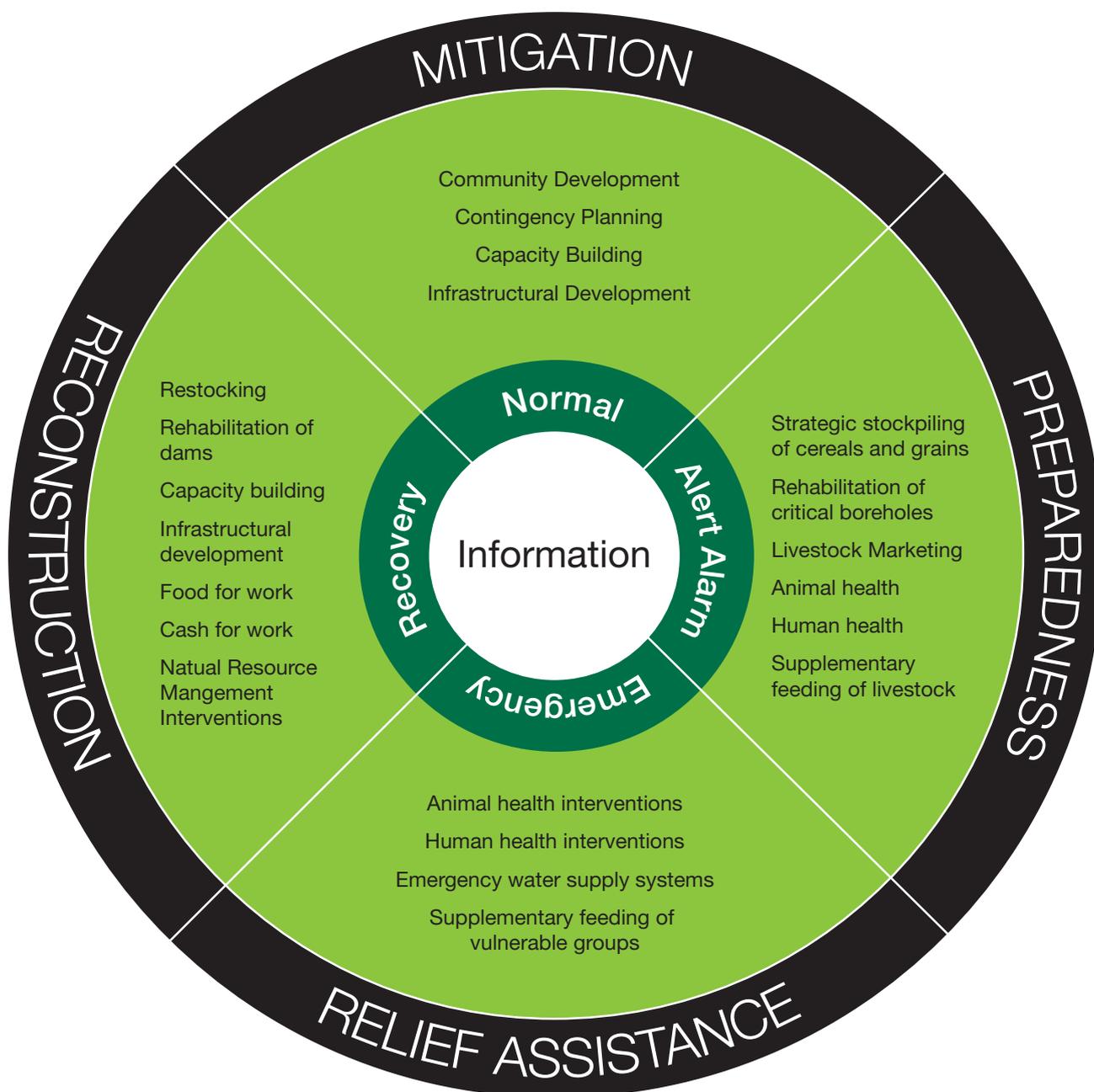
3. Why integrate the drought cycle management model into programming for dryland areas?

The DCM model conceptualises drought as a cycle of four warning phases: normal, alert, emergency, and recovery. There are clear advantages in viewing drought as a cyclical process rather than an isolated event preceded and followed by 'normal' development activity. Some of the benefits of integrating the model into programming are as follows:

- The model improves the timeliness, appropriateness, and ultimately, the effectiveness of work by ensuring that activities are matched to the current stage of the drought cycle.

