Africa’s Crises: Recent analysis of armed conflicts and natural disasters in Africa

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Geneva

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PREFACE

The magnitude of armed conflicts and natural disasters together with HIV/AIDS in Africa, the contributory factors and adverse impacts make analysis of these crises a sine qua non for planning effective response to the employment and other development challenges in the region. This working paper on Africa’s crises: Recent analysis of armed conflicts and natural disasters in Africa, by Paul Dunne and Guy Mhone, contains two such analyses. They were undertaken within the framework of the ILO InFocus Programme on Crisis Response and Reconstruction and the ILO Jobs for Africa Programme.

The overall goal of the current ILO InFocus Programme on Crisis Response and Reconstruction is to develop the ILO’s coherent and rapid response to the different crises – natural disasters, armed conflicts, financial and economic downturns and difficult political and social transitions – focusing on areas of ILO’s comparative advantage. Knowledge development constitutes one of the Programme’s four main pillars. The other three are timely needs assessment and programme formulation and implementation in the crisis-affected countries; advocacy at the international, regional and national levels on the employment and other socio-economic dimensions of crisis and the need to address them as an integral component of crisis prevention, resolution and post-crisis reintegration, reconstruction, and development processes; and capacity building of the ILO and its constituents to enhance their effective and active role in crisis response. The Programme’s implementation is currently quite advanced in all four areas.

The InFocus Programme acknowledges the contribution of Mike Shone to the commencement of the studies, as well as that of Erik Lyby who reviewed various drafts of the report. I am also grateful to the ILO Jobs for Africa Programme, especially Mpenga Kabundi, for providing funding for the exercise. The ILO Crisis Response Programme as well as the ILO Jobs for Africa Programme will do their best to ensure follow-up to the recommendations. We are also sure that others working on the different crises in the region will find the analysis useful for their work. We welcome feedback from readers and users of this working paper.

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<th>ACRONYMS</th>
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<tbody>
<tr>
<td>ACORD:</td>
<td>Association for Cooperation on Research and Development</td>
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<td>ANC:</td>
<td>African National Congress</td>
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<td>ANE:</td>
<td>National Roads Administration</td>
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<td>CBO:</td>
<td>Community-based organization</td>
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<td>CCF:</td>
<td>Country Cooperation Framework</td>
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<td>CESTRAR:</td>
<td>Rwandan Trade Union Centre</td>
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<td>CSPD:</td>
<td>Child Survival, Protection and Development Programme</td>
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<td>DFID:</td>
<td>Department for International Development</td>
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<td>DRP:</td>
<td>Drought Relief Programme</td>
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<td>EIU:</td>
<td>Economist Intelligence Unit</td>
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<td>ERC:</td>
<td>Emergency Relief Committee</td>
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<td>ERP:</td>
<td>Economic Rehabilitation Programme</td>
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<td>EU:</td>
<td>European Union</td>
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<td>FDI:</td>
<td>Foreign direct investment</td>
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<td>FAO:</td>
<td>Food and Agricultural Organization</td>
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<td>FFW:</td>
<td>Food for Work</td>
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<td>FRELIMO:</td>
<td>Mozambique Liberation Front</td>
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<td>FRP:</td>
<td>Feeder Road Programme</td>
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<tr>
<td>GDP:</td>
<td>Gross Domestic Product</td>
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<td>GEMINI:</td>
<td>Growth and Equity through Microenterprise Investments and Institutions</td>
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<td>GNI:</td>
<td>Gross National Income</td>
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<td>GNP:</td>
<td>Gross National Product</td>
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<td>GOMBF:</td>
<td>Government of Mozambique Final Balance</td>
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<td>HIPC:</td>
<td>Heavily Indebted Poor Countries Initiative</td>
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<td>ICFTU:</td>
<td>International Confederation of Free Trade Unions</td>
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<td>ICRC:</td>
<td>International Committee of the Red Cross</td>
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<td>ICT:</td>
<td>Information, Communication, and Telecommunications</td>
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<td>IFAD:</td>
<td>International Fund for Agricultural Development</td>
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<td>IFP/CRISIS:</td>
<td>ILO InFocus Programme on Crisis Response and Reconstruction</td>
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<td>ILO:</td>
<td>International Labour Organization</td>
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<tr>
<td>INE:</td>
<td>Instituto Nacional de Estatistica</td>
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<td>INGC:</td>
<td>National Institute of Disaster Management</td>
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<td>IMF:</td>
<td>International Monetary Fund</td>
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<td>LEDA:</td>
<td>Local Economic Development Agency</td>
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MINICOM: Ministry of Commerce, Industry and Tourism
MT: Ministerio do Trabalho (Ministry of Labour)
MTFS: Medium-Term Financial Strategy
NDTF: National Drought Task Force
NGO: Non-governmental organization
OCHA: Office for the Coordination of Humanitarian Affairs
ODA: Official Development Assistance
PDHL: Programme on Human Development at Local Level
PESU: Emergency Seed and Tool Programme
PIPD: Participatory Irrigation Development Programme
PPA: Participatory Poverty Assessment
PRONAR: Programa Nacional de Agua Rural (National Rural Water Programme)
PRSP: Poverty Reduction Strategy Paper
R&D: Research and Development
REIP: Project for Quick Impact on Employment (Mozambique)
RENO: Mozambique National Resistance
RDP: Reconstruction and Development Programme
RDS: Rural Development Strategy
RPA: Rwandan Patriotic Army
RPF: Rwandan Patriotic Front
SADC: South African Research and Documentation Centre
SADF: South African Defence Force
SAFARI 2000: Southern African Regional Science Initiative
SIPRI: Stockholm International Peace Research Institute
SMEs: Small and micro enterprises
UNAMIR: United Nations Advisory Mission in Rwanda
UNDP: United Nations Development Programme
UNDRO: United Nations Drought Relief Organization
UNEP: United Nations Environmental Programme
UNHCR: United Nations High Commission for Refugees
UNICEF: United Nations Children's Fund
UNOMOZ: United Nations Operations in Mozambique
UNOPS: United Nations Office for Project Services
USAID: United States Agency for International Development
WB: World Bank
WFP: World Food Programme
WHO: World Health Organization
WRM: Water Resource Management
INTRODUCTION

Crises encompass disasters and other events where the functioning of a society is seriously disrupted, causing widespread human, material or environmental losses that exceed the ability of the affected society to cope using its own resources. In these situations, unusual activities or external intervention are required to support their ability to cope. Vulnerability to crises is often a result of factors that include poverty, overpopulation, unequal economic opportunities, the absence of social dialogue, and lack of resources and basic services.


Part I of the report is a study by Paul Dunne that looks at armed conflicts in Africa, in the light of the experiences of Rwanda and Mozambique. The two cases were selected so as to represent different aspects of the settings, root causes, crisis responses and time, with Mozambique being the case of an “old” crisis now in the stage of reconstruction and development, while the more recent genocide in Rwanda, triggered by the plane crash in April 1994 in which the two presidents of Rwanda and Burundi were killed, continues to have a strong impact on everyday life in that country. Taking place in an intrinsically unstable area, its ramifications throughout the Great Lakes Region remain enormous.

In his paper, Dunne also examines the economic effects of armed conflict in terms of growth, needs of reconstruction of infrastructure, as well as of new evolving economic opportunities. In Africa, the International Monetary Fund and the World Bank are powerful players in the aftermath of conflict, when new policies and programmes are put in place. Dunne pays special attention to their roles, both in the crisis response itself and in the rehabilitation and reconstruction phases.

Finally, Dunne relates the ILO’s Decent Work Agenda to the evidence presented, inter alia by looking at concrete interventions where ILO has assisted the Mozambican government in the implementation of employment-intensive activities aimed at creating jobs, rehabilitating infrastructure, and stimulating local development He concludes by proposing an agenda for action, by which the ILO could strengthen its crisis response.

Part II by Mhone et al. focuses on the region’s “natural disasters” many of which are largely human-made. Unlike armed conflict, natural disasters are often cyclical. Certain regions or locations are particularly prone to disastrous events such as earthquakes, flooding or droughts, which reoccur at irregular intervals. These can turn into major catastrophes, as seen in the present cases of Southern Africa and the Horn of Africa, where currently an estimated 33 million people in total are threatened with famine due to natural disasters exacerbated by structural dependencies and bad politics. However, due to their cyclical nature, natural disasters are more predictable and, with sufficient political commitment and international support, preparedness
responses can be made that can reduce the vulnerability of the population to hunger and misery.

Mhone et al. examine these and other issues in the Sub-Saharan African context. The study focuses in particular on South Africa and Mozambique, with the former being endowed with rich natural resources and a strong industrial base, and the latter a poor country emerging from colonialism and a devastating civil war. The paper also looks at the ILO’s activities in disaster mitigation, such as local economic development, employment-intensive infrastructure programmes, promotion of micro- and small enterprises, all supported by extensive training activities. The study further points to the potential that lies in supporting social and labour market policies geared towards such cyclical outbreaks of natural disasters.

Between them, the two studies raise pertinent questions of relevance to governments, the United Nations and its agencies, NGOs and others involved in reducing vulnerability of communities to such crisis.
PART I

Challenges of Armed Conflicts to the Decent Work Agenda and other Socio-economic Issues in Africa

J. Paul Dunne
with
Yannick Martin
ACKNOWLEDGEMENT

Paul Dunne acknowledges the contributions from Yannick Martin to the section on Rwanda. They are both grateful to all those who agreed to be interviewed in Rwanda and Mozambique and to James Markland, Erik Lyby and Ron Smith for insightful and helpful comments.
EXECUTIVE SUMMARY

One of the major concerns facing the developing world in the post-cold-war environment is how to deal with the aftermath of conflict. Conflicts can be immensely damaging to economies, but also leave much deeper scars on society. Successful recovery from conflict is a difficult path fraught with dangers and riddled with economic, social and political problems and concerns. Countries that have achieved successful recoveries provide valuable lessons, while those that have had less success provide valuable warnings. Despite the importance of this issue, there is surprisingly little substantive work on the subject, in particular work that attempts to deal with the possible paths countries can take from crises caused by conflict.

This paper considers the socio-economic aspects of crisis brought about through armed conflict, covering the general issues and then presenting two case studies of countries that have experienced rather different but equally terrible conflicts in recent times, Mozambique and Rwanda. These countries provide a valuable comparison. Mozambique is a country with more than a decade of peace that has followed a narrow definition of the World Bank/International Monetary Fund (IMF) model until relatively recently. The ILO has played an important role in a number of developments and has taken the initiative in offering assistance after the 2000 floods, in addition to being involved in the post-conflict reconstruction. Rwanda is a country that still has security problems and is attempting to recover from a genocidal civil war.

The paper considers the national frameworks for reconstruction and finds:

- **Models of reconstruction**: Both countries have had structural adjustment policies imposed on them post crisis, but in Rwanda this has been the later and more flexible World Bank version. The ILO has played no role in Rwanda’s post-crisis recovery, yet there is considerable work that it could do.

- **Crisis management frameworks**: Neither country has a national framework to handle crises, but this is now being developed in Mozambique, supported by the United Nations Development Programme (UNDP)/World Food Programme (WFP), and it is likely that Rwanda will develop such a framework as it moves further away from a state of emergency.

- **Programmes implemented**: In Rwanda there is considerable effort being put into the poverty reduction strategy that goes beyond the strictures of structural adjustment. A Demobilization and Reintegration Commission has also been set up. Reintegration is a particularly important aspect, given the nature of the conflict in Rwanda. In Mozambique, the ILO is involved in some important programmes that have moved beyond the simple structural adjustment policies of the World Bank, and it has tried to deal with very real problems. Demobilization and reintegration, the labour-intensive road-building programme and the local economic development programme are all seen to have been successful. They have made important contributions and should be exported to other countries.
Challenges: The challenge for the countries is to find ways to move beyond the restrictive programmes of structural adjustment, even in its new more flexible form. The challenge for the ILO is how best to support this.

The research also suggests an agenda for action:

- More research on post-conflict reconstruction should be undertaken or commissioned to improve knowledge. Some of this research should include gathering information on countries coming to the end of a conflict to assist earlier action. Case studies and comparative analyses of post-conflict experiences are important, as circumstances do differ markedly across countries.

- Care is needed in judging the developments taking place in a post-conflict country and comparing countries. Data are often poor and unreliable, and it is difficult to generalize on the basis of very limited indicators.

- Efforts are needed to gauge the less visible legacies of the conflict: the damage on institutions, markets and consumer confidence; the persistence of subsistence agriculture because of lack of support to smallholders; the regional issues; the lack of development of living standards and the divergence of urban-rural development.

- An important area for research is to consider exactly what the substantive changes in World Bank policy have been and how best to engage with the “flexible” World Bank to encourage it to reflect the concerns of the Decent Work Agenda.

- The ILO also needs to take a more proactive approach: becoming involved earlier in post-crisis situations and assisting governments in setting up statistics departments and policy formation, building capacity in ministries and providing training. Many of the policy initiatives needed are already available as part of the ILO's InFocus Programme on Crisis Response and Reconstruction (IFP/CRISIS), but they need more emphasis and support.

- One possibility is to undertake research on countries in conflict to prepare for early entry at the end of the conflict and/or to have a presence in countries during the emergency reconstruction period immediately following the conflict to assess when to get involved.

- Another possibility is an early warning unit that could assess when it is optimal for the ILO to become involved in post-conflict reconstruction. If the ILO were to move in earlier, it might be able to work together with groups such as the UNDP and share donors. Pre-crisis preparation work may be attractive to donors. Certainly all of the usual donors would be willing to support the work of the ILO suggested above. There does seem to be considerable support from governments for the initiatives the ILO is best suited to undertake, e.g. from the UK Department for International Development (DFID).

- The ILO must sort out its organization and communication lines in Africa, which do not seem to be functioning efficiently.
Overall, this paper concludes that, with present programmes, the ILO has much to offer post-conflict countries but that it needs to change its means of action and become more proactive. In this initiative, it will be following developments already taking place in IFP/CRISIS. One of the earliest needs is assistance in capacity building in ministries and training of officials and managers, and the ILO can make a vital contribution to this. It will also mean its influence on the path of development within the country will be markedly increased, and the concerns of the Decent Work Agenda will become an important part of post-war reconstruction.
1. INTRODUCTION

One of the major concerns facing the developing world in the post-cold-war environment is how to deal with the aftermath of conflict. Conflicts can be immensely damaging to economies, but also leave much deeper scars on society. Successful recovery from conflict is a difficult path fraught with dangers and riddled with economic, social and political problems and concerns. Countries that have achieved successful recoveries provide valuable lessons, while those that have had less success provide valuable warnings. Despite the importance of this issue, there is surprisingly little substantive work on the subject.

There have been few efforts to deal with the possible paths countries can take from crises caused by conflict. Work by institutions such as the World Bank is still steeped in the language of structural adjustment, labour market flexibility and fiscal restraint. There is almost a complete absence of work which attempts to deal with the ILO’s concern for "decent work", which tries to consider how post-conflict reconstruction can be underpinned by concern for the quality of development. There is clear evidence from the work of the ILO that "decent work" can lead to a trajectory of development that is at least as good as other routes, with the added bonus of improved socio-economic conditions within the country.

This paper considers the socio-economic aspects of crisis brought about through armed conflict. It considers the general issues and then presents two case studies of countries that have experienced rather different but equally terrible conflicts in recent times, Mozambique which has been recovering from a brutal civil war that was made worse by the involvement of external actors and Rwanda which has been recovering from the horrific genocide. The case studies briefly consider the background and extent of the conflict, while also assessing the availability of data on employment and other economic challenges of armed conflict in the countries, and they give a sense of the local and external response to crisis caused by conflict. More detail is then given of the models of development and reconstruction in use within the countries and the programmes that were or are being implemented.

In undertaking this review, interviews with various actors provide much of the detail. These interviews were valuable in providing an up-to-date dynamic picture of developments in each country, but also had the disadvantage of being - of necessity - uneven in coverage across the countries, depending on data availability and practical limitations. However, the problems of data availability and reliability and the speed of change in post-conflict countries make this form of data collection vital. Using the information available, a comparative analysis was then undertaken. This provides useful information and a means of learning lessons from the experiences of the countries, but also illustrates the problems of undertaking empirical research on post-conflict countries. Finally, an attempt is made to provide an agenda for action that identifies research gaps and possible policy initiatives and considers the action that is required and how this might be funded.
2. CONFLICT AND THE DECENT WORK AGENDA

2.1 The Decent Work Agenda

The ILO’s role is to help in the generation of employment opportunities for decent work, so as to improve the situation of workers. The priority is to promote opportunities for men and women to enable them to obtain decent productive jobs in conditions of freedom, equality, safety and human dignity. The complementarity and reinforcing nature of economic and social development in achieving this are clear from the ILO’s four major objectives to:

• effectively apply the International Labour Standards, so as to provide basic rules and a developmental framework;
• improve work and income conditions, so as to achieve reasonable standards of living and personal development;
• expand social protection, so as to provide a minimum protection level and minimum income; and
• strengthen social dialogue, so as to develop mechanisms and institutions that allow a vigorous flexible labour market that contributes to peace and long-lasting social stability (ILO, 1999).

Decent work is the meeting point of these four objectives.

In judging the development of countries with regard to the aims of the Decent Work Agenda, an index has been created that includes seven components in three groupings:

• employment components, namely the unemployment level and the level of informality;
• the income components, namely the industrial wage, the minimum wage and the women/men wage gap;
• the social protection component, namely social security coverage and the number of working hours.

The pursuit of decent work has translated well from the original focus on the developed to the developing world. It has been valuable in arguing for different patterns of development than those often imposed in a blinkered manner. There has been some change of emphasis in the context of development, emphasizing job creation and recognizing the importance of agriculture and the important role of the informal sector, but the basic tenets transfer well in general. There are problems when the developing countries being dealt with are coming out of some form of crisis. In this case, it is clear that rather different responses are needed to "business as usual". The ILO is very concerned with post-crisis reconstruction and has been developing policies and
responses through its InFocus Programme on Crisis Response and Reconstruction (IFP/CRISIS). This Programme has been considering how the ILO needs to change and adapt to the new situations and has been implementing the new approach in a number of countries. The most challenging environment for the Programme is in countries that are emerging from conflict.

Post-conflict reconstruction can present a whole range of specific problems that need to be dealt with. To understand what these problems are likely to be, we need to consider the importance and impact of conflict on developing economies. This is discussed in the next section, which reviews the literature on the political economy of conflict and post-conflict reconstruction.

2.2 Conflict in developing countries

In each year of the 1980s and 1990s, there were between 30 and 40 major armed conflicts in progress. The 1996 Stockholm International Peace Research Institute (SIPRI) Yearbook lists 30 major armed conflicts\(^1\) in 25 locations in 1995. All were internal or interstate disputes over government or territory. There was a wide variation in the intensity of these conflicts, from "low-intensity" guerrilla-government conflicts to conflicts between relatively large and well-equipped armies.

There has also been a prevalence of conflicts within well-defined locational boundaries, often interstate or civil wars. Such internal conflicts also show a range of features, from ideological struggles linked to civil populations through shared political commitment (e.g. liberation wars in Mozambique, Eritrea, Nicaragua) to more fragmented decentralized conflicts such as in Somalia and Rwanda, with many conflicts a mixture of both at any particular time (Macrae et al., 1995, Harris, 1999). In developed and developing economies, the nature of war has undergone important changes, with an increasing role for less formal armies, lack of battlefield engagement and an increased involvement of civilians as victims (Kaldor, 1999, Duffield, 2001).

Civil wars often lack a clear military goal and are difficult to bring to an end by military or political means. The characteristics of a civil war economy and polity make reversion to peaceful existence extremely difficult, with the easy availability of weapons, the fragmented polity, the alienated young, the problems of demobilization, the shattered infrastructure and the elite dependent on military rather than civil actions for their power and legitimacy. Considering such factors, it is not surprising that civil wars restart.

The causes of conflict are as varied as the nature of conflict and the roots of war are multifaceted, with important historical contexts. This has made the first step of conflict

\(^1\) "Prolonged combat between the military forces of two or more governments, or of one government or at least one organized armed group involving the use of weapons and incurring the battle-related deaths of at least 1,000 people during the entire conflict", SIPRI, 1996, p.15.
resolution a detailed understanding of the background and dynamics of the conflict. There are a number of features that can be identified:

- **Colonial legacy**: Many civil wars have occurred after the end of colonial rule, at least partly the result of the policies followed by the colonial masters, who may have favoured one group over another and created enmity.

- **Military governments and militaristic cultures**: Many countries have a history of high military spending and a common involvement of the military in the civil society.

- **Ethnicity and religion**: Religious and ethnic differences have often led to conflict, both within and between countries. Combined with the colonial legacy, they can be an inflammatory mix.

- **Unequal development**: Different areas and different social groups can achieve different levels of income and patterns of development which can lead to resentment.

- **Inequality and poverty**: Related inequality can cause resentment and lead to crime, etc., while poverty can also provide the recruiting ground for fighters.

- **Bad leadership and/or polity frailties and inadequacies.**

- **External influences**: During the cold war, this was obvious, but also the post-war construction of various countries split up different ethnic groups into different countries and sowed the seeds of future conflict, e.g. the Kurds in Turkey, Iraq and Iran.

Very few conflicts are simple. They seldom have single or even few causes and will often be a combination of many of the features above. This means it is important to carefully research individual countries when attempting to design policies for post-conflict reconstruction.

It is useful to distinguish the immediate human cost and the longer-term development costs, following Stewart (1993). Immediate human costs are incurred at three levels. At the macro level, there are the declines in the macroeconomic aggregates. Further down at the meso level, government resources fall as the tax base declines and expenditure on war crowds out expenditure on other areas, especially social investment. Finally, at the micro level, mobilization, death and injury affect households directly, but there are other impacts, as heads of household may need to migrate in search of income. There is also likely to be loss of education and health service access for families.

The longer-term development costs include the destruction and deterioration of existing capital and the reduction of new investment. This will include national and foreign large- and small-scale enterprise investment. Indeed, the growth of small-scale national investment is particularly important as it drives the informal sector, probably the largest potential source of employment. Capital in this instance is defined widely, including physical productive infrastructure, social infrastructure, human capital, institutions, and social and cultural integration. In evaluating the cost of the war, it is also necessary to include the loss of potential output and the cost of additional military spending.

Again, these costs vary from country to country, depending on the nature of the country and the nature of the conflict, and are in addition to the lost output resulting from the disruption.
of conflict. The challenge to post-conflict reconstruction will depend upon exactly what the impact of the conflict has been and, again, it is important to have detailed information on individual countries.

On the basis of a case study analysis of 15 countries, Harris (1999) argues that war is associated with slow growth, declining food production and declining exports. While war is generally not the only or essential cause of such economic problems, once it has started it does impact negatively on human development.

There is in fact considerable debate over the economic effects of military spending. As Dunne (1996) argues in a survey of the literature, the studies tend to show a negative or insignificant effect of military spending on growth for developed economies and an insignificant and often negative effect on economic growth for developing economies. The impact of war is generally seen as negative, though the econometric analysis underpinning this work cannot really be used for periods of war. There are arguments for positive effects of war, particularly for developed economies. The Second World War is argued to have led to substantial changes in the social relations of production, breaking down fetters on the means of production and leading to the "golden age" of post-war economic development in the capitalist world. Most of these arguments operate at a systemic level and involve wars between states; they do not really apply to the types of conflict prevalent in the developing world.

2.3 Reconstruction and recovery

The variety of forms of conflict and its various possible causes all make peace a difficult achievement. They also contribute to making the recovery from conflict and the reconstruction of the country difficult and fraught with the danger of a return to fighting. Peace will first depend on how the war ended, by victory of one side, by international imposition or by exhaustion, and whether it does in fact end completely. As war moves to peace, the country and economy will require reconstruction, and this will certainly need to be designed in such a way as to prevent any of the parties reverting back to war. This of course raises the question of how peace is defined, and different groups are likely to disagree on this. Clearly, the process of transition to a commonly accepted "peace" is as important as the end of hostilities. Rehabilitation and reconstruction are likely to aim for more than a return to the pre-conflict economic, political and social life. This leads to considerable difficulties and specific problems for each individual situation.

An important concern is the possibility of moving back to crisis, simply because it makes economic sense. Collier and Hoeffler (2001) have emphasized the role that the availability of financing of civil wars, through the availability of scarce commodities, can play in their continuation. In post-conflict situations, it has to be clear to the protagonists that they will benefit from the peace more than going back to war.

Harris (1999) presents a useful summary of the four phases of recovery and reconstruction. The first phase is ending the fighting, which may seem straightforward, but as mentioned it is not necessarily so. Fighting can continue even as a peace agreement is being drawn up, so it can take time to end it and to start to put the agreement into practice. The second is rehabilitation and restoration, which will include the removal of limitations on civil activity,
re-establishing civil law and civil institutions, disarming ex-combatants, demining roads, and returning displaced persons. Then comes reconstruction and/or replacement, which will involve gaining financial resources for reconstruction, replacing and repairing capital and infrastructure, demobilization and resettlement, rehabilitating victims of war, introducing or reintroducing democracy, developing and restructuring civil institutions consistent with the post-conflict environment, and beginning reconciliation. The final phase is development and transformation, which will involve adopting and implementing a new vision for society, undertaking structural changes, establishing new institutions, and continuing reconciliation.

It is worth noting that the end of conflict can also provide opportunities, as the population is likely to have the energy for and acceptance of relatively radical economic and social change that could target socio-economic problems such as poverty and inequality. In addition, those with vested interests in maintaining the status quo of distribution are likely to be less organized and so provide little resistance in the immediate aftermath of conflict. The reform of the military is likely to be important in this period to prevent them becoming a fetter on change. Clearly there are opportunities, but they may need to be taken quickly.

Each stage can present different challenges and can have different implications for the international agencies that move in to support countries emerging from conflict. It may also be possible that agencies moving in at later stages are restricted in how involved they can become and what contribution they can make, as many structures and processes are already in place.

Economic reconstruction is clearly vital and may start before the complete end of the conflict/crisis. An improving economy would clearly make it easier to move through all stages. Whenever it does start, the first actors involved are likely be the aid agencies and the World Bank and the IMF. An important issue to be dealt with by all those involved is the perceived balancing of the demands for greater economic growth with those for greater social justice and human welfare. Although their attitudes and policies have changed in recent years, this is often externally imposed by the World Bank and the IMF, which tend to impose structural adjustment policies for economic growth and to oppose policies that are concerned with social justice and redistribution. This partly reflects past failures and the recognition that these policies were the result of rigid adherence to the doctrine of structural adjustment. The fact that conflict has occurred is likely to mean that a series of changes and promises will be needed to deal with grievances to underpin any peace deal. To ignore these and to impose generic policies for economic growth that may have high short-term costs may well simply lead to a reigniting of hostilities. The protagonists may simply see themselves as being better off fighting.

More generally, there is considerable opposition to the policies imposed by the World Bank and the IMF, with alternative development paths being proposed. These include the concern of the ILO for the reduction of the "decent work deficit" and its arguments for the recognition that different development trajectories can lead to the same outcome in economic terms in the long run, but the nature of the paths may be very different.

Duffield (2001) argues that there is often a failure to recognize the importance of the informal sector, both during and after the conflict. Often externally imposed policies have tried to develop the formal sector at a cost to the informal, which can cause considerable problems.

In principle, the end of a conflict should lead to a "Peace Dividend", as the benefits of reallocating military spending to civil areas has been termed. Certainly, the end of the war is likely to provide opportunities for government to reallocate spending, but it is likely to be limited
in the short term. Conflicts seldom end tidily, and continued military action may be required, even if only to defend the peace. Weapons often do not make up the majority of military expenditure in developing economies, and demobilizing soldiers is problematic and can take time. If it is done too quickly, the country could end up with disaffected and armed ex-soldiers, and this can be dangerous. Dismissing soldiers can also mean they are no longer spending their income, and this reduction in demand may affect regions damaged by the war particularly badly. More generally, the reduced spending power of the armed forces can reduce the demand they provide for goods and services in the economy as a whole and lead to economic problems. A "war" economy faced with a sudden change in the form and level of demand will find it difficult to adjust.

After a civil war, the first stage may be to "regularize" all combatants, and this costs money. Unfortunately, the fiscal possibilities are also likely to be limited as well, given the state of the economy. Generally, revenue-raising improvements will be the result of foreign aid and loans, and these can cause their own problems (displacement, dependency, difficult interest payments, etc.).

2.4 Economic and socio-economic issues

The economic and socio-economic problems post conflict will depend upon the level of development of the country and the damage caused by the conflict. Here we consider the issues for an industrialized economy, or one with an industrial sector. An agriculture-dominated country will find most of the same problems, but with more concentration in the agriculture and informal sectors.

Conflict will reduce the capacity of economies to absorb labour, which is likely to lead to reduced employment in the economy. The ILO (1995) suggests that employment-intensive public works (EIPW) programmes are important in the immediate post-war conflict period. The construction and maintenance of roads with such methods will create jobs at low cost and result in improvement to the infrastructure, which will lead to improved access for trade and industry. This will allow many jobs to be created quickly, will creates assets, release commerce from constraints, add to capacity, facilitate access to economic and social services, stimulate economic growth, and of course assist in the demobilization and reintegration of combatants. But, if effective infrastructure is to be produced, a significant amount of supervisory and technical expertise needs to be in place.

It can also improve the income distribution in the country through providing income to the very poorest members of society. The ILO has also been concerned with the nature of the employment being created and has emphasized the need to reduce the decent work deficit, though this could be a longer-term goal.

The end of war does not necessarily imply economic security. Collier and Gunning (1995) suggest that there may be problems of micro security, with armed inhabitants desensitized to violence and high rates of robbery likely to discourage the acquisition of visible assets, as well as problems of macro insecurity with the considerable risk that war will be resumed. This is particularly important, as it can be reflected in political instability, which is likely to discourage private investment, especially foreign direct investment (though, as mentioned, the growth of
small-scale national investment is particularly important as it drives the informal sector, probably the largest potential source of employment. A third type of risk is the fiscal shocks resulting from the war-to-peace transition. Governments may find it difficult to raise taxes or borrow from the public and will be tempted to print money, possibly resulting in inflation.²

Collier and Gunning also argue that it is important for governments to encourage private investors to make irreversible investments. This will require the rebuilding of civil society with concern for investment-sensitive reforms such as inflation, valuation of exchange rates and restraint in revenue collection. The re-establishment of transport infrastructure is also vital. Aid can play a major role in developing infrastructure and is itself a valuable way of encouraging other investment.

There is a need to consider how to develop local investment and to encourage entrepreneurs while at the same time encouraging foreign investment. There can be some tension between these two. For example, the policy of keeping government expenditure down to keep inflation down may encourage investment in an economy but damage economic development, which itself may discourage foreign investment (through lack of potential profits).

Agriculture will be affected through the destruction of other infrastructure but also has its own problems, and giving importance to "food security" is vital to reconstruction. In a post-crisis situation, it is necessary to get investment into the sector and to support clear-up and agricultural development through the development of public services, credit services and infrastructure. It is important to consider both subsistence and commercial farming: the former is crucial as it can allow much of the population to become self-sustaining fairly rapidly, and the latter is important as it may be the only earner of foreign exchange. In addition, land-reform policies may be important, but they need to be designed and implemented with care. There is a need to prevent an exodus to urban areas and to take pressure off them, and targeting the development of rural areas is the obvious way to do this. Failing to prevent the break-up of social groups and communities, which is likely to result from moves to urban areas, could cause conflict with the return of ex-combatants who will not be reintegrated into society (ILO, 1995). It is also important to recognize the impact conflicts can have on rural household behaviour and how this might affect their responses to attempts at reconstruction (Bruck, 2000).

In conflict situations, the informal economy can often come to the fore. This can be a complex circuit of exchange with international links, e.g. Sarajevo. But with the end of conflict, the strength of this sector can act as a restraint on the reassertion of the formal economy and can introduce criminal elements. Indeed, as Duffield (1992) points out, conflict can lead to a transfer of assets to middlemen, which can be extremely destructive and embed inequality. At the same time, this is usually a circulation of goods, with little new production of assets. The informal sector is, however, the only viable possibility of a livelihood for many, and the impact of destroying it through reconstruction policies may not be compensated for by the growth of the formal sector. International intervention can in fact make things worse, and care needs to be taken by aid agencies and policy makers. Aid can destroy the existing market structures and lead to anomalies, such as farmers being ruined by inflows of cheap aid.

² A post-Keynesian would argue that the link from money supply to inflation is not clear and if anything is likely to be the other way around.
It has become obligatory for conflict-affected countries to undertake some form of short-term stabilization programme to correct balance-of-payments problems and increase efficiency by reducing demand for imported goods. These typically involve currency devaluation, higher taxes, higher interest rates, and the reduction or removal of government services. There are also medium-term adjustment and economic-reform programmes, which include cuts in government spending, reduction in government staff, freezes on wages and salaries and privatization to reduce budgetary deficits. Basically, such policies are aimed at removing distortions in incentives, and they have been imposed by the World Bank and the IMF for these reasons as conditions for them providing assistance. Recently, the World Bank has started to show more flexibility and has recognized previous failures of such policies.

There has certainly been considerable debate over the World Bank programmes, with many arguing that they are inappropriate and counterproductive for countries emerging from conflict. In particular, they lead to increased suffering for the poor in the short term and can lead to increases in corruption, as government salaries decline and officials revert to non-legal means to supplement inadequate incomes. They can also prevent social reforms and the projects that aim to lower tensions and achieve political stability, which may be needed to preserve peace. Instead, the imposition of structural-adjustment-type policies can be the biggest challenge to the socio-economic well-being of post-conflict societies. This means that there are important arguments that need to be made in order to be able to develop social and anti-poverty programmes that go beyond the still narrow confines of structural adjustment. While the World Bank has become much less doctrinaire, it still is loathe to consider alternative perspectives, but it does show more flexibility. It is possible that the concerns of the ILO’s Decent Work Agenda could be raised within this new terrain of policy debate and discourse.

Overall, this review suggests that it is important to recognize that developing policies for post-conflict reconstruction is unlikely to be straightforward. It will be necessary to determine the nature and causes of the conflict, the impact and effects, the characteristics of the actors and the structure of the economy or what remains of it. Policies will also need to change as the country moves away from the immediate emergency period to the development phase.

### 2.5 Decent work after conflict

Conflict and post-conflict situations are characterized by high levels of unemployment and underemployment, deterioration of employment conditions and erosion of incomes, all of which reflect the absence of decent work opportunities and present a real challenge to the Decent Work Agenda. The policies and measures implemented in the aftermath of the conflict tend not to be conducive to the recovery of lost jobs nor the generation of new employment opportunities and may not be concerned with reconciliation and peace building (Date-Bah, 2001). Policies focused only on economic growth will generate some employment, but the level and nature of unemployment in post-conflict situations, the needs of the whole population, the disruption of social cohesion, the destruction of infrastructure and the dangers of rekindled conflict mean these policies are unlikely to be enough. A whole host of other policies is clearly required, and the concerns of decent work can clearly play an important role in the design of these policies.

The aim of the ILO remains the same in the post-conflict period: to help in the generation of employment opportunities of decent work so as to improve the situation of workers and to
promote opportunities for decent productive jobs in conditions of freedom, equality, safety and human dignity. The ILO's four objectives remain relevant: effectively applying the International Labour Standards, improving work and income conditions, expanding social protection, and strengthening social dialogue. There are, however, greater problems in convincing people of their importance and in implementing them in a post-conflict environment. There seem to be so many pressing needs that shortcuts may be sought and more basic forms of development pursued. In this case, arguments as well as compromises will need to be made.

In judging the development of countries with regard to the aims of the Decent Work Agenda, the index used normally is somewhat wanting. Firstly, the employment components, namely the unemployment level and the level of informality, are difficult to get information on in a country in turmoil, while the income components, namely the industrial wage, the minimum wage and the women/men wage gap, are almost impossible to find. Thirdly, the social protection component, namely social security coverage and the number of working hours, will most likely not exist. As the country develops, these indicators may become relevant again, but in the period of post-conflict reconstruction they are unlikely to be useful, and more qualitative and judgemental indicators need to be considered. This is examined in the case studies.

Having provided a general overview of the issues involved in post-conflict reconstruction, we now move on to consider the concrete situations of two countries in Africa at different stages of recovery from conflict and to compare their experiences and attempt to draw some lessons. Africa has an unenviable reputation as the most conflict-ridden continent at present. There were conflicts in 16 of Africa’s 54 countries in 1999 (Addison, 2001).
3. COUNTRY ANALYSES

In this section, we provide two case studies of African countries that have experienced rather different but equally terrible conflicts in recent times: Mozambique, which has been recovering from a brutal civil war that was made worse by the involvement of external actors, and Rwanda, which has been recovering from the horrific genocide.

3.1 Country analysis: Mozambique

3.1.1 Background

During the colonial period, much of the Mozambican economy was centred on the transport network and related services. In the south, Maputo served as a major outlet for the South African eastern provinces and Beira as a major outlet for Rhodesia. Independence and the election of the Mozambique Liberation Front (FRELIMO) saw hostility from the neighbouring white minority regimes and the start of a civil war, with the rebel groups supported by South Africa and Rhodesia. In 1980, Rhodesian independence reduced military support for the Mozambique National Resistance (RENAMO), but the South African Government took an increasingly aggressive stance to the frontline states and sponsored RENAMO. Terrorism and sabotage increased sharply in 1981.

The achievement of independence had produced economic problems after the white colonists, who constituted a high proportion of the skilled workers and professionals, fled. There were initial improvements in the health and education sectors (Hanlon, 1996), but the Government embarked upon what has been seen as poorly conceived policies of central planning, which had a particularly disastrous impact on the central and northern regions. In particular, the reintroduction of the forced cultivation of cotton and punishments for failures to reach quotas drove people towards the rebel movement. In addition, South Africa decreased its use of migrant labour that had traditionally been an important earner of foreign exchange (Haines et al., 2001). When these were combined with the massive costs of the war (deaths in fighting and the resulting hunger and disease, orphans, destruction of infrastructure, loss of education for generations) the impact was disastrous. The country was bankrupt and the Government almost wholly dependent on foreign aid to pay its workers, while the country remained militarized with many adult males knowing only fighting and having little alternative but to resort to robbery and extortion to gain income (Harris, 2000).

Faced with the perilous economic situation, in 1986 the Mozambique Government adopted an Economic Rehabilitation Programme (ERP). The aims were to reverse the decline in production (GDP had fallen by half between 1980 and 1985), to ensure a minimum level of consumption and income, especially for the rural areas, to reduce domestic financial imbalances (debt service ratio was 247 per cent by 1986), to strengthen the balance of payments (exports had fallen by over 50 per cent between 1980-86), and to lay foundations for future economic growth.

Around two-thirds of the population were in absolute poverty (where the cost of basic food was more than 50 per cent of per capita income). Most of the population was displaced or otherwise affected by the war. As mentioned earlier, the transport system was devastated,
government finances were unsustainable, military spending increased and the war and the growth of the informal sector reduced the tax base.

November 1990 saw a new liberal Constitution and a partial ceasefire the following month, culminating in the Peace Accord signed in Rome in 1992. The Plan for National Reconstruction identified three major recovery tasks: first, restoring national security and peace; second, resettling displaced people and refugees; and third, demobilizing the armed forces and reintegrating them into a unified defence force. While this required a considerable degree of central planning, strong emphasis was placed on the use of the market. The aims were to increase agricultural production for consumption and export; to increase industrial production, supporting agriculture, import substitution and exports; to reconstruct infrastructure and industrial capacity, in particular to directly support productive activities; to increase rail and port traffic; and to mobilize external resources and allocations to priority sectors (Haines et al., 2001).