- It provides a common framework against which humanitarian, development and advocacy work can be aligned to reinforce each other.
- It is an excellent tool for mainstreaming DRR activities in the pastoral/dryland livelihood context, as the DCM model reduces the prominence of traditional relief activities, and emphasises the need for disaster mitigation and preparedness activities.
- The multi-sectoral nature of the model is very compatible with a livelihoods approach to addressing pastoral development. By considering the multi-faceted ways in which drought affects pastoralists' lives, it is easier to consider cross-sectoral linkages.

The Original Drought Cycle Management Model. The DCM Model is widely understood within Eastern Africa and provides many benefits to managers and experts. Users of the model recognise that representing drought (and associated responses) as four distinct phases is a simplification. But the DCM model remains a well-accepted concept that fits well with programmers' and pastoralists' own understanding of the drought cycle.





Men who sold sick livestock as part of an Oxfam de-stocking programme. This was part of a range of measures to minimise the impact of the failure of the short rains in 2008. Photo: Jane Beesley/Oxfam

4. Why use disaster risk reduction approaches alongside drought cycle management?

Climate change adaptation and DRR are corporate priorities for Oxfam, because Oxfam recognises that it will be unable to fulfil its mission to overcome poverty and suffering unless it can address the impact of disasters and climate change on people's livelihoods.

Many arid and semi-arid land areas are already feeling the impact of climate change as it increases the severity and unpredictability of droughts and floods. In addition, high levels of poverty among pastoral populations and the deteriorating terms of trade have meant that communities in the drylands are increasingly vulnerable and at risk from flood, conflict, livestock and human disease, and landslides.

The DCM model follows a simple logic easily understood and accepted by both pastoralists and staff in drought-prone areas. While Oxfam has committed to integrate the DCM model into all pastoral programmes, the failure to implement this commitment means that relief interventions can be late and inappropriate – for example, when food relief arrives months after malnutrition rates have peaked.

In addition, while the DCM approach has a specific focus on vulnerability to drought, it is often only applied in preparedness response and recovery, rather than to address the underlying causes of vulnerability and risk. Therefore, many programme managers are unable to determine whether, in the long-term, their programme reduces vulnerability to drought. For example, in Wajir, Oxfam found that the installation of new boreholes to provide water for livestock resulted in a shift in traditional herding patterns. This caused overgrazing and degradation of pastures normally used at the end of the dry season, thus further undermining pastoralists' ability to cope during a prolonged dry season or drought.

5. How to integrate disaster risk reduction in drought cycle management programming

DRR is not a radically new concept, but it is a valuable way of analysing humanitarian, development and advocacy programmes to improve their quality and effectiveness in targeting the most vulnerable people.

Taking a DRR approach does not mean that you have to establish new or distinct projects, since risk is most effectively reduced when DRR principles are internalised into wider programming. DRR should be considered at each stage of the programme cycle. Please see the Companion: An Introduction to Disaster Risk Reduction for more on this.

To support programme staff to use the DCM model in practice, Oxfam has identified the following issues that should be considered when attempting to build a greater risk reduction focus into a more comprehensive DCM approach:

5.1 Identification: assessing and analysing levels of risk

Risk is made up of the interaction between hazards, vulnerabilities and capacities. Generally, it is understood in the following formula:

$$\text{Risk} = \frac{\text{Hazard} \times \text{Vulnerability}}{\text{Capacity}}$$

Therefore, assessments of risk require analysis of hazards, vulnerabilities and capacities.

There are a variety of different methodologies for analysing risk. Some of these are described in more detail in the Companion *An introduction to Disaster Risk Reduction*.

However, whichever methodology is used, the essential outputs of this process should include an understanding of:

- the range and relative importance of hazards affecting the target population;
- the priority risks expressed by the community;
- the groups most likely to be severely affected;
- why some groups are more affected than others (including a capacity analysis of all stakeholders, especially the community itself);
- why some groups are less able to cope than others;
- how Oxfam's current programmes need to change to reduce disaster impact and increase communities' capacity to deal with hazards;
- the additional activities required to reduce risks and vulnerability and build communities' capacity to cope and respond;
- which activities can be carried out by Oxfam and which by others; and
- an action plan (for example, a community-based disaster management plan – CBDM).