It was clear that the initial import requirements of such a plan were large and would worsen the balance of trade. With inadequate savings and foreign exchange, there was a clear need for aid and external finance to rebuild transport and industry. The country was hugely in debt, with debt as a share of GNP ranging from 398 per cent in 1988 to 444 per cent in 1995. In 1993, the ratio of official development assistance (ODA) to GNP was 89.5 per cent compared to the sub-Saharan African average of 10.5 per cent (UNDP, 1998). Annual meetings of a Consultative Group for Mozambique, including all major donors, provided a forum for discussion of and support for policies. Substantial foreign aid was received, particularly around the time of the 1994 elections, but most of this was spent on foreign imports, with an estimated 50-60 per cent of imported goods coming from the donor nations.

The IMF and the World Bank had been involved in the ERP from the start. This provided a stamp of approval that made it easier to raise aid and loans, and when the Government pressed for rescheduling and relief it gained it in recognition of its attempts to move towards a market-oriented economy. In 1996 the Heavily Indebted Poor Country (HIPC) initiative by the World Bank and the IMF provided some relief with an initial US$2.9 billion debt relief in 1998, later increasing this to US$3.7 billion. The relief was contingent on meeting structural adjustment targets, and part of the money was earmarked for debt servicing. Other countries have written off debt with no conditionalities, e.g. South Africa and the United Kingdom.

This financial assistance came at a cost, however, as the model imposed by the World Bank and the IMF was the old structural adjustment model and was inflexible (involving devaluation; elimination of price controls on basic goods; elimination of subsidies on government services; reduced government expenditure and public-sector employment; and privatization of state assets). The conditionalities attached to the aid caused considerable economic problems and increased poverty levels.

The issue of poverty was a concern in Mozambique well before the World Bank had decided the need for a rethink of its policies in the light of failure and criticism. The old policies had a particularly bad effect on economies disrupted by war, as evidenced in Mozambique. The supposed trickle-down reduction of poverty was seen as unlikely to impact much on the extreme poverty there and if anything had made matters worse. There were price rises of food as price controls were eased, reductions in food and rent subsidies, reductions in social services, and the introduction of fees for health and education. At the same time, wage increases were not sufficient for many workers to deal with the price increases, and the burden of adjustment fell disproportionately on the poor.
Structural adjustment policies also led to large job losses and some suggestions that they were applied in an inappropriate manner. The usual example of this is the cashew nut industry, traditionally a major earner of foreign exchange. The World Bank insisted that restrictions on the exports of unprocessed nuts be lifted, despite the advice of independent experts. This led to the collapse of the processing industry. The bulk is now exported unprocessed to India. The peasants have benefited from higher prices offered by exporters, but the job losses in the industry have been damaging to the regions affected, particularly in the north. World Bank pressure led to the postponement of a parliamentary debate on the issue (Haines et al., 2001).

By 1990, the Mozambique Government was pushing for poverty alleviation through the direct allocation of resources to the most vulnerable groups. Policies included employment generation, the use of labour-intensive production methods, a safety net of transfers, and health and education provision. Since 1990, economic growth has averaged 6 per cent per annum, though from a very low base, with inflation virtually eliminated by the late 1990s. Still there remain problems of regional disparities and poverty in what is a predominantly rural society.

Bruck et al. (2000) argue that there are powerful legacies of the war that were not completely understood when the structural adjustment policy was introduced, and they have shaped the pattern of economic development more than was realized. It is not just the more obvious destruction of capital that came out of the conflict but the less visible damage to institutions, markets and confidence and the persistence of subsistence agriculture for the majority of the population. The deterioration in the Government's fiscal position resulting from the conflict has made it difficult for it to respond to such problems and has led to a dependence on aid. This has exacerbated the weaknesses in the economy and resulted in dislocation and urbanization effects that are likely to be permanent rather than transitory problems. Agriculture did improve in post-conflict Mozambique, but as Bruck (2000) shows this was a result of improvement at the extensive margin (using more land) rather than productivity gains and is unlikely to be sustainable in the future. He argues that too little attention was paid to the preconditions needed for smallholders to develop output, trade and living standards and that this has led to an increasing divergence between the rapid urban growth and the slow rural growth. This is of concern, as the urban-based growth is argued to be based upon short-term production opportunities, both aid-dependent and urban services, on low-linkage foreign direct investment (FDI), and on the investment activity of a political elite (Fitzgerald et al., 2000). This may not be sustainable as a growth path, as it is increasing inequalities and has the potential to lead to future conflict.

Privatization has not been particularly successful. The initial experiment with socialism led to nationalization of property, and privatization led to corruption and confusion. Clearly, there are problems of accountability within the ruling elite, with the problem common in Africa that politics is seen as the most accessible way of accumulating wealth. State-owned firms are often allocated to rival bureaucratic factions, to people who lack the necessary skills. A number of them are presently in financial difficulty, although the inflow of foreign investment in the south of the country has improved this situation, in particular the development of the Maputo transport corridor with South Africa. The most successful privatization has been in the brewing industry. Mozambican brewer CDM is now owned by South African Breweries, and Laurentina Brewery, now Portuguese owned, and the Maputo Coca-Cola plant are similar success stories, as

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3 A joint development with South Africa linking Gauteng and Maputo.
are Chimio and Nampula. Alongside the Maputo corridor, there have been big improvements in Mozal, with foreign investment used to produce a new smelter, making it one of the biggest exporters in the country. Questions have been raised, however, about the economic linkages of the plants with the rest of the economy. There have also been interesting developments in natural gas, with foreign investment likely to provide pipelines and export earnings.

Over the period 1994-98, the volume of agricultural produce reaching the market more or less doubled. Improvements in transport have assisted the peasants in accessing markets, but there are still problems in the north and northwest regions. Recovery has also been constrained by erratic rainfall patterns and possibly by the existence of minefields in agricultural areas. There is also a timber boom taking place, particularly for hardwood, though with little attempt at reforestation and hence concerns for sustainability of the resources. Other developments have included moves to rehabilitate national parks and to develop tourism, but the ecological problems resulting from over-fishing and environmental degradation make these tasks more difficult.

The emerging national economic development strategy is based upon a series of transportation and development corridors. The Maputo and Beira corridors are the largest and most important. It is most likely that the southern initiatives linking Mozambique with South Africa will be most successful. The floods in 2000 did, however, lead to a serious setback in development within southern Mozambique, and the response of the international community also showed up some of the tensions between government plans and donor support.

Overall, it must be said that Mozambique’s progress has been mixed. A general desire by the population as a whole to preserve the peace was a principal factor in the success of the Peace Accord, and that has allowed for economic development. There have been some successes, and good economic growth has been achieved, though from a low base. Unfortunately, there has been little progress made in dealing with the poverty and inequality endemic to the country. These successes and failures suggest lessons both for the future and for other countries.

3.1.2 Data on employment and other economic challenges of armed conflict

The involvement of international agencies in Mozambique since the early 1990s means that the country has been relatively well studied, and an array of data has been produced, including some impressive household-level surveys. The 1998 UNDP Report “Mozambique: Peace and Economic Growth: Opportunities for Human Development” provided a relatively comprehensive analysis of the situation that Mozambique found itself in and is testament to the amount of information available. However, some national statistics are unreliable, and there are problems with time series data comparability across the period of conflict. There are also problems with regional-level data from the poorer regions.

There is a particular problem in measuring employment or underemployment, as people in agriculture often do not see themselves as employed. In the regions, employment centres have been set up for people to register for work, but they have only recently been computerized, and
there are some problems with the quality of the information. The move of such activities from central Government to the regions has been relatively recent, and the ILO is successfully involved in training and capacity building in the ministries.

3.1.3 Local and external response to crisis caused by conflict

There seems to be no clear structure in place for responding to crisis in Mozambique. The country was recovering from the crisis of war when it was hit by devastating floods. The government experience meant that it had a clearer and more direct response to the disaster that was informed by the previous experiences. It also had the links to the aid agencies established and could easily look for support. So while the Government does not have a crisis unit, it feels it has the knowledge and capacity within the responsible ministry to respond to any new crisis. The crisis caused by conflict in Mozambique has been dealt with at both the local and national level when possible, but the main policy response was the introduction of the World Bank/IMF structural adjustment policies discussed above. They provide the context to understand the nature and the experience of the programmes implemented within Mozambique.

3.1.4 Models in use and programmes implemented

As discussed above, the main model used to deal with post-conflict reconstruction has been the World Bank/IMF structural adjustment. At first, this was very much the pure adjustment package, but in recent years there has been more flexibility. There are a number of programmes that have been implemented with the input of the ILO.

i. Demobilization

Interviews with UNDP and Ministry of Labour officials gave valuable information on the details and experience of Mozambique's demobilization and reintegration policy and the important role the ILO has played. During the process of moving to the 1992 Peace Agreement, a management team for demobilization and reintegration was set up with the Government, RENAMO and the UNHCR leading the process with a conflict-resolution team. The United

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4 For example, office workers generally do not take the cards of the individuals out of the system when they find a job.
5 Interviews with Alex Aboyage and Ilidio Caifaz.
6 Interview with Ilidio Caifaz.
7 Alex Aboagye and Gilberto Anteso Botas of the UNDP and Ilidio Caifaz of the Ministry of Labour. Gilberto Botas worked on demobilization with the ILO while at the Ministry of Labour in the early 1990s; Ilidio Caifaz worked under him on the programme. Alex Aboagye has worked with the ILO previously.
Nations Operations in Mozambique (UNOMOZ) peacekeeping force also had a strong coordinating and stabilizing role. The management team had to organize the beginning of the process, determine where the troops would go, construct regional camps and provide activities for them to prevent boredom, such as arranging football games. The ILO was invited to join the process to assist in training and became involved in 1993-94 in designing a reintegration scheme.

Support from the UN provided monthly payments, small tools, clothes, etc., plus some other agricultural support. Some soldiers had joined when very young and had no education or training. The ILO with the Ministry of Labour and support from a UN Trust Fund composed of contributions from Sweden and Holland set up a training and employment package. There was a regular coordination meeting of non-governmental organizations (NGOs), donors and the Government to review progress, and indeed progress was important. Ex-combatants could be very sensitive to delays, and delays of payments did lead to trouble in some cases.

Micro credit schemes were set up across the country to help create small and micro enterprises (SMEs) and to support self-employment, using the ILO programme. Bank employees were also trained. The African Development Bank lent money to the Mozambican Bank BPD (now closed and being privatized for the second time).

Overall, the programme seems to have worked well in the sense that the ex-combatants did not revert to being soldiers again as they did in Namibia and Angola. The fact that demobilized soldiers were returned to their homes and that conditions for subsistence agriculture existed there, appear to have been crucial to this success.

If there are lessons to be learned, one is that it would have been helpful if the ILO had become involved earlier. A workshop linked to the project concluded that reintegration should have started earlier, even while negotiating the peace settlement. Counselling and training in "life skills" were seen to be extremely important, and the ILO could have played a major role in helping provide these early on. It is very important to prepare people for change, especially when there are ethnic issues involved, rather than waiting until there is a crisis.

ii. Labour-Intensive Roads Project

Interviews with advisers on the ILO/UNDP Feeder Road Programme provided information on the Mozambique Project. It is two years on from the pilot and is using labour-based methods (tractors and trailers, but no heavy machinery) for road construction, with interest in the Project spreading across regions. It started in 1982 in Zambesia, but during the war almost came to an end, as the situation on the ground became dangerous. There were other problems, as the sandy soil in Mozambique makes road construction difficult without heavy equipment and means it is necessary to import some materials, but most of the technical problems have been overcome. Around 1987 the project took off again in the south, concentrating on the more "secure" areas, although suffering occasional attacks. Then in the 1990s it expanded throughout

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8 A World Bank report that was critical of demobilization policies was mentioned, but it admitted that the criticism was not applicable to this particular programme (Botas interview).

9 James Markland and David Jennings, Chief Technical Adviser and Engineering Adviser respectively. James Markland has been working for eight years in Maputo as the ILO consultant on the Labour-Intensive Roads Project.
the country. The Project is implemented through the road administration in the Government, and the team that includes the ILO consultants is now based at its head office. The consultants explained that in the earlier stages of the Project much work was directly involved with the Projects on site, but that this has been reduced as local capacity has developed. Their main role has become managing and coordinating projects and providing training to build up further capacity.

Mozambique has an interesting way of organizing the workforce in the programme. It does not have direct labour units, but separate contractors who are state owned and have to do the work and collect invoices to get paid. In this way, prices can be determined by the Government, but the groups still have to do the work before they can claim remuneration - a clear advantage over the practice in other African countries of using direct labour units. Originally, the team put its efforts into training and building capacity in the contractors, and this was successful. Now, the team is concerned that the clients need to have the knowledge and training to deal with the contractors, and it is dealing with this. The team has also switched to working with local Government at the level of the provinces. In some cases, this means it also has to make efforts to convince those at the local level of the value of using labour-intensive methods. The Project does finally seem to be getting recognition of its successes and potential across the country, while the use of labour-intensive methods is being recognized by international organizations as an important component of post-conflict development.

There certainly seems to be a more sympathetic environment for this sort of project. The instigation of the Decent Work Agenda and the establishment of IFP/CRISIS seem to have altered the focus of the Organization. At the same time, the World Bank has become more receptive to new initiatives, but it still seems to need some convincing on the ground, even if the principle is accepted in Washington. Certainly, the Bank accepts that agriculture needs improved access and that this is an important part of a poverty-reduction strategy.

There are also problems with the World Bank evaluation of the construction programme. The Bank tends to consider the sustainability of the programme rather than just evaluate the cost and benefits. This means requiring governments to cost in upkeep and maintenance on the roads, thus limiting the amount governments are allowed to spend on new roads. The World Bank management initiative creates a road fund from petrol tax to pay for maintenance and upkeep, but while this is likely to work in a stable slow-growing economy, in a developing economy it can cause problems. Indeed, in a post-conflict situation where there is a pressing need to restore access to large areas of the countryside that had been abandoned, it is probably not socially or politically realistic to have road construction limited by the amount of funding available for upkeep and maintenance. Indeed, in the case of rural roads, the provision of any form of access for smallholders should be considered essential. Recognizing these issues, governments tend to try to find ways around the restriction, and Mozambique is being inventive and showing a will and determination to make things work.


11 James Markland interview.

12 James Markland interview.
The Labour-Intensive Roads Project also aims to provide employment opportunities to women, though there have been practical difficulties in implementing targets, especially in the northern regions. Indeed, the Roads administration has a social affairs unit that is responsible for monitoring the proportion of women employed in the road sector. It also aims to sensitize people to gender and HIV issues. There has also been some pressure in regions to employ ex-combatants in the programme. This can raise problems on the ground, as ex-combatants can be more difficult to manage, and there can be some resistance from the other workers. The question of who should benefit from the employment opportunities arises - those who had been involved in the fighting (demobilized soldiers) or those who suffered as a result of it (rural populations). It has, however, normally been possible to reach a compromise with the communities involved.

iii. Local economic development

The PDHL (Programme on Human Development at Local Level) Project is funded by the Italian Government and executed by the UNDP and United Nations Office for Project Services (UNOPS), with the ILO as associated agency. The Project is concerned with regional economic development in Mozambique. Interviews with the Chief Technical Adviser and the resident ILO expert provided valuable insights into the importance of regional development and the success of this initiative.

The Project started in 1998 in the pre-election years, with the focus being on the central provinces which were the core territories for the conflict and where the local administration and the civilian population were still in conflict. There was still some armed presence and tension in remote areas, so the team had to move carefully and build up trust in the area. It tried to introduce the concept of civil society and to reopen relations between actors in the local areas. Health education, development, and local administration were all put together, and attempts were made to create a sense of community.

The ILO was involved from the beginning of the Project, with an inter-agency Letter of Agreement allowing the Project to manage all activities related to local economic development and allowing it to take a territorial rather than a sectoral approach. The ILO provided a few staff, the senior consultant and some associate experts, while UNOPS contributed the local staff. The ILO Harare and Lusaka Offices provided administrative support and some capacity, and there do not seem to have been any institutional problems between the different organizations in the Project; indeed, the impression is of a very good working relationship between the organizations.

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13 This can be due to social and cultural factors, but James Markland remarked that it has often been found possible to overcome these by working closely with local communities. A positive attitude from the managers involved is more important than other factors.

14 James Markland interview.

15 Marina Lo Gundice.

16 Walter Urbine.

17 Marina Lo Gundice and Walter Urbine interview.
Local economic development that involves people in the territory and generates employment for both groups is an important means of reducing tensions in a post-conflict situation. But moving into a local area is not straightforward and can be dangerous. It was necessary for the team to have knowledge of the area and the sources of tension and to try to reduce the tension and to try to disarm the different groups. In fact, one of the main reasons people retained arms was just to have some paid employment, often working for some local "bigwig". If people can be convinced that there is some alternative, they are often willing to be disarmed.

The main target for the Project was the setting up of a Local Economic Development Agency (LEDA). This provided a mechanism for sustainability of activities, with public, private, civil society and demobilized groups involved. The Agency builds up community activities, such as shops and flour mills, provides capacity building of management and training directed at technicians. It is important that local institutions are developed in a form that breaks down the divides created by conflict and builds up capacity.

Working at the regional level has other problems. There were almost no data on employment available after the conflict, and the data are extremely difficult to collect. It was even difficult to measure the number of people. Files had been destroyed in the conflict, and what information was available was unreliable.

The Project had started against a background of the World Bank model of structural adjustment, which was mainly macroeconomic in focus. The recent change in World Bank policy has made programmes based on regional development more acceptable. The World Bank is now preparing the conditions for a 2003 project worth US$30 million on decentralization as part of its strategy against poverty. The Mozambique Council of Ministers already has a poverty reduction programme, but the World Bank has criticized it as failing to include a clear strategy to increase community participation and to decentralize control.

This would seem to be good news for the PDHL, but the problem is that what the World Bank means by decentralization is top down, whereas this Project is all about bottom-up decentralization, and these can be rather different – empowering local communities, rather than simply decentralizing central government decision-making. The Government has accepted the policies of the international community and is decentralizing, but the local institutions are not really available and the capacity is not there. The PDHL argues that there is a need to develop LEDAs at province level first. It is, therefore, trying to influence government policy and the World Bank and is seeking ILO support for this. The team also feels that it needs to improve the marketing of the outcomes of its programme, and it is seeking ILO assistance for this.18

The problem of lack of capacity at the local level to manage any recovery activity is important for Mozambique and other countries.19 The experience in Mozambique has shown that major conflict will result in a major reduction of capacity, and this needs to be taken into account in planning recovery activities. It is no good developing policies centrally and then expecting local authorities to be able to implement them without support. It is also clear that low- and

18 Marina Lo Gundice and Walter Urbine.
19 Even South Africa has had similar problems in implementing local development initiatives.
medium-level managerial and technical skills are essential for the successful implementation of programmes such as employment-intensive works.\textsuperscript{20}

Another concern of the programme is the nature of government policy. It is creating the development corridors - the Maputo corridor, plus two others - but at the moment there is no clear national policy link with the local economic development strategies that are being put in place. The design of large projects needs to reflect local economic development requirements, particularly the importance of supporting SMEs, as well as the large champions that take centre stage in the development corridors. The challenge for the PDHL is to influence the Government to link the LEDAs with the corridors and to link the large companies with the local areas. It is worth noting that as the LEDAs also include the trade unions, they provide some protection for the conditions of labour, the provision of training, etc., i.e. the concerns of decent work.

iv. Capacity building and training

An official at the Ministry of Labour was interviewed to get information on the programme of training and capacity building that had been undertaken with ILO support.\textsuperscript{21} There is presently a project running in the Ministry to provide employment and vocational training and the recovery and rebuilding of training centres. This is part of the Portuguese-speaking countries' initiative, with Portugal financing an ILO national coordinator and using ILO strategy designs.\textsuperscript{22} The Ministry has also tried to build measures for employment and on-the-job training. It runs a job-creation scheme that provides companies with 75 per cent of minimum salary initially and then a reduced contribution each year. There is also a related scheme for small business support that provides credit and tools and other such assistance.

Another project which the ILO, through IFP/CRISIS, has been working with in the Ministry is the Chokwe Job Recovery Project. The floods in 2000 had devastated the city of Chokwe. The Project focused on reconstructing three markets to give people the opportunity to take up business and trade when they returned. This was particularly important, as the city has very special characteristics. Many of the men were migrant workers in South Africa, and the informal sector was extremely important. The markets gave people the opportunity to restart their lives when they returned. A second action was to replace animals killed in the floods (100 cows were bought from an agricultural association and distributed). A third action provided training. Much machinery was destroyed or in need of repair, in particular pumps. Training was given on how to repair the pumps, and a small micro centre was built to train carpenters, builders and stone masons. There is evidence of recovery in the city as the Project approaches its end.

\textsuperscript{20} As James Markland argued.

\textsuperscript{21} Illidio Caifez of the Ministry of Labour has worked in the Ministry since 1991 and has been working with the ILO on the reintegration of demobilized combatants project since 1994 and has also received training. He has worked in the Ministry since 1991.

\textsuperscript{22} The present project ends in December 2002, but there is a new one in the planning stages with programmes for four professions.
It is interesting that this Project reflected a very different form of involvement for the ILO. Instead of waiting to be asked, IFP/CRISIS initially approached and sent an adviser. The Portuguese Government and the ILO’s Director General approached the Mozambiquan President and the Minister of Labour to offer their support for the Project.

The ILO has also given support to the Ministry through training officials and others in Turin. The IFP/CRISIS team is also involved with the Ministry of Industry and Commerce on post-flood micro policy, with funding from the Italian Government.23

3.1.5 Mozambique and the ILO

Overall, it is clear that Mozambique is recovering from the damaging civil war that has left deep scars and huge socio-economic challenges. There is clearly much to be done and a number of important roles for the ILO. Several interviewees suggested that the ILO should carry out exploratory missions to emphasize the need for its services. It was suggested that it is not as visible in Mozambique as it is in other countries.24 The UNDP and others work on Country Cooperation Frameworks (CCFs) with other bodies which define their activities in the future; they look ahead and define orientation. The ILO should be involved at the beginning, as it is difficult to become involved later. It is also possible that the ILO's lack of permanent "official" presence in Mozambique makes it extremely difficult for it to play a proactive role in CCF preparation, although there was some consultation and participation of the ILO's Lusaka Office in the final stages of preparation of the last CCF.25

Labour-intensive projects are extremely important and represent a very successful contribution by the ILO to post-war reconstruction. Donors seem to be pressing the ILO to develop these further, but such projects still remain limited. There is also a new World Bank project on labour and education, though so far this is basically the management of employment data to forecast employment needs. This is very much the type of project the ILO should be undertaking, but it has not been involved so far, possibly because the project came via the Education Ministry.

While the ILO has played a positive role in the development of Mozambique in the post-conflict period, there is a real sense that it could have made an even greater contribution. There is certainly great scope for its future involvement in the country.

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23 Luis Eduard Sito.  
24 Illidio Caifez made this point and suggested that Mozambique being the only Portuguese-speaking country in the area might seem at a disadvantage.  
25 James Markland.
3.2 Country analysis: Rwanda

3.2.1 Background

Rwanda is a country recovering from a horrific internal conflict. By the end of April 1994, over 1.3 million Rwandans had fled the country and over 500,000 had been massacred as the result of the civil war and genocide at a rate unseen since the Holocaust. The ethnic violence was mainly directed by the majority Hutu ethnic group against the minority Tutsi. It was not the first time violence had flared up, but it was the worst. Colonial rule had created a clear ethnic divide that had not existed earlier in a people that had interbred and shared language and religion – one of the most Catholicized peoples in Africa. The conflict presented itself as ethnic, but it had many aspects and characteristics. Centralized political control that was increasing based on oppression was coupled with agricultural shortages, a weak economy, spill-over effects from neighbouring countries, and international contempt, all factors creating the powder keg.

Prior to the arrival of external powers (Europeans), both groups lived in a rather non-violent community and accepted each other. The differentiation between the two was based on caste or class more than mere ethnicity (Metz, 1994). Hutu or "servant" farmed and meant someone having less than ten cows, whereas Tutsi or "rich" was someone with “many long-horn cows” (Peterson, 2000). But this distinction was not fixed, as Tutsi could become Hutu and vice versa. An earlier explorer, Speke, from his base in Tanzania, had started the myth of the Tutsi being an aristocratic race that had come from Abyssinia. Belgian colonizers took the myth and gave it legitimacy through rather problematical comparisons of physical characteristics. The Belgian colonizers, taking over from the Germans after the First World War, created the myth of Tutsi superiority, favouring them over the Hutu in both the education and administrative systems and changing what had been a more fluid ethnic and socio-economic classification into one that was almost purely racial (Peterson, 2000). In the 1930s, the old Rwandan social system was transformed through a series of legislative changes. Different leaderships were unified under the Tutsi, and ethnic affiliation on identification cards was introduced. In Rwanda where ethnicity was used as a qualification for a job or an education opportunity, this played into the hands of Tutsi supremacists.

The insurrection in 1959, called the Rwanda Revolution, was an attempt on the part of the majority to achieve a social and political order based on consent (Lemarchand, 1970). This led to the Belgians switching their support towards the Hutu, sweeping away the Tutsi monarchy, and led to the slaughter and exodus of hundreds of Tutsi. The First Republic of 1962-73 gave an overview of what was yet to come. Ethnic confrontation from exiled Tutsi and Hutu armed response led to mass killings. In the mid-1960s, some 10,000 had died and over 300,000 had fled their homes. In 1973, General Habyarimana seized power in a coup and established the Second Republic. The regime was originally committed to reducing ethnic skirmishes and favouring development, but Habyarimana "declared the return of Tutsi exiles impossible" on the

26 It is believed that the Hutu had migrated first to the region nearly 1,000 years ago, and the Tutsi appear to have arrived in the region in the fifteenth century.
grounds of insufficient cultivable land (Peterson, 2000). Political instability was ignited by a series of unfortunate crises emerging at the same time. Economic and development efforts from the early Second Republic were shattered by a combination of "soil degradation, population pressure, crop disease, and a precarious decline in world prices for coffee - Rwanda’s major source of export earnings" (Metz, 1994). As a result, the economy faltered, famine spread and inequalities grew. This struggle created the seeds for the civil war and offered Tutsi refugees a good excuse to support the rebels and fight the Government. The regime propped itself up by ethnic populism.

Civil strife in neighbouring Uganda saw Yoweri Museveni seize power in 1986, helped by Tutsi refugees who had joined the guerrillas after being forced to flee from Rwanda (Metz, 1994, Miall et al., 1999). These guerrilla fighters were involved in the early 1990s when the Tutsi Rwandan Patriotic Front (RPF) from Uganda invaded Rwanda and was defeated by the Rwandese Army, aided by Zairian, French and Belgian military assistance. They continued a low-level guerrilla war with incursions into the north of the country.

In 1992, the international community brokered the Arusha Accords, a series of good-faith agreements rather than a peace agreement. They were signed by the Government and the RPF under pressure, despite Hutu militias disagreeing fundamentally with them and seeing their President as being too "soft". The overall aim of the peace agreements was to demobilize both sides, move the nation toward multiparty democracy and reintegrate the Tutsi refugees back into Rwandan life (Metz, 1994).

Both sides also requested an international force to help monitor the agreements. Thus, the United Nations Advisory Mission in Rwanda (UNAMIR) was established in October 1993. As its name suggests, UNAMIR was not an enforcement mission and was mostly concerned with the political peace process, not humanitarian support. Its mandate "was oriented towards assisting and cooperating with both sides" (Connaughton, 1994).

When the plane carrying President Habyarimana and the President of Burundi crashed in mysterious circumstances in Kigali, the hopes of a peaceful settlement of the unrest in Rwanda were dashed. Hutu militias unleashed a wave of mass terror and massacres of Tutsi and moderate Hutu. This *Interahamwe* (those who work/attack together) carried out systematic killings under a predetermined plan and strategy, with some of the assailants being observed using pre-established lists and maps to locate their victims. With radio Mille Collines constantly broadcasting hatred messages and incentives to commit more slaughters: "The grave is only half-full; who will help us fill it?", the death toll soon reached 500,000 towards the end of April. Although it is impossible to give a precise estimate of how many people died between April and July 1994, reports announced the estimate to be as high as 1 million (Prunier, 1995). The UNAMIR forces mandate was seen as insufficient to stop the perpetrators or even to protect the civilians.

The RPF then invaded from Uganda, and its advance throughout the country in late April led to the unfolding of a refugee crisis as Hutu fled Rwanda. Neighbouring Zaire and Tanzania took most of the nearly 2 million refugees, with Burundi sheltering the remaining 200,000.
France had a history of support for the Hutu regime and decided to act, sending a multinational operation approved by the UN, purportedly "to assure the security and protection of displaced persons and civilians at risk in Rwanda". There is evidence that it allowed genocide to continue as it made efforts to rescue its previous allies’ leaders (Gourevitch, 2000). The force was deployed in early July 1994 and was replaced by UNAMIR II in late August (Prunier, 1995).

Even in the face of such gruesome killings as in Rwanda, the international community seemed to step back, probably due to the fact that the "mission creep" that had occurred in Somalia was still haunting the authorities, especially the United States which, worried at further losses of soldiers, was not ready to commit a large force in Rwanda. In addition, Europe was already dealing with its own crisis in its backyard, with the fragmentation of Yugoslavia and the ongoing civil war. Moreover, the international community was in an awkward position, as it was being accused by the RPF of feeding the genocide by providing food and shelter to the Hutu refugees in Zaire’s camps. It was faced with a dilemma throughout the crisis to either close the camps, leaving the people to their fate, or to keep the camps open, with the possibility of an RPF attack. Once the RPF advance on Kigali had been completed, it was agreed to close the camps and let the refugees return to Rwanda.

The Rwanda genocide was clearly not some disorganized madness. It was planned and executed with appalling efficiency. Yet there were clearly important factors that gave rise to the situation. A combination of structural inequality, colonial legacy, economic and agricultural decline, deep-rooted animosity and the international lack of vision triggered the events of April 1994. The role of the international community both during and after the terrible events is a matter of considerable concern, and it is important that lessons are learned (Melvern, 2000).

3.2.2 Data on employment and other economic challenges of armed conflict

Rwanda has made great efforts to develop its national accounts and other indicators. These are on the government website and published by the Department of Statistics at the Ministry of Finance and Economic Planning. The 1999 edition replaced some previous estimates with up-to-date figures, provided more detail on agriculture, debt and education, improved coverage of the data and provided some comparisons with other sub-Saharan African countries.

Substantial gaps remain, most notably in labour, gender and informal sector information, which is rather problematic for the ILO concerns. Officials argue that strengthening statistical capacity is ongoing, but there is continued need for institutional support if greater improvements are to be made. In addition, data for 1994 and 1995 are problematic estimates, as statistical collection capacity was disrupted by the conflict.

Recent trends in economic growth of 5 per cent per annum are relatively impressive but still heavily dependent on external donor support, although this is declining. The food supply has improved greatly, inflation has declined and the industry and services sectors continue to recover. Poverty is widespread, however, with an estimated 65.3 per cent of the population living below the poverty line in 1998. For the same year, life expectancy was 48.5 years and infant mortality 129:1,000 births (compared to 54 and 91 for sub-Saharan Africa as a whole). In fact, access to health care is relatively good, and primary school enrolment rates compare favourably
with sub-Saharan Africa, but the quality of education is seen to be low and drop-out rates are high. Secondary education enrolment is particularly poor - only 7 per cent in 1998 - and a high proportion of teachers lack qualifications.

Rwanda has one of the highest population densities in Africa, is predominantly rural (94 per cent) and 54 per cent female. The genocide and fighting left females heading 34 per cent of households in 1996. Despite women making up the majority of the population and the labour force, particularly in agriculture, they face constraints on their participation in the economy and society which the Government is trying to deal with. The Ministry of Social Affairs is charged with this task.

The task of building up capacity and national statistics has been given to the Department of Statistics in the Ministry of Finance and Economic Planning. The Director sees his Department’s role as coordinating all statistical activities countrywide.27 The Department has had institutional and human resource problems, especially in the regions. It basically started with nothing in 1994 as, although there had been a training centre with highly qualified staff before the conflict, it did not open after 1994. A European Union fund for training has provided some middle-rank expatriate staff for two years (two statisticians, a demographer, three mathematicians) but there are still resource problems, with an inadequate budget for activities and equipment. The quality and coverage of information on labour and relevant data are major weaknesses in Rwanda and clear constraints on planning.

The ministries do plan to develop a national statistical system and are attempting to build capacity internally, but there is a problem keeping staff as once they are trained they are in demand internationally. They cannot increase civil service salaries, because of World Bank restrictions. One way around this is the development of an autonomous statistical institute, with UK DFID funding.

The Department has undertaken two surveys. The main one, a large Household Living Condition Survey, is being analysed and reports produced on education/poverty/health. It also plans to undertake an informal sector survey, which the African Development Bank will finance, but it has no experience in this type of work and is looking to the ILO for support. The Department also plans a national labour survey in 2003, organized together with the other relevant ministries.

As part of the Government’s decentralization policy, it has 12 regional offices linked directly to the main office and plans to increase this. It also has made efforts to inform people of its work, recently holding a national statistical week to explain the role of statistics in poverty reduction. There have also been attempts to create links between ministries and civil society with a two-day seminar, and it is also developing its own website.

27 Interview with the Director, Pacifique Ruty.
3.2.3 Local and external response to crisis caused by conflict

A Government of National Unity was set up with both Tutsi and moderate Hutu (those opposed to the Hutu Power) members, and this has been working with the World Bank, the IMF and other donors to develop policies for economic reconstruction. There have been recent incursions by Hutu rebels, but these seem out of desperation and pose little threat to the Government (Economist Intelligence Unit (EIU), 2001). In this insecure environment, however, the Rwandan framework for crisis preparedness is not so much preparedness, but a framework for dealing with the existing crisis. It has of necessity a large component of spending on defence, which is required to deal with the simmering internal violence and rebel incursions. Its overarching domestic policy is one of reconciliation and reconstruction. This programme has a number of components. There is an attempt to seek justice by dealing with the leaders of the genocide and the main perpetrators, while the Government is attempting to provide reconciliation among the races and between the survivors and the returnees, some of whom have never lived in Rwanda, having been born in exile. There is ongoing political reform, which has provided a power-sharing Government with a mixture of Tutsi and Hutu ministers, and there are continuing external negotiations in an attempt to deal with the problems in neighbouring countries.

3.2.4 Models in use and programmes implemented

Coming out of civil war and genocide, with the conflict continuing and commitments in the Democratic Republic of the Congo and the refugee problem, has clearly put particular constraints on the new Government's policies. The core of the reconstruction programme was the World Bank structural adjustment reforms, which were undertaken between 1995 and 1997 despite severe limitations in administrative capacity, resulting from the genocide. The exchange and trade system was liberalized in 1995. The commercial banks and foreign exchange bureau were allowed to buy and sell foreign exchange at market-determined prices, while the foreign-exchange surrender requirements on coffee and tea export receipts were reduced in steps and abolished by the end of 1998. A new tariff code was adopted with fewer and lower tax rates than in the pre-war era, and efforts were made to rehabilitate the banking system, with recapitalization and provisioning. This has led to an improvement for the two largest commercial banks and the Rwanda Development Bank and to the licensing of a number of new ones. Central Bank independence in conducting monetary policy was adopted in mid-1997, and the Government’s non-performing debt to commercial banks was restructured. In March 1996, a law was passed providing the legal and institutional framework for a divestiture programme for state assets (privatization). These developments were intended to provide the basis for deeper reforms in the context of the formal arrangements with the World Bank/IMF, which started in 1998.

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28 Which has kept it involved in the conflict in the Democratic Republic of the Congo, though it has now signed a peace agreement.

29 Banque National du Rwanda (BNR).
Despite these efforts, the administrative and institutional capacity of the public sector remains weak, and security-related outlays absorb a large share of government expenditure, thereby limiting resources for essential services. Domestic investment is very low (only 15.7 per cent of GDP in 1998), domestic savings are negative (-2.0 per cent of GDP in 1998) and the public debt is burdensome\(^\text{30}\) (EIU, 2001).

A Poverty Reduction Strategy Paper (PRSP) was being finalized to allow the Government to meet conditions for receiving debt relief under the Heavily Indebted Poor Country (HIPC) initiative.\(^\text{31}\) This development of the strategy is intended to be a participatory process, but this is not straightforward in a country with little previous participation in strategy. The Government implemented Participatory Poverty Assessment (PPA) training to overcome this problem through training people in participatory approaches and techniques at the national, provincial, and district level. It has undertaken district-level poverty assessments as part of this process, which are to continue. It is not just the people who need training; the Finance Ministry found it needed to train provincial officials to grasp the Medium-Term Financial Strategy (MTFS) and its implications. This is especially important given that decentralization of budgets is to take place.

As regards the financial situation, the revised 2001 budget was higher than expected because donor contributions had declined less than expected. The government plan is to use this to settle domestic arrears and debts, but also to target priorities and social areas. The main focus will be demobilization, the prisoner feeding programme, medical supplies, seed and fertilizer, and Kigali’s sanitation system. The implementation of the privatization strategy has hit technical problems that have slowed it down, but an anti-corruption drive is now taking place.

There have also been some targeted injections of funds by external donors. The World Bank has agreed to a US$40 million loan to develop the private business sector by improving the investment climate. This will be, in part, through examining possible legal reforms, the creation of a commercial court, the reduction of private-sector costs through increasing the efficiency of public utilities and a speeding up of the privatization of the tea industry.

The Rwandan Government has signed cooperation agreements with the United States Agency for International Development (USAID) worth US$11 million for programmes concerning good governance, health, social-sector assistance and agricultural development.\(^\text{32}\) In addition, the Belgian and Dutch Governments have donated funds to the justice system.\(^\text{33}\)

\(^{\text{30}}\) About US$1.4 billion compared to GDP of US$1.9 billion in 1998 (about 75 per cent of GDP).

\(^{\text{31}}\) This Paper has since been published.

\(^{\text{32}}\) An interview with a Senior Economist in the Sub-Regional Development Centre Eastern Africa of the United Nations Economic Commission for Africa, Andre Nikwigize, provided useful insights on the role of the Commission in Africa. But aside from attempting to develop regional policy, it was not clear what inputs it has on the ground in Rwanda, beside an advisory role for the Government.

\(^{\text{33}}\) US$2 million and US$0.3 million respectively.
An interview with the National Economist for the UNDP\textsuperscript{34} was valuable in providing the context for the programme. It brought home the fact that, while there is a clear need to build up institutions and infrastructure, there are clear capacity problems. During the genocide, there was a deliberate attempt to target professionals, and this has led to a lack of human resources and an over-reliance on foreign experts. In the present situation, the Government is the major employer, and the capacity problem is not helped by the fact that, as mentioned before, skilled people are mobile and the World Bank/IMF will not allow increases in civil service salaries. This has led to a situation where there are too many government employees at the lower levels, with capacity problems at the higher levels, and in the present crisis situation it is difficult for the Government to streamline and increase efficiency\textsuperscript{35}.

The feeling is that the country has moved out of the emergency stage and is now at the development stage, though there are still some areas that have been very slow to improve, and some pockets of the country would still be considered to be in the emergency stage and are still affected by conflict. One of the major challenges is seen as developing a sustainable development programme. The Rwandans are still a vulnerable people, without basic skills and amenities, such as clean water, and many still need very basic support. Planning development has, therefore, to be comprehensive, looking at the whole range of conditions in the country, and the rural self-employed, the informal sector and the entrepreneurs need to be considered as important in any policy.

The DFID Fellow at the National Poverty Reduction Programme at the Ministry of Finance and Economic Planning made the point that the present development model is not the one of two years ago, which was rather unrealistic. The Government was pushing high-tech industries and information technologies in what seemed an attempt to recreate the high-tech development path of Bangalore in India.\textsuperscript{36} Now it has moved to a more realistic agriculture-led model, but one that recognizes that the use of labour needs to be intensified and the rural economy expanded.

i. National Poverty Reduction Programme

The Government recently presented its National Poverty Reduction Programme to its donors and received a positive response\textsuperscript{37}. The national coordinator,\textsuperscript{38} who is based at the Ministry of Finance and Economic Planning, stated that, given the extent of poverty in Rwanda and the importance of its relief to reintegation and reconciliation, this is seen as a major project by the Government and donors. The Programme Document is over 170 pages in length and extremely comprehensive, and it is very much a national plan.