5.2 Design: drought-proofing programme planning

A key aspect of integrating DCM into programmes in arid and semi-arid land areas is learning to 'drought-proof' programme work. This means that all programme teams need to consider how all interventions will continue or be modified in the (very likely) event of a drought. As a minimum this will entail ensuring that:

- project proposals include options for a range of activities at different stages of the drought cycle;
- budgets include contingency amounts for additional or expanded activities that may be required during the drought;
- project staff have the skills and training required to implement both development and humanitarian activities as circumstances dictate; and
- information from specialised external or internal early warning systems is incorporated into programme decision-making, even where the programme's focus is not working directly on response to hazards. For example, an education project will still need early warning information about drought or floods to implement contingency plans accordingly.

Working within the drought cycle – supporting livestock markets in Turkana, Kenya

Oxfam's long-standing Turkana programme in Kenya identified a strategic need to improve access to livestock markets. Funding was secured to support the development of local livestock marketing associations (LMAs), construct four new livestock markets, and develop links with livestock traders from outside the area. The objective was to ensure that local stakeholders in the livestock sector were actively involved in major livestock interventions and in making livestock markets work.

The project faced many difficulties, as Christopher Ekuwom, Oxfam's Livestock Project Officer in Turkana explains: "As we were completing the construction of the markets it became clear that a drought was developing. This meant we had to delay the opening of the markets as so much livestock had left the area in search of pasture. The drought also forced Oxfam to shift its priorities. We reallocated the funding to undertake emergency de-stocking. Just when the drought ended and market conditions returned to normal, the area was hit by an outbreak of PPR (goat plague). This meant livestock were quarantined, so again the markets were unable to operate. So again we reallocated project funding to undertake an emergency vaccination campaign." But this time, the LMAs were stronger and played a key part in the emergency response, collaborating well with local structures. Finally, Oxfam and the LMAs managed to open the markets as soon as the quarantine was lifted. The activity of LMAs through the emergency period was key for keeping them vibrant and for being able to switch back to development activities as soon as the conditions permitted.

The LMAs are now recognised as key stakeholders in the area and have gained further legitimacy from pastoralists. This has given pastoralists access to information and a level of organisation absent before. The four markets run by LMAs aimed to link producers to higher-value terminal markets in Lodwar and bigger centres. Despite the delays to their opening, the sale yards are now valuable assets and are in regular use, raising sales income for pastoralists.

The project was not initially conceived with DRR in mind. However, several disasters struck during the project that forced Oxfam to modify projects to incorporate a DRR approach that has ultimately reduced the disaster risk to the target population. This example highlights how important structural problems, such as a lack of markets, can be addressed in a way that adapts to the different stages of the drought cycle and supports not only communities' resilience to recurrent droughts and other hazards but also their ability to respond.



A goat for sale at the daily market in Lodwar town. Photo: Andy Aitchison/Oxfam



5.3 Implementation: DRR in practice

Preparedness

- Establishment and capacity building of disaster management committees and other structures
- Development of contingency plans by all stakeholders
- Supporting development of early warning information policy

Livelihoods

- Facilitating livestock de-stocking before condition and prices decline
- Restocking in recovery periods, but identifying appropriate breeds or crop varieties
- Improving access to markets
- Food or cash for work – ideally geared towards risk reduction
- Cash or social transfer programmes that continue until other income sources are established
- Financial services: savings, credit, insurance
- Advocacy on key policy issues – e.g. land use planning, environmental protection

WASH

- Maximising the number and reliability of water sources, e.g. rehabilitating boreholes, construction of water catchment systems, training water user associations
- Ensure consistent promotion of hygiene and sanitation that continues after emergency response and is appropriate to pastoral lifestyles.

Health and education

- HIV prevention activities
- Lobbying for services for people affected by HIV
- Lobby for continued immunisation campaigns
- Provision of mobile or alternative education systems

5.4 Implementation: incorporating advocacy

Marginalisation is a primary factor in the vulnerability of pastoral and other drought-affected populations. This is because communities such as pastoralists generally lack the means to hold the powerful to account, so too often their rights are not addressed relative to the rest of the population. Too many governments only focus on drought-affected populations during the emergency stage when welfare indicators or the media spotlight highlight a crisis. The DCM model is a useful means to ensure that authorities consider communities' rights at all stages of the drought cycle. This involves ensuring that humanitarian, development and campaign programming all aim to:

- help pastoralists to build or develop their own organisations, through which they can represent themselves and their values, and come to understand, articulate and claim their rights; and
- work with others to influence those in power to become more responsive to pastoralists' needs and concerns.

Harvesting sorghum in Mali. The seeds for drought resistant sorghum were provided by Oxfam. Photo: Dave Clark/Oxfam

Pastoralists engaging with politicians in Wajir

With an illiteracy rate of about 80 per cent (Wajir District Development Plan, 2002–8), pastoralists in Wajir are poorly informed and not well represented in key decision-making forums.