\textsuperscript{34} Francis Kabera Gatari.

\textsuperscript{35} An interview with DFID Fellow, Karen Kristiansen.

\textsuperscript{36} Bangalore developed an innovative development path that has emphasized high-tech industries, especially software, programming, data management and information technology.

\textsuperscript{37} Rwanda: The Poverty Reduction Strategy.

\textsuperscript{38} Vincent Karega.
In developing the policy, the lack of data has not surprisingly been a huge problem, and this is an area where the Government is seeking further support. At the moment, it is getting support from the DFID and others to deal with this (see the previous discussion on data), but capacity building has to be the key to improving data collection and policy making.

The Programme is greatly influenced by the World Bank and while it has promised changes to its old structural adjustment policies, the challenge to the Government is to influence them in the country. The ministries are arguing that poverty reduction plans have to build on the reality of the situation, rather than just use figures projected by donor experts. They are attempting to build their own model of development, one of pro-poor growth, which requires them finding out where the poor are and where and how they can generate income and then provide them with support. While the IMF/World Bank argue that more government spending will lead to inflation and increased debt, they argue that strategic investment should not do so. Rwanda being a donor economy means that any spending will be strategic and aimed at creating growth, not just stability. The IMF/World Bank see no value in the usual policy of providing safety nets for the poor in a country like Rwanda. The low level of income and development means that the country needs to increase the income of the poor and then go for the growth and development of productivity/productive capacity. The poor need to be able to pay for the services they consume; otherwise they become dependent on state handouts and have no means of improving their situation.

The Rwandan Government has developed labour-intensive road programmes as one means of providing income possibilities to the poor, but - unlike in Mozambique - there is no ILO involvement. The Government has EU funds to support this and could do with concrete projects from the ILO on roads and transport as soon as possible.

Given the nature of the conflict, a Commission for Unity and Reconciliation became the most important policy forum. When dealing with the post-conflict crisis, the Government originally did not separate out and emphasize poverty alleviation because so many problems were being caused by bad governance, and these had to be dealt with. Given Rwanda’s history, it had to develop a system that promoted human rights, which meant having a system of justice that works and is seen as fair by both sides. This was difficult, as it could not use classical law in the situation in which it found itself. Instead, it uses participatory local legal procedures with elected judges who decide on the punishment, with the families of both sides involved.

The onus was on the Government to develop security, administrative structures and policy, to ensure recovery and reconstruction and to provide hope. This initially led to considerable central control, but as mentioned earlier, the Government is now moving to liberalize and widen participation in policy making and is under pressure from the World Bank to do so. It is trying to reduce government involvement in trade and industry, to increase participation and to decentralize. Increasing participation is seen as an important aspect of developing a Constitution, and consultative procedures are taking place, while decentralization is apparent with elections taking place at the grass roots (local areas). Fiscal decentralization is planned to provide resources for local Government, but there is concern over whether there is the capacity in the regions to undertake these tasks.

There are still challenges: a security threat remains, and the country is landlocked. Rwanda could benefit from changes in the international community’s policies in Africa, if it manages to attain peace and stability in the region.
Gender is a cross-cutting issue, with a number of important aspects that need to be dealt with. First, the general population has to recognize the issues, and socio-cultural beliefs as to the role of women have to be changed. This is especially important, as the genocide increased the proportion of women in the population, meaning that women have to play new roles as heads of household and in society. Policies are being developed by the Ministry, and it has changed laws on the right to property, education, etc., with programmes for capacity building and empowerment specifically aimed at women. There are problems, however.

One important problem that is becoming apparent is the importance of designing policy to ensure that the timings of policy initiatives are consistent. For example, policies to reduce underemployment should not be impacting on the economy in a period and area of labour shortage, or they will just lead to increases in wages. In addition, designing and assessing poverty alleviation policies need to take account of the dynamics of household development. As income increases from very low levels, households have been observed to move from being paid in kind to money income, with changes in length and nature of their employment contracts. The use of labour will also change from subsistence production to employment. Changes in family profile, that is the age of children, is the main effect on income and on the source of income. This is particularly important in Rwanda, as smallholdings are only around 0.6 hectares, which is more like market gardening than farming, and will not really be enough to feed a family. This means as families age, increased rural employment is needed. This underpins the importance of having good survey information on households over time. It also indicates the potential value of programmes such as labour-intensive road construction to rural economies, but also highlights the need to develop sufficient economic activity to pay for the maintenance of these roads in the longer term.

Another important part of the poverty alleviation programme is demobilization. A Demobilization Commission has been set up to work with the ministries and donors on unity and reconciliation, the re-education and reintegration of rebel forces and the analyses of causes and side effects. The Government plans to take a comprehensive approach and considers that the ILO could provide valuable help. One particular need is to assist the private sector in labour relations.

The Rwanda Government sees NGOs playing an important role, and the programme has continuous consultation. They are key partners assisting with skill gaps/capacity and play important roles in implementing actions – raising critical capacity and monitoring. The Country Coordinator, Association for Cooperation on Research and Development (ACORD), underpinned these points and illustrated the active involvement of NGOs on the ground and in the regions and confirmed that the relation with the Government is generally good.

ii. Industrial development

The original focus of government policy was on social services, reintegration, health, etc. during the emergency period, but now it is moving to develop an industrial strategy. In the

39 Karen Kristiansen interview.

40 Francois Munyangwari.
development period, the aim is to focus on the productive sector, to redevelop institutions, to support sectors that perform well, and to work with the poverty reduction strategy. The Ministry of Commerce, Industry and Tourism (MINICOM) is responsible for commerce and artisan (craft) industry, and an interview with the Directrice de l’Industrie et de l’Artisanat provided useful information on the development of industrial policy in Rwanda and the programmes in place. The first thing to recognize is that while the Ministry has some data on companies and public services, mainly employment, as one might expect there are limitations and problems with these data which can limit the development of sectoral policies.

There is evidence that policy debates initially focused on high-tech information, communication and telecommunications (ICT) industries, but the debate has changed somewhat with the recognition of the importance of agriculture. Certainly, the focus of the Ministry is agriculture and related industries and the service sector – services to industry and other services such as handicrafts and tourism, covering both the formal and informal sector.

The handicraft industry employs many people, in the formal and informal sector, in both permanent and temporary employment. The Ministry’s policy is to develop institutions to support the industry, including employers’ federations and trade unions, at both the national and local levels. The sectors all need people with skills, and so programmes and training provision are essential for both formal and informal employment. There certainly seems to be ample room for new developments at all skill levels, for example teaching sewing for the craft industry. Tourism is also considered an important industry. To be successful, infrastructure needs to be developed, including large and small hotels, restaurants, etc., and the Ministry is trying to develop a policy for the sector. Again, it needs qualified and skilled people and vocational training. Aside from the obvious need to develop human capital, improvements in internal distribution are required desperately, and there is also a need to diversify exports to reduce the dependency on coffee and tea, for example exporting flowers.

There are important roles for the ILO in these developments. The country will need entrepreneurship training as well as a legal framework to organize the sectors and a financial system adapted to the sector, for example developing micro credit institutions. The ILO could also assist in influencing the development path to reflect the Decent Work Agenda. In the past, the ILO has helped the Rwandan Government, and it would like the ILO’s support again.

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41 Agnes Kayijire.

42 Interview with Karin Kistiansen.

43 Banks that provide small loans to peasant households, often to the women who have been found to have lower risk of default, and operate outside of the usual banking system, developing a fund to reinvest.

44 Interview with Agnes Kayijire.
iii. Demobilization and reintegration

To deal with one of the most important policy issues facing Rwanda, the Government has created the Rwanda Demobilization and Reintegration Commission. The Chair of the Commission explained how the National Executive set up the Commission with a UNDP trust fund initially for three years from 1998. The World Bank has provided a US$25 million loan, and funding is expected from the DFID, Germany, Sweden, the Netherlands and the EU. There is presently no support from the ILO.

This is clearly an important policy issue. There are 20 camps to demobilize, with rebel groups as well as the Rwandan Patriotic Army (RPA) involved. This means there could be as many as 5,000 combatants needing demobilization and reintegration. They require education, vocational training, reintegration activities and assistance for disabled veterans. The vocational training needs to be targeted to areas such as printing, handicrafts, mechanics, forestry, carpentry and agriculture. These are sectors where the ILO has experience and could provide support, but it would need to link up with the World Bank and the UNDP in the Commission.

The demobilization and reintegration policy is also aimed at trying to get people to move to the rural areas rather than stay in the towns, where they often end up. Reintegration is therefore being undertaken through the creation of cooperative associations, the provision of accommodation and education and the creation of institutions, in particular institutions for medical care and disabled support. The lack of skilled people to work as trainers is a real problem and is worse in the regions; therefore, a cross-country programme of training and capacity building is needed rather than just in the main towns.

These integration policies mean that the Commission must work closely with the civil ministries. Given the history of Rwanda, it is important that the ex-combatants are integrated into civil society proactively and not just provided with short-term support.

iv. Human resources development

As has already been noted, the depletion of human resources resulting from the genocide, which targeted skilled people, was devastating for the country. To try to deal with this, the Human Resources Development Agency run from the Office of the President has been set up to develop strategy. Being run from the President's Office gives the Agency some independence from the individual ministries and makes it easier to avoid duplication across programmes and ministries. The Agency needs to deal with the coordination facilitation and mobilization of resources at both the institutional and company level. It aims to support the building of

45 Jean Sayinzhoga.

46 Headed by Mike Mahigigi in the Office of the President.
administrative systems, the integration of new capital equipment, the building of capacity, and effective recruitment and to assist in dealing with problems of labour mobility. The Agency also has an interest in organizational development and plans to develop proposals for public-sector reforms. It receives some funding from the World Bank for capacity building and is planning a strategic change management conference in Rwanda, for which it is looking for support. The head of the Agency felt that the ILO could assist its work greatly.\textsuperscript{47} He felt that the ILO should become more proactive and that it needs to understand the context and develop its perception of the situation facing policy makers.\textsuperscript{48}

With the setting up of the Human Resources Agency, it is not surprising that the Ministry of Public Service and Labour feels a bit marginalized, and this was confirmed in an interview with the Director of Labour.\textsuperscript{49} He suggested that the Ministry felt far from the forefront of policy making and that it left the impression of being poorly resourced. It seemed to be operating very much in the shadow of the Ministry of Finance and the Statistics Department with a limited budget. The Director pointed to the serious data problems, the lack of capacity and of resources, which make developing policy very difficult, but the Ministry did not seem to be active in dealing with the problems.

Prior to 1994, the ILO was involved in cooperation with the Ministry and even intervened in the informal sector, but there are no official contacts at the moment. This is unfortunate, as the impact of the conflict was to render the Ministry’s systems obsolete. There is little information, no inspectorate, no new recruitment to the Ministry, and the officials lack the necessary education and skills. The Ministry wanted to set up a Labour Observatory and focus on vocational training, and it could certainly do with ILO support.\textsuperscript{50} In the meantime, much of the work of the Ministry has been conceptual, and the officials are now working on a revision of the labour law and code. It also has some involvement with the Statistics Department in planning a labour survey directed at households, though it is concerned that there may not be enough money to cover the informal sector. Most agriculture in Rwanda is in the hands of peasants, with little or no land to use, so there is likely to be disguised unemployment as they may not be working fully - e.g. only cultivating for a fraction of the year - and the informal sector is likely to be extremely important. Another issue that needs to be dealt with is the World Bank push for the privatization of public enterprises. This is leading to redundancies, and the Ministry is trying to put forward a reintegration programme for public-sector officials as well as for the armed forces.

\textsuperscript{47} Mike Mahigigi is a returnee and had links with the ILO while in Uganda.

\textsuperscript{48} Interview with Mike Mahigigi.

\textsuperscript{49} Jean-Baptiste Rulindahanywa.

\textsuperscript{50} The Ministry apparently sent requests to the ILO in 1999-2000, but nothing has happened and it was not clear why.
3.2.5 The role of the trade union movement

Rwanda has an umbrella organization for the trade union movement in the country. The General Secretary of the Rwanda Trade Union Centre (CESTRAR) and a member of the Governing Body of the ILO felt that unions have important roles to play in post-conflict reconstruction. CESTRAR is the umbrella for public and private trade unions and has about 72,000 members in the whole country. It aims to defend its members' interests and to negotiate, organize and provide services. These include education, training, savings schemes and running a computer training centre. It tries to work with the Government in policy development, in particular with the development of labour laws. CESTRAR also sees a role in arguing with the World Bank on behalf of the workers. While the World Bank may seem more flexible in Washington, it would appear that it is less so on the ground.

Both the Government and the World Bank/IMF claim to have had consultations with the trade unions, but this has tended to be rather cursory, consisting of the General Secretary being invited to breakfast and asked for opinions when the World Bank made a country visit. CESTRAR has not been engaged in dialogue, nor involved in the development of policy. It has responded to government policy by such acts as providing written statements on the need for labour-intensive projects and expressing concern that there is not enough focus on employment in the poverty alleviation strategy, but the union movement is not directly involved in policy making although it is not being excluded and is kept informed of policy through informal means.

When employment policy is discussed in Rwanda, it is often a cross-ministry issue, and this makes it difficult for trade unions to engage in discussion. This is made worse by the fact that the Labour Ministry is marginalized and deals only with developing general principles and lacks the capacity, funds and resources to do more. The General Secretary considers that the ILO should be providing support and engaging in policy making. The country needs capacity building for employers, workers and the Government, and the ILO could play an important role. CESTRAR tried to implement policy on social dialogue – the InFocus Programme, but needs ILO support. The union movement feels that the ILO needs to be more proactive in Africa as it has been in other countries, such as East Timor and Eastern Europe.

3.2.6 Rwanda and the ILO

The overall impression of the situation in Rwanda is that the Government seems very committed, that it has an opportunity to start afresh and is willing to take on new ideas and act fast. This is shown by the government programmes outlined above that are in being implemented or are about to be. The Government has also developed good relations with the major donor countries, with the identity of the major donor countries changing from pre-conflict times. There is also a relatively inclusive approach to the involvement of UN agencies and NGOs. There is, however, also an almost complete absence of ILO presence, despite the fact that there is much

51 Francois Muraiygira.

52 Francois Muraiygira.
that it could do. The ILO did have a substantial involvement before 1994 in Rwanda, in particular in relation to the informal sector (as mentioned by the Ministry of Labour). It is suggested that it also tried to come back after the crisis, with proposals for vocational training, but has had difficulty getting funding from donors for such long-term development programmes.\textsuperscript{53} Given the enthusiasm of the interviewees for ILO involvement, this does seem surprising and may suggest a need for retargeting proposals. Rwanda is at an early stage of post-conflict reconstruction, but it is already clear that the programmes supported by the ILO in Mozambique are needed in Rwanda. The plans for IFP/CRISIS to move into post-crisis situations earlier than the ILO might normally do is clearly a sensible change in policy; in the case of Rwanda, this could have benefited greatly.

\textsuperscript{53} Erik Lyby.
4. COMPARATIVE ASSESSMENT

Mozambique and Rwanda have provided two extremely good case studies for the challenges of post-conflict reconstruction. They have differences and similarities, and the difference in the stages of post-conflict reconstruction means that important lessons can be learned from their experiences. The Mozambique conflict, the civil war that ended in 1992, was an ideological one with a variety of direct foreign involvements. Rwanda came through civil war and genocide in 2000, though there are still the vestiges of conflict because of the failure of the international community to act. The colonial legacy of both countries was important in precipitating the conflict, and poverty and inequality were and are important issues. The Mozambique conflict ended in a Peace Agreement in 1992, and the Rwandan conflict in victory for the RPF. Mozambique has become a democracy, while Rwanda of necessity remains under a government of national unity.

Taking the component indicators the index used to judge countries with regard to the aims of the Decent Work Agenda presents an immediate problem of data availability. Please refer to the World Bank data presented in Annex 1. There are also likely to be questions about the reliability of these data.

As tables A1 and A2 show, the World Bank indicators give no information on unemployment or on the level of informality. Clearly, a country in turmoil makes it difficult to get information. There is some information on the labour force and the structure of the workforce as shown in table A3, but this is for very limited years and simply shows the dominance of agriculture in both economies relative to the average for low-income countries, with some evidence of a small increase in the share of industry and services between 1980 and 1990. The income components, namely the industrial wage, the minimum wage and the women/men wage gap, are not available, nor are the social protection components, namely social security coverage and the number of working hours.

Where the time series data are available, the different experiences of the two economies are evident. As figures 1, 2 and 3 show, the Rwandan economy collapsed over the period of the genocide and conflict from 1992 to 1994, both in terms of per capita GDP and GDP growth rates. The experience of Mozambique is less pronounced, but both countries' experiences are in stark contrast to the continued growth in GDP per capita for low-income countries as a whole over the period. As figure 2 shows, GDP levels in both countries were not so dissimilar until the Rwandan crisis. Separating out the countries' growth rates in figures 4 and 5 shows Mozambique to have higher growth rates than the average for low-income countries, but with more variance. The conflict led to negative growth in the early 1980s, improving immediately after the imposition of the ERP, but then declining until the 1992 Peace Agreement and then remaining positive until 2000. In contrast, Rwanda had low growth rates over the period, sometimes with small negative rates, until after the Arusha Accords when the effect of the conflict was catastrophic.

A useful way of judging the problems faced by people within the country over the period of conflict is to consider food production. As figure 6 shows, low-income countries as a whole saw a steady rise in the food production index over the period, whereas the conflict in the two countries made production more erratic, declining from 1990-92 in Mozambique and sharply from 1992-94 in Rwanda. Given the dependence of these countries on agriculture, these patterns
are a clear indicator of the problems and hardships faced by people during conflict. There are also biannual figures available on life expectancy for the two countries, which was lower than for low-income countries as a whole for the whole period. The horrors of the conflict in Rwanda led to it moving to a lower life expectancy than Mozambique, as shown in figure 9, a situation that remained in 2000.

The response of the international community to the problems is given in figures 7 and 8, which show the level of aid per capita and the percentage of aid in Gross National Income (GNI). In both countries, aid per capita grew over the early 1980s, peaking at the height of the conflicts, Mozambique in 1992 and Rwanda in 1994. The different histories of the conflicts in the two countries are reflected even more strikingly in the aid as a share of GNI figures in figure 8.

In the period of post-conflict reconstruction, qualitative and judgemental indicators may be more important. It was certainly evident in the case studies that judgements of researchers and agents on the ground can provide important even if sometime impressionistic information. They can also allow the validity and reliability of published information to be gauged. Using the classifications of section 2 in a more broad-brush manner does provide a useful way of comparing countries. As the table below shows, there are differences evident between Rwanda and Mozambique. Clearly, Mozambique is much further along the development path than Rwanda, which has just moved past the emergency stage and is only now putting in place policies for development.

**Broad comparison of the two countries**

<table>
<thead>
<tr>
<th></th>
<th>Mozambique</th>
<th>Rwanda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage</td>
<td>Development</td>
<td>Just past emergency</td>
</tr>
<tr>
<td>End of conflict</td>
<td>1992</td>
<td>2000?</td>
</tr>
<tr>
<td>Type of war</td>
<td>Civil</td>
<td>Civil</td>
</tr>
<tr>
<td>Dispute</td>
<td>Ideological</td>
<td>Ethnic</td>
</tr>
<tr>
<td>Colonial legacy</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>External influence</td>
<td>Yes</td>
<td>Yes (but different)</td>
</tr>
<tr>
<td>Poverty</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Inequality issue</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Ended</td>
<td>Peace Agreement</td>
<td>Victory</td>
</tr>
<tr>
<td>Democracy</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Dominant</td>
<td>Dominant</td>
</tr>
<tr>
<td>Industry</td>
<td>Some</td>
<td>Little</td>
</tr>
<tr>
<td>Policy</td>
<td>Old World Bank + revisions</td>
<td>New World Bank</td>
</tr>
</tbody>
</table>

Both countries are dominated by agricultural production and have small industrial sectors, Rwanda’s being the smaller. Mozambique had the "old" inflexible form of structural adjustment imposed upon it by the IMF/World Bank, though this has been softened more recently. In contrast, Rwanda has more flexibility in the creation of programmes alongside the structural adjustment package. Mozambique has a much larger population than Rwanda.
The experience of Mozambique under the policies of structural adjustment have been mixed, with some promising economic growth at present but clear structural weaknesses and inequality and a concern of unsustainable growth (Haines et al., 2001). As Bruck et al. (2000) argue, there are powerful legacies of the war that were not completely understood when the policy was introduced, and they have shaped the pattern of economic development more than was realized. It is not the more obvious destruction of capital that came out of the conflict but the less visible damage to institutions, markets and confidence and the persistence of subsistence agriculture for the majority of the population. They argue that too little attention was paid to the preconditions for the smallholders to develop output, trade and living standards and that this has led to an increasing divergence between the rapid urban growth and the slow rural growth that is causing real problems. As Addison (2001) states, it is important not to separate reform and reconstruction; they need to be integrated if poverty-reducing growth is to be achieved.

Within this context, the interviews showed that there have been a number of important programmes that have attempted to address these issues and that the ILO has played and is playing an important role. The capacity-building activities within the ministries, the demobilization and integration programmes, the Labour-Intensive Roads Project and the local development project are all fundamental to dealing with the sort of problems encountered in Mozambique. The only criticism that can be attached to these initiatives is that they should have started earlier and should be more extensive and that the employment-intensive techniques should have been expanded into other sectors.54

There are certainly important lessons to be learned by policy makers in Rwanda from this experience, and there is evidence that the lessons have been learned. An initial concern with high-tech-led growth has been transformed with a clear policy towards recognition of the importance of agriculture and its development. This is particularly important given the small size of the average holdings, the density of population and the needs for reintegration. From the Mozambique experience, the priorities should be to reform and restructure at the same time and to get to know the nature of the post-war economy. This means building up capacity in Government, both local and national, building up data/knowledge and research on the structure of the post-war economy, improving infrastructure and communication, developing participation, reintegration and entitlement and, finally, emphasizing poverty alleviation and the rural economy.

All of these seem to be under way within Rwanda, but it is the emphasis/prioritizing that may be most important. For success, it is important that the ILO moves to provide assistance, as it has skills that are of great value to the development of policy. All of the ILO activities in Mozambique should be offered to Rwanda. The capacity-building activities within the ministries, the demobilization and integration programmes, the Labour-Intensive Roads Project and the local development project can all make important contributions and would be welcomed. It is important that this occurs as soon as possible.

54 Such works have been concentrated in the road sector in Mozambique, but this has limited the expansion of the technique into other sectors because of the lack of a "sponsor" at ministerial level (James Markland interview).
5. CONCLUSIONS

One of the major concerns facing the developing world in the post-cold-war environment is how to deal with the aftermath of conflict. Conflicts can be immensely damaging to economies, but can also leave scars on society that go much deeper. Successful recovery from conflict is a difficult path fraught with dangers and riddled with economic, social and political problems and dangers. Countries that have achieved successful recoveries provide valuable lessons, while those that have had less success provide valuable warnings.

Mozambique and Rwanda provide a useful comparison. Mozambique is a country with more than a decade of peace that has followed a narrow definition of the World Bank/IMF model until relatively recently. The ILO has played an important role in a number of developments and has taken the initiative in offering assistance after the 2000 floods, in addition to being involved in the post-conflict reconstruction. Rwanda is a country that still has security problems and is attempting to recover from a genocidal civil war. The ILO has played no role in the country’s post-crisis recovery; yet there is a considerable amount it could do. With the new flexibility of the World Bank, it is possible to influence paths of development in a way that would have been impossible a decade ago.

Models in use: In the aftermath of crisis, the World Bank and the IMF are usually the first to provide a model for reconstruction. In the case of Mozambique, it was the classical model of structural adjustment. In the case of Rwanda, there is considerably more flexibility in World Bank policy, and recently also in Mozambique. The World Bank is willing to listen to arguments for policies that aim to alleviate poverty. Its particular mindset is still one of economic growth and safety nets and so does not fully reflect the concerns of the ILO and the Decent Work Agenda. It is, however, possible to make the arguments required to alter this perception.

National framework: Neither country has a national framework to handle crises, but this is now being developed in Mozambique, supported by the UNDP/WFP. In the case of Rwanda, the country is in crisis and is learning as it goes along. It is likely that Rwanda will develop a national framework as it moves further away from a state of emergency.

Programmes implemented: In Rwanda, there is considerable effort being put into the poverty reduction strategy, and this goes beyond the strictures of structural adjustment but is still heavily influenced by the World Bank perspective. There is also a Demobilization and Reintegration Commission that has been set up. The reintegration is a particularly important aspect, given the nature of the conflict in Rwanda. In Mozambique, the experience of the last decade has been valuable, and the ILO is clearly involved in some important programmes that have moved beyond the simple structural adjustment policies of the World Bank, and it has tried to deal with very real problems. The demobilization and reintegration, the labour-intensive road building programme and the local economic development programme are all seen to have been successful. They have made important contributions and should be exported to other countries. Rwanda would certainly benefit.

55 James Markland.
**Challenges:** The challenge for the countries is very clear: it is to find ways to move beyond the restrictive programmes of structural adjustment, even in its new more flexible form. The challenge for the ILO is how best to support this. It is clear that the ILO has to take a more proactive role in post-conflict situations if it is to take forward its aims in the Decent Work Agenda. It has to become involved earlier and have more influence. It will also have to recognize the need to deal with the specificities of the agricultural sector in predominately agricultural economies.

5.1 **Agenda for action, research and policy initiatives**

It is clear that the circumstances of post-conflict countries differ markedly, and it is difficult to make generalizations. This means that more country studies and comparative analyses are essential. It is also important that lessons are learned from the countries further away from conflict by those countries recently emerging from conflict. Comparing Mozambique and Rwanda provides some pointers to this. It also shows the problems of being too formulaic, in the sense of drawing strong policy conclusions from limited information and being inflexible in implementing them. Care is also needed in judging the developments taking place in a post-conflict country and comparing countries. Data are often poor and unreliable, though improving as the country moves through the reconstruction phase. It is not just the existence of the data that is a concern, but the reliability of the data at any detailed level, given the lack of capability and resources in the countries. The external agencies that move in to collect information can still come across similar problems in information collection. In addition, the specific characteristics of the countries in post-conflict reconstruction are such that it is difficult to generalize much on the basis of very general indicators. Until there is enough comparative research that starts to suggest stylized facts and common characteristic of countries going through phases of post-conflict reconstruction, it will be difficult to move beyond the judgemental specificities of individual case study analyses.

One area where research would be useful is to consider exactly what the substantive changes in World Bank policy have been and how best to engage with the "flexible" World Bank to encourage it to have ILO concerns for decent work introduced into post-conflict reconstruction. It would also be useful to have research undertaken on countries in conflict so as to prepare for early entry at the end of the conflict.

In judging the state of a country, it is useful to take time series data from sources such as the World Bank, where available, to indicate the underlying trend, but care needs to be taken in interpretation. It is probably more useful to take a broad-brush approach in comparing at what stage the countries are at post conflict, the nature of the conflict, the damage undergone and the issues involved, as was done for Rwanda and Mozambique in table A1. It will also be necessary to gauge the less visible legacies of the conflict: the damage to institutions, markets and consumer confidence, the persistence of subsistence agriculture because of lack of support to smallholders, the regional issues, the lack of development of living standards and the divergence of urban-rural development.

Many of the policy initiatives needed are already available as part of the ILO's InFocus Programme on Crisis Response and Reconstruction, but they need more emphasis and support.
The ILO’s new proactive stance could be further developed, and there is a clear need for the ILO to start earlier in the process.

The ILO is likely to find it difficult to become involved during a conflict, and it is not clear that it should. Instead, the ILO needs to be there during the emergency reconstruction period immediately following the conflict to assess when to get involved. One possibility is to have a representative moving into the country with the early NGOs. In the past, the ILO has tended to wait for an invitation from the Government and arrived late when many of the parameters of the development path had been set. The IFP/CRISIS Programme has improved upon this, but there is more that can be done.

The experience of Mozambique suggests that a multitude of agencies appear along with the post-conflict crisis, posing serious problems of coordination for the recipients of the support. Possible entry strategies for the ILO are to make its services in the area of crisis recovery known beforehand to potential beneficiary countries, to develop a close liaison with lead agencies involved in initial disaster relief - usually the WFP, the UNDP or a national agency - as a disaster develops or to have ILO Area Office Multidisciplinary Team (MDT) staff trained and prepared to assess the situation at short notice or a combination of these. It is important to avoid "calling cold" immediately after the disaster - the last thing a harassed official struggling to deal with an emergency wants is to meet another body often perceived as "cashing in" on the emergency. Another possibility is an early warning unit that could assess when it is optimal for the ILO to become involved in post-conflict reconstruction.

With its present programmes, the ILO has much to offer post-conflict countries; it simply needs to change its means of action and become more proactive. One of the earliest needs is to assist in capacity building in ministries and training, and the ILO can make a vital contribution to this. It will also mean its influence on the path of development within the country will be markedly increased.

To summarize, on the basis of the findings of this study there are a number of actions that could be required. Firstly the ILO must sort out its organization and communication lines in Africa. It should undertake or commission more research on post-conflict reconstruction to improve knowledge; some of this should be to gather information on countries emerging from conflict to assist earlier action. The Organization also needs to take a more proactive approach by getting involved earlier in post-crisis situations, assisting governments in setting up statistics departments and policy formation, building capacity in ministries and providing training.

If the ILO were to move in earlier, it might be able to work together with groups such as the UNDP and share donors. Pre-crisis preparation work may be attractive to donors - it is being funded in Mozambique. Certainly all of the usual donors would be willing to support the work of the ILO suggested above. There seems to be considerable support from governments for the initiatives the ILO is best suited to undertake, e.g. from the UK DFID.

56 This point was made by James Markland and came up in a number of interviews.
ANNEX

Tables and Figures
### Table A1: Relative size of countries: 1980-2000

<table>
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<tr>
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<tr>
<td>GDP *</td>
<td>Mozambique</td>
<td>1.94</td>
<td>1.51</td>
<td>1.97</td>
<td>2.31</td>
<td>3.38</td>
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<tr>
<td></td>
<td>Rwanda</td>
<td>1.66</td>
<td>1.89</td>
<td>2.03</td>
<td>1.29</td>
<td>2.06</td>
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<tr>
<td></td>
<td>Low income</td>
<td>551.92</td>
<td>653.51</td>
<td>852.50</td>
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<td>GDP per capita*</td>
<td>Mozambique</td>
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<td>Rwanda</td>
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<td>379.0</td>
<td>423.0</td>
<td>428.0</td>
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<td>Labour force, total</td>
<td>Mozambique</td>
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<td>7.33</td>
<td>7.49</td>
<td>8.24</td>
<td>9.17</td>
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<td></td>
<td>Rwanda</td>
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<td>3.23</td>
<td>3.63</td>
<td>3.38</td>
<td>4.61</td>
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<td></td>
<td>Low income</td>
<td>708.71</td>
<td>789.87</td>
<td>880.30</td>
<td>991.04</td>
<td>11.20</td>
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</table>

* Constant 1995 US$ millions.

### Table A2: Development indicators

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<tbody>
<tr>
<td>Life expectancy at birth, total (years)</td>
<td>Mozambique</td>
<td>44.0</td>
<td>43.8</td>
<td>43.4</td>
<td>44.6</td>
<td>42.4</td>
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<tr>
<td></td>
<td>Rwanda</td>
<td>45.8</td>
<td>47.5</td>
<td>40.2</td>
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<td></td>
<td>Low income</td>
<td>53.2</td>
<td>55.4</td>
<td>57.2</td>
<td>58.4</td>
<td>58.9</td>
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<td>Food production index (1989-91 + 100)</td>
<td>Mozambique</td>
<td>101.6</td>
<td>94.0</td>
<td>106.5</td>
<td>108.3</td>
<td>113.8</td>
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<td></td>
<td>Rwanda</td>
<td>83.2</td>
<td>104.5</td>
<td>95.7</td>
<td>66.1</td>
<td>99.0</td>
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<td>Low income</td>
<td>69.9</td>
<td>84.5</td>
<td>99.4</td>
<td>116.5</td>
<td>127.9</td>
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<td>Illiteracy rate, adult total (% of people aged 15 and above)</td>
<td>Mozambique</td>
<td>75.5</td>
<td>71.1</td>
<td>66.5</td>
<td>61.5</td>
<td>56.0</td>
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<td></td>
<td>Rwanda</td>
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<td>53.5</td>
<td>46.7</td>
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<td>36.1</td>
<td>31.8</td>
<td>27.7</td>
<td>24.4</td>
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<td>Aid per capita (current US$)</td>
<td>Mozambique</td>
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<td>67.3</td>
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<td>Rwanda</td>
<td>30.1</td>
<td>29.7</td>
<td>41.9</td>
<td>109.7</td>
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<td>9.1</td>
<td>7.6</td>
<td>12.4</td>
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<td>Aid (% of GNI)</td>
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<td>Rwanda</td>
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<td>11.3</td>
<td>54.4</td>
<td>18.1</td>
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<td></td>
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<td>2.4</td>
<td>2.1</td>
<td>2.9</td>
<td>3.0</td>
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### Table A3: Employment structure

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<td>Low income</td>
<td>..</td>
<td>63.2</td>
<td>57.3</td>
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<td>Industry</td>
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<td>7.5</td>
<td>8.0</td>
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<td>Rwanda</td>
<td>3.0</td>
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<td>..</td>
<td>13.8</td>
<td>14.8</td>
</tr>
<tr>
<td>Services</td>
<td>Mozambique</td>
<td>8.2</td>
<td>9.2</td>
<td>..</td>
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<tr>
<td></td>
<td>Rwanda</td>
<td>4.3</td>
<td>..</td>
<td>..</td>
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<td></td>
<td>Low income</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
</tbody>
</table>
Figure 4: GDP Growth Mozambique

Figure 5: GDP Growth: Rwanda
Figure 6: Food Production (1989-91=100)

- Food production index (1989-91 = 100) Mozambique
- Food production index (1989-91 = 100) Rwanda
- Food production index (1989-91 = 100) Low income

Figure 7: Aid per Capita

- Aid per capita (current US$) Mozambique
- Aid per capita (current US$) Rwanda
- Aid per capita (current US$) Low income
Figure 8: Aid as % GNI

Figure 9: Life Expectancy
APPENDIX

List of people interviewed

In Maputo:

- Walter Urbine, ILO Expert, Programme de Desenvolvimento Humano a Nivel Local (PDHL).
- Marina Lo Gundice, Chief Technical Adviser, Programme de Desenvolvimento Humano a Nivel Local (PDHL).
- Alex Aboagye, Economic Adviser, UNDP.
- Gilberto Anteso Botas, UNDP.
- Ilídio Caifaz, Director of Formacao Profissional, Instituto Nacional do Emprego e Formação Profissional (INEFP), Ministry of Labour.
- James Markland, Chief Technical Adviser, Feeder Road Programme, ILO/UNDP Project Moz/96/013.
- David Jennings, Engineering Adviser, Feeder Road Programme, ILO/UNDP Project Moz/96/013.

In Kigali:

- Jean Sayinzhoga, Chairman, Rwanda Demobilization and Reintegration Commission.
- Mike Mahigigi, Office of the President, Human Resources Development Agency.
- Francis Kabera Gatave, National Economist, UNDP.
- Francois Munyangtwaro, Country Coordinator, Association for Cooperation on Research and Development (ACORD).
- Francois Murayigira, General Secretary, Rwanda Trade Union Centre (CESTRAR) and member of the Governing Body of the ILO.
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Challenges of Natural Disasters to the Decent Work Agenda in Africa

Guy C. Z. Mhone
in collaboration with:
Horacio Zandamela
Rose Mpisi
Akima Mavian
Kisimba Mwenge
EXECUTIVE SUMMARY

This report reviews the nature of natural disasters in sub-Saharan Africa and their impact on livelihoods, with a view to deriving lessons for future interventions aimed at ameliorating their negative effects on employment and income-generating activities. Sub-Saharan Africa is not only prone to frequent natural disasters, particularly droughts and floods, but also quite vulnerable to their negative effects, given the low level of development attaining in all of the countries.

Natural disasters are crisis situations which are generally difficult to anticipate and whose negative effects tend to be prolonged and pervasive, hence disrupting livelihoods and economic activities at both the macroeconomic and microeconomic levels. The report notes that socio-economic impacts of natural disasters are such that they pose major challenges to the ILO and other donors. For the ILO, the agenda for promoting decent work provides a useful framework for combining emergency, rehabilitative, reconstructive and developmental measures aimed at ameliorating the actual or potential negative impact of natural disasters.

There are essentially five major types of natural disasters, all of which occur to some degree or another across the continent. These are geomorphological occurrences such as earthquakes and volcanic eruptions, the most recent of which has just occurred in Goma; soil-related occurrences such as soil erosion and landslides; water-related eventualities such as floods and salination; climatic and atmospheric occurrences such as droughts and cyclones; and biological occurrences such as desertification.

Africa is particularly vulnerable, both because some of the natural disasters occur with much frequency and great intensity and because the majority of the households live in a delicate balance between survival and poverty. The general underdevelopment of many African countries implies that the capacities of both the households and governments are quite limited and constrained by institutional, organizational and resource factors. The report outlines the nature of livelihoods in Africa and shows that the majority of households rely on non-formal livelihoods which make them very dependent on the natural environment as well.

Floods, droughts and cyclones are common in the tropical/equatorial region; droughts, floods, fires and volcanic eruptions in parts of sub-Saharan Africa; and desertification and drought in the semi-desert parts of Africa. Given that the majority of households live and work in the rural sector, natural disasters tend to have their greatest negative impacts in this sector as well.

The impact is at various levels. At the household level, natural disasters tend to disrupt normal livelihoods, displace families, destroy infrastructure and disentangle social and community networks. At the industry and sector level, natural disasters may result in enormous disruptions of production and impairment of production and export capacities, while also discouraging investment. At the national level, natural disasters strain the financial, human and institutional capacities and resources of government, while exacerbating inflationary pressures as well, especially with respect to food products. In countries where there is political conflict as well, natural disasters worsen the plight of rural households.
The report presents two case studies of Mozambique and South Africa. The former country has been intermittently impacted upon by floods and droughts, while the latter has periodically experienced droughts, floods, fires, cyclones and desertification in parts of the country. Mozambique is a poor country whose vulnerability to natural disasters occurs in the context of an economy with a low level of development and a high level of rural poverty. The country’s vulnerability has also been aggravated by the legacy of political conflict which has resulted in the displacement of populations and their concentration in flood-prone areas and the ubiquity of landmines which get exhumed by floods, thereby posing major dangers to rural residents. Mozambique has to rely on external support to address the consequences of natural disasters. Such interventions have primarily entailed emergency, rehabilitative and reconstructive measures. There is a general concern that inadequate attention has been paid to undertaking preventative and developmental interventions to safeguard the lives of those affected and to generally ensure that the economy is able to absorb shocks arising from natural disasters.

South Africa has generally been in a much better situation to address the impact of natural disasters than Mozambique and a number of other African countries because of its higher level of development and its greater human resource, financial and institutional capacities. The South African Government has a comprehensive strategy for disaster management and has established a Disaster Management Centre which is well provided for financially. For South Africa, a major constraint has been the ability of local authorities to effectively and efficiently spend monies allocated for natural disaster relief. A key concern in South Africa is the fact that vulnerability to various natural disasters is partly a consequence of the legacy of apartheid in that black populations are generally placed in the most vulnerable locational and economic situations that make them highly vulnerable to natural disasters.