Despite some advances in pro-pastoralist policy, there is still a widespread lack of firm commitments to develop the pastoral areas according to the wishes and aspirations of pastoral communities. For example, service provision in education, health, veterinary services, trade, and water, and overall resource allocation fail to consider pastoralists' vulnerability and way of life.

Until 2007, the Wajir programme focused on supporting membership organisations (such as pastoral associations and women's savings groups), civil society organisations, and the district government (Pastoral Steering Committee). However, a significant trend in Wajir over the past five to ten years has been the growing strength of clan politics and the growing influence of the political class (MPs, councillors and others). Part of the reason for this was the increased availability of devolved funds and the diversion of responsibility for these funds from line ministries to elected representatives. Unfortunately, while these actors have significant power for good, in many instances they were undermining the efforts of the other three groups.

Strategies currently being employed to support pastoralists to have a greater voice and influence over political decision-making include:

1. Strengthening constituency advocacy groups and pastoral associations, by:

- increasing their awareness on a range of issues, including basic rights, devolved funds and their management, policy development, and the district planning process;
- encouraging debate about the quality of leadership, both within community organisations and in the district as a whole (including attention to issues of equity and exclusion from a gender and generational point of view); and
- strengthening negotiation and representation skills, to help people make their case and present their arguments.

2. Engaging directly with political leaders, for example by:

- organising regular events at which communities and leaders can meet and debate;
- briefing political leaders about development activities and priorities; and
- involving political leaders in programme activities (such as evaluations).

3. Encouraging transparency in the use of district resources, for example by:

- documenting the impact of devolved funds and disseminating this information widely;
- doing the same with respect to NGO and pastoralist association funds, in order to set an example; and
- encouraging more transparent systems of management for devolved funds.

Women dancing at the Museum Centre in Ololosokwan, Tanzania. The centre was developed by the village women's groups with support from the village government. Because of the project, the village government also gave women rights over land, a novel concept in Masai society. Photo: Geoff Sayer/Oxfam.



5.5 Monitoring and evaluation: improving information management systems

Good information is central to DCM programming, both to identify the drought cycle stage and to review and assess the appropriateness of interventions. The following recommendations will ensure the quality of information management systems:

- **Improve external context monitoring.** Moving from a project-based monitoring and evaluation system to a comprehensive information management system helps programme staff to understand how the external context affects their programming activities. For example, this might include collecting data to show changes in community wealth status (wealth ranking), access to and usage of productive assets, infrastructure and resources (resource mapping), and changes in policies or laws.
- **Collect the right information.** Most programmes already collect too much information. Programmes must examine what decisions they need to influence and what information is required to do this. Only collect the information needed. The table below highlights potential components and intervals for gathering data.
- **Ensure information systems are driven by a few SMART indicators.** A single strategy with shared goals and objectives is a key element of the 'One Programme Approach'. Progress in achieving these goals and objectives should be measured using a minimum number of agreed targets and indicators. The indicators should clearly relate to the programme logic and should include reference to vulnerability and coping capacity. Having similar indicators which require different data or setting too many indicators make it less likely that data will be gathered and that monitoring and evaluation will give the information needed to inform decision-making.
- **Increase the capacity to use, analyse and respond to information.** Often, it is not the quantity of information that is usually a problem, but the critical gap is often in the quality and use of this information. The purpose of collecting data should be to inform programme decision-making, and it is vital to ensure that systems are in place to make this happen.
- **Create a learning organisation.** Recording and sharing information between staff within programmes and between different area or country programmes is essential.

Component of a comprehensive information system		
Baseline context assessment	Infrequent (e.g. every five years or when context changes)	No standard format, but could use PCVA, RVPA, or HEA. ¹ See the Learning Companion on DRR Analysis for more information on these tools and methods.
Repeat context monitoring	Periodic (annual to every three years)	This provides a regular update to the baseline context assessment. Frequency depends on the size of the survey.
Early warning	Continuous (at regular intervals)	Should be led by government bodies, with agencies working to improve the quality of information and analysis – not duplicating efforts.
Emergency needs assessment	As required (annual)	Undertaken during alert/emergency phases as required. Should be used to fine tune existing contingency plans.
Project monitoring	Continuous	Project monitoring should focus on tracking process indicators (e.g. activities and outputs). Sector-specific surveys can add to overall context monitoring and be used to assess wider impacts (nutrition, water quality, KAP ² survey etc.).
Project impact evaluations	Periodic (annual or bi-annual)	These focus on data collected at outcome and impact level and usually provide recommendations which can be incorporated into future project planning.
Programme monitoring reviews	Periodic (every six months)	These are critical opportunities to analyse the information collected through monitoring in order to review progress against indicators, the outcomes of evaluations or impact assessments in order to identify opportunities to improve programme quality.
Documentation for advocacy	As required	A good information management system should provide data which strengthens lobbying and advocacy efforts.