Major lessons drawn from the review relate to the following: the need to develop institutional capacities for predicting, preventing and reacting to natural disasters in African countries; the need for integrated and comprehensive responses that combine the efforts of government, communities, donors and non-governmental agencies; the need for encouraging community involvement and taking advantage of local and indigenous forms of response; and the need to ensure that interventions are able to combine emergency, rehabilitative, reconstructive and developmental measures in a mutually reinforcing manner.

The report notes that the ILO, through its Infocus Programme on Crisis and Reconstruction (IFP/CRISIS), has been making much headway in placing employment and income generation as important focal points for mobilizing the interventions, as well as demonstrating the manner in which various types of interventions can be integrated so as to achieve a mutually reinforcing cycle of rehabilitation, reconstruction, development and prevention. This has been done by deploying measures to create an enabling environment for labour markets to perform efficiently and productively; using employment-intensive infrastructure in construction; reviving local economic development; promoting micro and small-scale enterprises; engaging in training; and providing social safety nets. The report recommends that those measures and others of a similar nature need to be integrated together with the activities of the ILO's Jobs for Africa Programme and the programmes of other domestic and international agencies to enable African countries to develop the capacities to respond to natural disasters by uplifting many African households out of the threshold of vulnerability to natural disasters.
Some of the lessons that emerge from the review undertaken in the report are the following:

• It is important to operate within the framework of a common programme. In Africa, it is necessary that natural disasters should be addressed in the context of overall development and employment strategies which (a) promote equitable development and sustainable growth so as to impart to a given country and affected communities the capacity to withstand negative impacts arising from natural disasters and the capacity to address such negative impacts when they arise; and (b) reduce the proportion of the labour force that lives and works in low-productivity pursuits in the non-formal sectors relying on natural resources primarily which make them vulnerable to the negative impacts of natural disasters. The ILO’s Jobs for Africa Programme should provide the relevant framework in the African context. The need for alternative and diversified sources of livelihoods for vulnerable groups combined with market-related activities which could be the basis for accumulating buffer stocks are important in this respect.

• It is necessary to have integrated approaches to preventative, emergency, and rehabilitative interventions encompassing social, economic and political spheres.

• All agents (government departments, community-based organizations (CBOs), non-governmental organizations (NGOs), bilateral and multilateral agencies) must work together collaboratively within the broader framework in an integrated manner. It is important that the specialized mandates of individual organizations, agencies and departments are not pursued separately and hegemonically but that they are located and pursued within the broader strategic context which addresses the structural and incidental considerations pertaining to natural disasters and their impact in Africa.

• Regional and global approaches to natural disasters should complement national-level interventions.

If the above approach is to be realized, it is necessary that all the major organizations such as the ILO, the UNDP, UNEP, UNOPS, OCHA, the UNCHR, the ICRC, the ICFTU, the IOE and bilateral agencies support with financial and technical resources country-level programmes arising from the Jobs for Africa consultative processes, while also pursuing their own mandates within such overall programmes and strategies. Other recommendations which follow from the above approach are:

• It is necessary that more research is undertaken to study the adaptive strategies that have been developed by local communities to anticipate and address the negative consequences of natural disasters so as to incorporate the lessons from such strategies into future interventions of both a long-term and short-term nature.

• There is a need to ensure that interventions utilize the most abundant resource, which is labour, and that the interventions complement the development of productive labour-absorbing economic activities in the formal and non-formal sectors, with a view to transforming the latter sectors and integrating them into the formal economy.

• Social policy should be complementary to the promotion of productive activities that enhance the capacity of households to withstand the negative impact of natural disasters and their capacity to reduce their vulnerability to such disasters.
• Policy, class, gender or politically determined factors which underpin the vulnerability of particular communities, households and individuals to natural disasters should be addressed. This can in part be achieved by ensuring that both overall strategies and disaster-related interventions are designed and implemented in a participatory manner involving affected and interested communities and parties, particularly at the community and civil society levels.

• It is necessary to promote the monitoring and evaluation of recurrent natural disasters in Africa and the collection, storage and dissemination of data and information pertaining to these disasters and the efficacy of interventions deployed to address them.

• Research regarding the degree to which women may bear the brunt of the negative effects of natural disasters needs to be undertaken and related to the need to promote the economic participation of women in productive activities and in organizations and agencies that address the consequences of natural disasters.

More generally, it is recommended that the ILO InFocus Programme on Crisis and Reconstruction should collaborate very directly with the Jobs for Africa Programme in Africa in an effort to more directly integrate its activities into the programmes and projects arising at the country level as a consequence of the activities of this Programme. Not only should programming related to addressing natural disasters be undertaken within this context, but so should resource mobilization at the global level. Disaster management agencies established by governments together with UNDP Country Offices should be focal entry points for strategizing and implementing interventions related to natural disasters.
1. INTRODUCTION

This paper reviews the impact of natural disasters on livelihoods in Africa south of the Sahara and assesses the nature of the interventions that have been designed and implemented to address their consequences. Africa is a diverse continent in terms of the climatic, ecological and geophysical characteristics that pertain to the various parts of the continent, and as such it is plagued by various natural disasters that differ in terms of type, frequency and intensity from one region to another. The impact of natural disasters on livelihoods differs from one country to another, depending on the nature of the disasters and livelihoods as well as the capacity of the state, international agencies, non-governmental organizations (NGOs), community organizations, and civil society to anticipate the disasters and deploy the necessary preventative, emergency and rehabilitative measures needed to restore livelihoods. Within this context, it may be noted that not only is the ecological, economic, social and political environment in each region and country complex, but so are the policy and adaptive responses that have been developed are equally diverse and complex.

Natural disasters can perhaps be classified into five categories, namely geomorphological and surface disasters or occurrences such as volcanic eruptions and earthquakes; soil-related occurrences such as land degradation and soil erosion; water-related occurrences such as floods; climatic and atmospheric occurrences such as drought; and biological occurrences such as deforestation and desertification. Natural disasters in Africa originate in all the five areas with differing frequencies and intensities in different regions of the continent. While the form of the disasters is natural, the causes may not always be, as they may be caused or aggravated by human activity as well.

The report is structured as follows. Section 2 presents a general classification of the major natural disasters that occur in Africa and their relative importance. Section 3 presents an overview of the nature of the livelihoods in Africa, while section 4 reviews the impact and response to the major and most frequent natural disasters in Africa, namely droughts and floods. Sections 5 and 6 present case studies of the impact of natural disasters in Mozambique and South Africa respectively. Section 7 concludes the report, together with some recommendations.
2. NATURAL DISASTERS IN AFRICA:
NATURE, INCIDENCE AND IMPACT

Data on the nature, frequency and impact of natural disasters are scarce. Typically, disasters of one type often have ratchet effects onto events of other types, thereby making the impacts of natural disasters fairly complex in their outcomes and consequences for human beings and their livelihoods. Thus, for instance, both floods and droughts often result in land degradation and soil erosion.

Further, human activity may also be a causal or aggravating factor. In The Human Impact Reader (1997), Goudie notes that it is now increasingly appreciated that human activity does exacerbate the occurrence of natural disasters in many ways. Coastlands and marshlands are modified by human settlement, generally to the detriment of the environment and its beneficial value to humans; mining, construction of dams and artificial lakes have accelerated seismic activity and land subsidence in some countries, apart from altering vegetation; and in some cases, humans have deliberately altered natural vegetation and land forms with untold consequences in the long term for other members of the community. Most importantly for Africa is the degree to which global warming resulting from the emission of fluorocarbons into the atmosphere may be accelerating the recurrence and intensity of droughts and floods in Africa.

The major natural disasters may be grouped into the following categories in accordance with the approach adopted by Goudie: geomorphologic occurrences; soil disturbances and deterioration; water-related disturbances; climatic and atmospheric disturbances; and biological disasters. Each of the foregoing is discussed below and can be expected to have a number of social and economic consequences on social and economic life, depending on the intensity, duration and frequency of the particular type of occurrence within that particular class of natural disasters. Among the possible effects that are important for livelihoods are the following: disruption of economic life through loss of output and earnings; disruption of social cohesion; loss of social amenities such as housing and energy sources; disruption of infrastructure such as roads, railways, bridges and vehicles; forced short- and long-term migration; disruption of marketing, distribution and communication systems; the possible breakdown of social order; and the resurgence of primary diseases.

Geomorphologic occurrences: Volcanic eruptions and earthquakes are most common in the central part of Africa in such countries as Cameroon, Burundi, and Rwanda. In some countries, minor earthquakes may be a result of anthropogeomorphological (human activity-induced) consequences of global warming, construction of reservoirs, and mining activity, all of which occur in a number of African countries such as the artificial lakes of Caborra Bassa in Mozambique, Kariba and the Lesotho Water Highlands Water Project. A 1982 study noted that an earthquake registering 5.8 on the Richter scale occurred around the Kariba Dam as a consequence of the weight of the lake water altering geomorphological structures below and around the lake (Goudie, 1997):

In 1958 Lake Kariba was the largest sustained loading that man had created. Filling occurred over several years (1958-1963). Seismic instruments were installed in 1959 after filling had begun. The array began recording small shocks within weeks of installation. In 1963 several large quakes occurred near the deepest portion of the reservoir. Most activity
took place in a burst of seven large quakes in a 3-day period of September 23 through September 25th and two more earthquakes in October and November. No large earthquakes occurred again until 1966 when they struck in April 1966, April 1967, and June 1968. The activity in 1963 occurred during filling but the later events seem unrelated to the reservoir (Goudie, 1997, p. 41).

Since the construction of the Kariba Dam, there have been numerous other similar large lakes constructed across the continent which can be expected to have had similar effects. The withdrawal of oil from the depths of the sea or earth also has similar geomorphological effects on surrounding land as in Angola, Nigeria and other oil-drilling countries, resulting in land subsidence.

Earthquakes and volcanic eruptions can be expected to impact on a number of social and economic amenities. Volcanoes can also be expected to entail wholesale migrations, loss of output, and destruction of infrastructure. The recent eruptions of one of the active volcanic mountains adjacent to the town of Goma reminded everyone that droughts and floods are not the only natural disasters that threaten African communities. This eruption which occurred in the beginning of 2002 spread about 300 million m$^3$ of lava over the town of Goma, displacing about 500,000 people while also destroying economic and social infrastructure, businesses, and surrounding farms in the town of Goma. The total loss was estimated at about US$3 billion. A number of organizations provided emergency assistance, and rehabilitation efforts continue to the present day. In general, as can be seen from table 1, volcanic eruptions in Africa are not as serious a problem as they are on the rest of the continents.

The information presented in the following tables is taken from EM-DAT: *The OFDA/CRED International Disaster Database*. In order for a disaster to be entered into the database, at least one of the following criteria has to be fulfilled:

- ten or more people reported killed;
- 100 people reported affected;
- a call for international assistance;
- declaration of a state of emergency.

### Table 1: Volcanic eruptions

1a: Top ten countries in terms of people killed or affected by the disaster

<table>
<thead>
<tr>
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<th>Country/date</th>
<th>Affected</th>
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<td>1,036,065</td>
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<td></td>
<td>14 June 1991</td>
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<tr>
<td>Colombia</td>
<td>22,800</td>
<td>Nicaragua</td>
<td>310,075</td>
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<td></td>
<td>10 April 1992</td>
<td></td>
</tr>
<tr>
<td>Guatemala</td>
<td>6,000</td>
<td>Indonesia</td>
<td>300,000</td>
</tr>
<tr>
<td>24 Oct. 1902</td>
<td></td>
<td>5 April 1982</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>5,500</td>
<td>Papua New Guinea</td>
<td>152,002</td>
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<td>1909</td>
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<td>19 Sept. 1994</td>
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<td>75,003</td>
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<td></td>
<td>30 Aug. 1976</td>
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<td>Mexico</td>
<td>75,000</td>
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<td>Country/date</td>
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<td>Costa Rica</td>
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<td>21 Oct. 1976</td>
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<td>Argentina Aug. 1991</td>
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1b: The world and Africa

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<th>Total killed</th>
<th>Total affected</th>
<th>Africa</th>
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<td>-</td>
</tr>
<tr>
<td>1977</td>
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<td>1900-74*</td>
<td>1</td>
<td>-</td>
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<td>-</td>
</tr>
</tbody>
</table>

Source: EM-DAT: *The OFDA/CRED International Disaster Database*, Université catholique de Louvain, Brussels, Belgium.

* Prior to 1974, relatively few major disasters are recorded. Therefore, the data from preceding years have been grouped together for this table.
Soil deterioration and disturbances: This may arise in the form of wind or water erosion, physical deterioration and chemical change. Soil erosion is a common problem in many mountainous regions and their associated down slopes. Countries such as Lesotho for instance have been experiencing major soil erosion in some regions within the country, affecting the livelihoods of many rural households. More generally, as Yaalon and Yaron (in Goudie, 1997) note, the following soil-forming or metapedogenetical factors acting singly or in combination may be responsible for soil formation: these are topographical, factors hydrological factors, chemical factors and cultivation and cropping factors. Thus a combination of natural and human factors can easily lead to changes in soil formation, some of which may be detrimental to livelihoods when they result in soil erosion or other changes that negatively affect how households utilize the soil for their livelihoods. In Africa, all of the foregoing factors in various combinations have proved to be important in the spread of soil erosion and land degradation in many African countries and regions, particularly those that have been overpopulated, those that are mountainous, and those that have been polluted so that the proactive and regenerative vegetation has withered away in the course of time. Additional activities that worsen the quality of soil include: terracing and land leveling, dam construction and flood plains, drainage that lowers the water table, planting of wind breaks, flooding paddy fields, irrigation with sodic water clay marling and warping, deforestation and shifting cultivation.

Soil disturbances generally occur over time but can occur in the form of landslides as well. Their effects being gradual, they will tend to result in conscious migration or changes in social and economic lifestyles to accommodate the emerging inhospitable soil conditions. Unfortunately, because of the gradualness with which such disasters occur over time, their impact tends to be underestimated until the consequences are too great and irreversible.

Water-related disasters: The major water-related natural disasters are floods which occur in a large number of African countries and salinization resulting in the concentration of salts in the surface or near the surface of the soil. Indeed, in some of countries the occurrence of drought alternates with the onset of floods within the same year. Thus, for instance, Nigeria had two floods in 1998 affecting 100,000 people and killing 15; and in the same country in 1994 there were two floods affecting more than 600,000 people and killing 31. In Sudan and Somalia, droughts and floods have alternated, affecting large segments of the population in recent years. The 1998 flood in Sudan is estimated to have killed more than 1,000 people. Salinization is another major problem which impoverishes the land and actually discourages the development of large-scale farming projects in some countries. Thomas and Middleton (in Goudie, 1997) classify possible causes of salinization into the following groups:

Salinization directly due to poor cultivation techniques; salinization due to indirect effects of irrigation schemes; salinization due to vegetation change; salinization due to sea water incursion; and salinization by disposal of saline waste (Goudie, 1997, p. 73).

Many of these forms of salinization occur in a number of African countries such as Nigeria (encroaching sea or marshland as in the city of Lagos) and many of the Sahel countries due to drought and at times due to irrigation schemes: "River barrages and dams can result in salinization of soils on valley terraces above a dam after its construction; due to changes in local water tables following flooding of a reservoir, irrigation schemes can also increase salinity in soils downstream of the water extraction point" (Thomas and Middleton in Goudie, 1997, p. 73). Thomas and Middleton suggest that human-induced salinization may not be a major problem in Africa and may only affect about 10 per cent of the land area, but that "soil degradation by nutrient loss inside, and indeed outside, African dry lands is a much more
widespread problem than that of secondary (human-induced) salinization in African dry lands" (Goudie, 1967, p. 79).

The most common water-related disasters are floods, which, if grave enough, can entail all the various effects listed earlier: social and economic disruption; loss of infrastructure; migration; disease; and loss of social cohesion. Table 2 shows the occurrence of floods in the world and in Africa. As can be seen, not only are floods a frequent occurrence in Africa, but they tend to affect millions of people in most years and also result in large numbers of deaths. This incidence and the numbers affected assume greater significance when it is recognized that the floods primarily tend to occur regularly in particular countries.

Human activity and livelihoods lead to people being located in rural and urban areas which are prone to flooding, and the number of people vulnerable is increasing as populations rise and the lack of alternative settlement sites places increasing numbers on flood plains. Vulnerability to floods is partly a product of human-created environments, although the risks are experienced in varying degrees by different groups of people. Many areas in West, Central and Southern Africa are prone to devastating floods. Some households have relocated in flood-prone areas because they are compelled to do so given their marginal status in society, as is the case with various communities in South Africa; and others reside in flood-prone areas primarily because such areas also contain very fertile soils, such as alluvial deposits.
Table 2: Floods

2a: Top ten countries in terms of people killed or affected by the disaster

<table>
<thead>
<tr>
<th>Country/date</th>
<th>Killed</th>
<th>Country/date</th>
<th>Affected</th>
</tr>
</thead>
<tbody>
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<td>China, PR</td>
<td>238,973,000</td>
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<tr>
<td>July 1931</td>
<td></td>
<td>6 Aug. 1998</td>
<td></td>
</tr>
<tr>
<td>Guatemala</td>
<td>40,000</td>
<td>India</td>
<td>128,000,000</td>
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<tr>
<td>Oct. 1949</td>
<td></td>
<td>7 July 1993</td>
<td></td>
</tr>
<tr>
<td>Venezuela</td>
<td>30,000</td>
<td>Bangladesh</td>
<td>73,000,000</td>
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<tr>
<td>19 Dec. 1999</td>
<td></td>
<td>22 July 1987</td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td>28,700</td>
<td>Pakistan</td>
<td>12,324,024</td>
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<td>July 1974</td>
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<td>Sept. 1992</td>
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<tr>
<td>Afghanistan</td>
<td>6,345</td>
<td>Argentina</td>
<td>5,830,000</td>
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<td>June 19985</td>
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<td>May 1983</td>
<td></td>
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<tr>
<td>India</td>
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<td>Korea, DPR</td>
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<td>July 1995</td>
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<td>Algeria</td>
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<td>Colombia</td>
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<td>Nov. 1970</td>
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<tr>
<td>Somalia</td>
<td>2,311</td>
<td>Viet Nam</td>
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<tr>
<td>Iran</td>
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<td>Cambodia</td>
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2b: The world and Africa

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<th>Year</th>
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<th>Total affected</th>
<th>Africa Events</th>
<th>Killed</th>
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</tbody>
</table>

Source: EM-DAT: *The OFDA/CRED International Disaster Database*, Université catholique de Louvain, Brussels, Belgium.

* Prior to 1974, relatively few major disasters are recorded. Therefore, the data from preceding years have been grouped together for this table.

**Climatic and atmospheric disturbances:** Since the 1960s, scientists have increasingly recognized that climatic changes may be a result of natural and human-induced developments and that the resulting consequences need to be understood on both a regional and global scale. The development of various high-technology tools and instruments of tracking climatic changes and developments while furthering the understanding of climatic changes and developments has also resulted in heated debates as to the relative effects of human and natural causes. Drought is the major natural disaster in this respect and one that affects almost all of the countries in Africa. In 1998, droughts affected about 3 million people in Nigeria and 8 million people in Sudan, with 150,000 killed. Every year millions of people are affected by droughts in one way or another in some African countries. Ethiopia and countries in Southern Africa such as Zimbabwe and Zambia experience drought in what appear to be three-year cycles, with the drought at times stretching over two to three years. Indeed, almost all the countries in Southern Africa apart from South Africa are currently gravely affected by drought. Table 3 shows the occurrence of droughts in Africa over a number years. The table shows that droughts are a major cause of destitution and death in Africa and that droughts occur with regularity as well. Table 4 shows the frequency of famines and the numbers affected and killed by such famines, and table 5 shows the effects of wind storms. The occurrence of famines again demonstrates the marginal attention given to the rural economy in much of Africa. Given the regular occurrence of droughts in Africa, it is of major concern that the countries affected and the international donor community continue to treat each occurrence as an unanticipated disaster requiring extraordinary measures. It should be clear by now that preventative measures are needed to anticipate the occurrence of droughts and their devastating effects.