5.6 DRR and the 'One Programme Approach'

Activities to effectively manage drought risk and response fall under the remit of both Humanitarian and Development departments. This often makes it difficult to implement DCM programming effectively, as almost all

programmes tend to organise themselves into separate departments with distinct work plans, projects, and resources. By following the principles of Oxfam's 'One Programme Approach', some of the problems encountered can be overcome.



Men sitting atop the earthen bank of Nalapatui water pan, which was created with Oxfam support. Nalapatui pan allows the Turkana herding groups to exploit dry season grazing on the western border of the district without crossing into Uganda for water. Photo: Crispin Hughes/Oxfam.

Key questions to consider when implementing a 'One Programme Approach' include:

- Does the programme have a common vision and strategy that is widely accepted by both Humanitarian and Development department staff?
- Do management structures and systems reinforce or undermine the 'One Programme Approach'?
- Are roles and responsibilities clear between departments, field and head offices, and individuals?
- Are good leaders in place that will take responsibility for leading delivery and change?

6. Summary of key learning from this companion

- DCM provides a common framework to align humanitarian, development and advocacy work and improves the effectiveness of interventions by ensuring that activities are matched to the current stage of the drought cycle.
- DCM can be combined with DRR approaches to ensure that programmes are reducing vulnerability to drought and other hazards. This should include hazards that will become more frequent or widespread due to climate change.
- Planning should take into account the drought cycle and consider how all interventions can be adapted for different conditions.
- Information management systems that capture data relating to the external context and communities' vulnerabilities and capacities are essential to inform programme decision-making.
- Advocacy to ensure that governments respond appropriately to the needs of communities at all stages of the drought cycle is a crucial part of a DRR approach.

7. Further reading

Many of the documents listed below are available on the Oxfam Intranet or online. If you are having difficulty locating a resource, please email phd@oxfam.org.uk to request a copy.

Barton D, Morton J and Hendy C (2001) *Lessons for Drought Contingency Planning in the Pastoral Livestock Sector: an Overview*. In: Morton J (ed.) *Pastoralism, Drought and Planning: Lessons from Northern Kenya and Elsewhere*. National Resources Institute, Chatham

HECA (2008) *Drought Cycle Management: Concepts and practical guidance in integrating drought cycle management into pastoral programming in the Horn and East Africa* – a series of briefs for practitioners

IIRR/Acacia Consultants Ltd./Cordaid (2004) *Drought Cycle Management – a toolkit for the drylands for the Greater Horn*

Useful websites

www.aridland.go.ke
www.droughtnet.org
www.livestock-emergencies.net
www.nri.org/work/pastoralists.htm
www.oxfam.org.uk/resources/learning/pastoralism
www.proventionconsortium.org
www.undp.org/drylands

The HECA Regional Pastoralist Programme is the primary source of expertise in DCM for Oxfam. You can contact Helen Bushell at Hbushell@oxfam.org.uk. For more advice on integrating DRR into your programme, please contact your regional Food Security, Livelihoods or DRR Advisor or the PPT Adaptation and Risk Reduction team in Oxford – arr@oxfam.org.uk.

1 Participatory Capacity and Vulnerability Assessment (PCVA), Risk Vulnerability and Poverty Assessment (RVPA) and Household Economy Analysis (HEA). The assessment should provide information that can be used to set and track overall programme indicators.

2 Knowledge, Attitude and Practice

Disaster Risk Reduction and Climate Change Adaptation are corporate priorities for Oxfam GB. The Learning Companions are a set of articles, which provide accessible and practical guidance to Oxfam staff wishing to integrate DRR and Climate Change adaptation approaches into programming. To find out about other resources on Disaster Risk Reduction and Climate Change Adaptation, and to give us your feedback on these resources, please contact the Programme Resource Centre. Email: phd@oxfam.org.uk

Pastoralists herd their cattle ready for vaccination at the launch of the Oxfam supported Cattle Vaccination Campaign in the Gao region, Mali.
Photo: Dave Clark/Oxfam

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