The major effects of drought are loss of crops and forced migrations. In the long term, communities negatively affected by drought will develop mechanisms to adapt to such occurrences if the ability to migrate is restricted. Relations between communities may deteriorate as a consequence of drought as different communities compete for resources, or as affected communities invade areas that are least affected by drought.
### Table 3: Drought

#### 3a: Top ten countries in terms of people killed or affected by the disaster

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<td>Iran, Islam Rep. 2000</td>
<td>37,000,000</td>
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<td>Brazil 1983</td>
<td>20,000,000</td>
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<tr>
<td>Sudan 1984</td>
<td>150,000</td>
<td>Bangladesh 5 July 1983</td>
<td>20,000,000</td>
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<tr>
<td>Mozambique 1985</td>
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<td>Ethiopia March 2000</td>
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<tr>
<td>Cape Verde 1946</td>
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<td>Sudan Oct. 1991</td>
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<tr>
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<tr>
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#### 3b: The world and Africa

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<th>Total affected</th>
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</table>

Source: EM-DAT: *The OFDA/CRED International Disaster Database*, Université catholique de Louvain, Brussels, Belgium.

* Prior to 1974, relatively few major disasters are recorded. Therefore, the data from preceding years have been grouped together for this table.

**Table 4: Famine**

4a: Top ten countries in terms of people killed or affected by the disaster

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<th>Country/date</th>
<th>Affected</th>
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### 4b: The world and Africa

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<th>Total killed</th>
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<th>Africa Events</th>
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Source: EM-DAT: *The OFDA/CRED International Disaster Database*, Université catholique de Louvain, Brussels, Belgium.

* Prior to 1974, relatively few major disasters are recorded. Therefore, the data from preceding years have been grouped together for this table.
Table 5: Wind storms

5a: Top ten countries in terms of people killed or affected by the disaster

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<th>Killed</th>
<th>Country/date</th>
<th>Affected</th>
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<td>China, PR</td>
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5b: The world and Africa

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Source: EM-DAT: The OFDA/CRED International Disaster Database, Université catholique de Louvain, Brussels, Belgium.

* Prior to 1974, relatively few major disasters are recorded. Therefore, the data from preceding years have been grouped together for this table.
Biological disasters: The major occurrences in this respect relate to land degradation and desertification. While there may be debate as to the irreversibility of some of the trends in the Sahel and other semi-desert areas, it is accepted that in the short term the loss of vegetation and trees does result in untold hardship for many rural households in Africa. Human interventions related to commercial farming, logging, exploitation of mineral resources and increasing concentrations of population have tended to aggravate the problem. Thus, for instance, Salati and Fobre note as follows:

The conversion of tropical rain forests in different vegetation, most notably pastures or annual crops, inevitably entails major changes in the ecosystem. There appears to be a consensus that this type of conversion changes flora, the aquatic and land fauna, and the physio-chemical and biological characteristics of the soil and surface waters. There also appears to be agreement that qualitative and quantitative changes are based in the biogeochemical cycles (Goudie, 1967, p. 265).

The activities of ranchers, miners, logging companies and settlers are seen to contribute to tropical deforestation. The biological environment is altered by a number of other activities such as human habitation and settlement; introduction of exotic species of fauna and flora which destabilize the stability of the natural environment; increased pollution; and deforestation.

A major area of contestation relates to the extent to which desertification can be said to be a major problem in Africa. Binn (in Goudie, 1967, p. 403) notes that over the years the definition of desertification has changed from "the expansion of desert-like conditions to a process of land (soil and vegetation) degradation in arid, semi-arid, and dry sub-humid areas, caused at least partly by man". Binn suggests that a distinction should be made between irreversible land degradation which should be termed desertification and short- to medium-term land degradation which is reversible in due course. He suggests that much of what is referred to as desertification is primarily land degradation, hence the observation in a United Nations Working Paper by Nelson that:

Contrary to popular belief, the extent of desertification is not at all well known... there is extremely little scientific evidence based on field research or remote sensing for the many statements on the global extent of the problem (quoted in Goudie, 1967, p. 402).

Binn concludes that:

The concept of desertification has many problems... But frequent references in the media to desertification have played an important role in raising awareness of environmental problems in the world's marginal lands and a significant interest has developed in dry lands research. The evidence seems to suggest that the idea of the Sahara desert sweeping southwards on a broad front, as Stebbing postulated in 1935 and others have argued more recently, is no longer tenable. However land degradation of varying degrees does exist and the causes and possible remedies of this problem must be understood (Binn in Goudie, 1967, p. 405).

Table 6 shows the frequency of epidemics and the numbers affected by them. Many of these epidemics are exacerbated by the natural disasters discussed above. It may be noted that while epidemics affect relatively fewer people, they tend to kill more people with consistent frequency each year. Table 7 shows another major type of natural disaster in the form of wild fires. These, however, do not tend to pose major problems for the continent as a whole, although they may have significant effects in areas so affected.
### Table 6: Epidemics

#### 6a: Top ten countries in terms of people killed or affected by the disaster

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<tr>
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<tr>
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<td>United States Jan. 1993</td>
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#### 6b: The world and Africa

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<th>Total affected</th>
<th>Africa Events</th>
<th>Killed</th>
<th>Affected</th>
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### Table 7: Wildfires

7a: Top ten countries in terms of people killed or affected by the disaster

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Source: EM-DAT: The OFDA/CRED International Disaster Database, Université catholique de Louvain, Brussels, Belgium.

* Prior to 1974, relatively few major disasters are recorded. Therefore, the data from preceding years have been grouped together for this table.
### 7b: The world and Africa

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<th>Total affected</th>
<th>Africa Events</th>
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Source: EM-DAT: *The OFDA/CRED International Disaster Database*, Université catholique de Louvain, Brussels, Belgium.

* Prior to 1974, relatively few major disasters are recorded. Therefore, the data from preceding years have been grouped together for this table.
In reflecting upon the above possible eventualities, it is important to take note of a number of considerations.

First, while many of the above trends may be occurring in many parts of Africa as a consequence of nature and human-induced factors, the degree to which some of them may be seen to constitute "disasters" may be debatable, particularly when some of them occur gradually so that their disastrous consequences may only be realized after a long lapse of time. Nevertheless, it should be accepted that for policy purposes it may be necessary to monitor and anticipate such trends so as to prevent them, even if their impact may appear marginal or miniscule initially.

Second, it is important to note that the foregoing nature-related phenomena occur within particular political economy contexts within localities, countries and regions and on a global scale. Within this context, unequal access to economic assets and livelihoods resulting from exclusionary structures of growth and development may exacerbate the impact of mild natural occurrences on vulnerable groups due to their inability to protect themselves from such occurrences or due to their being compelled to reside and earn livelihoods in areas that are vulnerable to such occurrences.

Third, the deployment of policy interventions in the form of preventative, rehabilitative and long-term restitutive measures may be disadvantageously skewed in favour of the privileged rather than those who are least endowed and most vulnerable.

Fourth, human beings interact with natural environments on the basis of various types of knowledge. Tension continues to exist between the efficacy of indigenous knowledge systems and forms of adaptive behaviour which have been well suited to cope with the known natural occurrences. New forms of knowledge and their accompanying economic activities may be least suited to the extant natural environment and may indeed disturb the stability of such an environment.

Finally, and more relevant for policy purposes perhaps, policy interventions to address what are perceived to be natural disasters are usually based on implicit or explicit assumptions and presuppositions about the desirability of maximizing given normative goals (of development, growth, efficiency or welfare, for instance). It is never clear the degree to which such goals tally with those of the presumed beneficiaries and their knowledge systems. This raises the question of the degree to which it may be desirable for the individuals affected and presumed beneficiaries to participate in the diagnosis of the problems at stake and in the formulation of necessary interventions.

Land degradation and desertification may be expected to result in a diminished capacity to carry on livelihoods based on land and agriculture and, hence, could either result in adaptive responses, coping strategies and migration of communities that are negatively affected by such events.
3. THE STRUCTURE OF THE LABOUR FORCE AND NATURE OF LIVELIHOODS IN AFRICA

In order to appreciate the impact of natural disasters on livelihoods in Africa, it is necessary to first sketch the main ways those in the labour force and their households earn their livelihoods. In many economic respects, Africa remains a lagging continent. This is particularly true with respect to the nature and status of labour as an economic agent and as an end in itself. This section reviews the structure of the labour market in Africa and the nature of recent trends related to various aspects of it, with the aim of showing that the impact of natural disasters on African communities is aggravated by two factors: first, by the fact that the majority of the households in Africa live close to or below poverty levels; and second, by the fact that the majority of the population lives in rural areas which are also the areas most vulnerable to the most common natural disasters such as droughts and floods. Both these eventualities are manifestations of the relative underdevelopment of the continent. Thus, not only are African communities vulnerable to natural disasters; they are also inadequately resourced to respond to their consequences or to deploy preventative measures to protect themselves from their future occurrence.

While the per capita incomes in East Asia are close to US$2,000 and those in South Asia just above US$1,000, in Africa per capita incomes averaged around US$600 in the 1990s. The per capita incomes shown are such that the World Bank classifies more than half of the African countries as low-income countries, another eight as low middle-income countries and the rest as upper middle-income countries. The rates of population growth are quite high, and the incidence of poverty in rural areas where the majority of the African population still resides is also high. The foregoing socio-economic indicators are directly related to developments in the labour market.

The nature of the situation in the labour market is easily captured initially by the fact that growth rates in gross domestic product have not kept pace with growth in population in many of the countries of the continent. In sub-Saharan Africa, real gross domestic product grew annually by 2.7 per cent between 1975 and 1980, by 1.1 per cent between 1980 and 1985 and by 1.1 per cent between 1985 and the present, while the rates of population growth throughout these periods were close to 3 per cent (UNDP, 1992). In North Africa, real growth in gross domestic product averaged 7.8 per cent between 1975 and 1980 as a result of the oil boom, 2.3 per cent between 1980 and 1985, and 2.1 per cent between 1985 and the most recent period, while population growth averaged about 2.5 per cent. Thus, since 1980 per capita gross domestic product has been negative for most of the countries and has only increased significantly for countries such as Botswana, Burkina Faso, Ghana, Uganda, Egypt, and Mauritius.

World Bank projections of population growth rates suggest that the rates are likely to be below 2 per cent for only Tunisia and Mauritius, above 3 per cent for about 60 per cent of the countries and between 2 per cent and 3 per cent for the rest of the countries. Such population growth rates place a greater burden on the growth of gross domestic product if per capita incomes are not to be allowed to decline. The rates of growth of the labour force closely parallel those of population growth. It may be noted that the labour-force participation rates of
women and girls are much lower than those of males and boys. The participation of males is between 80 per cent and 90 per cent except for Botswana, Gabon, Ghana and Sudan where it falls below 80 per cent. The labour-force participation rates for females are generally below 50 per cent for about 45 per cent of the North African and sub-Saharan countries with dominant Muslim populations.

As economic circumstances have deteriorated in many of the countries, labour-force participation has tended to increase primarily through females and youths who previously were not in the labour force, thereby aggravating the problems of unemployment and underemployment.

For the majority of the reasonably sized countries in sub-Saharan Africa, most of the labour force still works in agricultural pursuits. The proportion in agriculture is low in North Africa because of an inhospitable rural environment and higher levels of development, in Mauritius because of higher rates of industrialization, and in Lesotho because of the high levels of migrant labour to South Africa. In the more developed countries of North Africa, the majority of the labour force is in wage employment, with Egypt having 50 per cent in wage employment and Algeria having 70 per cent. For these countries, informal employment represented by non-wage non-agricultural employment accounts for about 15 per cent of the labour force, and subsistence agriculture represented by non-wage agriculture accounts for 11 per cent and 36 per cent of the labour force in Algeria and Egypt respectively. There is a tendency for wage employment to be concentrated in services, reflecting the inability of many African countries to generate adequate formal employment opportunities in agriculture and industry.

For sub-Saharan Africa, the majority of the labour force is in subsistence agriculture. For Nigeria, with a per capita income of about US$300, 42 per cent of the labour force is in non-wage employment in services and industry probably as part of the informal sector, while about 20 per cent are in wage employment, and the rest in subsistence agriculture. The high rate of non-wage non-agricultural employment attests to the preponderance of informal activities in Nigeria and many of the West African countries. Nevertheless, it should be underscored that the majority of the labour force in Nigeria and many such countries is engaged in non-formal activities. By contrast, on the one hand, Malawi, which is typical of the poorest countries in Africa, has about 81 per cent of its labour force engaged in subsistence agriculture with only 9 per cent in wage employment and another 10 to 11 per cent in non-wage industry and services; and, on the other hand, South Africa which is perhaps the most developed economy on the continent has 45 per cent of its labour force in wage employment, with about 25 per cent in non-wage employment in services and industry (primarily informal-sector employment) and about 30 per cent in subsistence agriculture. But again, even for this latter country, the majority of the labour force is in non-formal employment.

Generally, the proportion of the labour engaged in the dynamic part of the economy, the formal sector, is quite low in sub-Saharan Africa with the majority of the labour force engaged in low productivity pursuits in the subsistence and informal sectors. The presence of the majority of the labour force in non-wage low-productivity employment represents underemployment or disguised employment, since the activities that the labour force is engaged in are either residual in nature, as in subsistence farming, and/or survival in nature if it is in the informal sector. In both cases, the redundant labour force, i.e. that which cannot find employment in the formal wage sector, resorts to the subsistence and informal sectors for sustenance. It is for this reason that open unemployment is difficult to estimate in many
African countries. With rates of urbanization in Africa at about 5 per cent per year while employment opportunities have been stagnating if not decreasing, rates of open unemployment should be expected to be high. Where statistics are available, open unemployment tends to be quite high by international standards in South Africa where it is close to 29 per cent, Zimbabwe where it is between 15 and 20 per cent, Botswana where it is about 21 per cent, Mozambique where it is about 10 per cent and Lesotho where it is about 15 per cent (SADC, 1997). Nevertheless, the more significant labour market phenomenon in Africa is that of underemployment which afflicts the majority of the labour force.

It was noted earlier that in the face of low rates of growth in gross domestic product and high rates of growth in population the per capita incomes have generally been declining in Africa. An important aspect of this decline has been the low rate of growth or stagnation in formal-sector employment over the past decade. In turn, the low rate of growth in formal employment has been a consequence of the low rate of growth in output. Between 1965 and 1973, Africa experienced consistent positive growth rates in gross domestic product (World Bank, 1988). During this period, all of Africa experienced a weighted annual average growth rate in output of more than 4 per cent. Indeed, during this period the majority of the countries experienced growth rates that were above rates of population growth. It may be expected therefore that between 1965 and 1973 formal-sector employment was expanding in Africa. This expansion was propelled by a number of factors, among which were the growth in the public sector, the exploitation of easy import substitution which was pursued by a number of countries, favourable terms of trade, positive flows on foreign investment in many of the countries, and purposive developmental strategies in agriculture that were primarily pursued by a number of countries such as Kenya, Malawi, and Côte d’Ivoire. Stagnation ensued in the mid-1970s as a consequence of the world recession triggered by the increase in the price of oil. Subsequent attempts at economic reforms from the 1980s to the present have not been able to reverse the trend toward increasing unemployment and underemployment in many African countries.

Finally, it is important to comment on the gender aspects of employment in Africa. Women continue to be over-represented in agriculture, services and the informal sector; and they tend to be under-represented among production workers, except in Tunisia where they are over-represented, and among the professional, technical and managerial personnel. Generally women tend to be concentrated in the more vulnerable forms of employment and in the traditional forms of female employment in production and services. Interestingly, women appear to be well represented in the higher-level occupations among the North African countries and in Lesotho where the internal labour market is to a degree dominated by females, given the high rate of male migration to South Africa.

### 3.1 Earnings in the formal sector

Between 1980 and 1994, per capita incomes declined or stagnated in most African countries. The exceptions were Chad, Egypt, Mauritius, Botswana and Tunisia. In light of the sluggish trends in the growth in gross domestic product and in formal-sector employment accompanied by the tendency for unemployment and informal activities to expand, the negative overall trend in per capita incomes over the period is to be expected. The scanty data that are available (UNDP/WB, 1992) suggest that the responsiveness of wages to changes in output and employment has been quite high. Declines in growth in gross domestic product are associated with significant declines in wages in industry and agriculture.
In general, the structure of earnings has been such that the lowest wages have been in agriculture, personal services and wage labour in the informal sector. Government has generally been a trendsetter in wages, while industry has tended to have higher sectoral wages in the private sector. In countries which have lucrative export sectors such as those related to mining and oil, these sectors have tended to have relatively higher wages as well. The overall trend has been for real incomes to decline with the slow rates of economic growth and the liberalization of the economies, even if rates of inflation have been reduced drastically in many of the countries. An indication of what has been transpiring in the labour market is illustrated by the fact that in almost all of the countries for which data are available the value of minimum wages in US dollar equivalents declined or stayed the same the first half of the 1980s (UNDP/WB, 1992). Minimum wages tended to be higher than per capita gross national product (GNP) in all the countries for which data are available. The exceptions were Cameroon, Congo, Gabon and Somalia where they were lower and Malawi and Madagascar where they were equal to per capita GNP.

Finally, it needs to be mentioned with respect to earnings that gender differentials continue to persist. These differentials are primarily explained by gender differentials in the sectoral distribution of the labour force and workforce, as well as by outright discrimination in pay and earnings. The Human Development Report of 1995, for instance, shows that female wages as a percentage of male wages in non-agricultural activities were 92 per cent in Tanzania, 85 per cent in Kenya, 81 per cent in Mauritius, 78 per cent in Zambia and 73 per cent in the Central African Republic. Overall female earnings in these sectors averaged about 75 per cent of male earnings.

3.2 Earnings in non-formal sectors

As noted earlier, the majority of the labour force in Africa lives and works in non-formal activities in agriculture and urban areas. Generally, there has been a secular trend of labour moving away from rural areas to urban areas, given the high rate of rural-to-urban migration. Thus, it may be deduced that employment in subsistence farming has been declining. The situation has been exacerbated by the incidence of drought and desertification in some countries and by civil strife in many others. The subsistence sector has progressively been a deteriorating sector in economic terms and real production, and consumption per household in this sector has generally declined, except perhaps in the few countries such as Uganda and Ghana which are experiencing growth as a result of economic reforms and Mauritius where employment is shifting away from agriculture to industry and services as overall productivity has increased in the economy. The plight of the rural sector is pointedly indicated by the high incidence of poverty in these areas as many poverty studies have shown. Associated with rural poverty has been the increasing proportion of female-headed households that are also to be found in poverty. The subsistence sector has continued to remain a residual sector and, unfortunately, in Africa the majority of the labour force is still to be found there.

The next largest absorber of labour in Africa has been the unregistered micro-enterprise and small-scale sector in urban and rural areas, which may be disaggregated into the urban informal sector and the rural non-farm sector. The nature of the developments in these sectors in some of the countries in Eastern and Southern Africa has been summarized in a GEMINI report by Liedholm and Mead (1993). The majority of the small and micro enterprises (SMEs) are to be found in rural areas and are typically in the form of self-employment. Malawi, which
has a predominantly agrarian economy, has the highest rate of rural SMEs while Zimbabwe, which is relatively developed and urbanized, has the largest proportion of SMEs in urban areas.

From the above discussion, it can be deduced that African countries are highly vulnerable to natural disasters for a number of reasons. First, the structure and performance of African economies together with the composition of the labour force imply that for any internationally comparable natural disaster, African countries are likely to be more adversely affected because of their lower capacity to deploy preventative measures and because of their lower capacity at the individual, household, community and state levels to effect emergency and rehabilitative measures. Second, since almost all of the economies are highly dependent on natural resources such as agriculture and mining, any disruptions that affect these sectors will have negative repercussions on the rest of the economy in each of the countries. Third, the fact that the majority of the labour force is dependent on agriculture and resource-based non-formal economic activities at levels of production and consumption that are close to subsistence implies that natural disasters are likely to have drastic implications for livelihoods for the majority of the people in African countries. Fourth, the people most likely to be affected by natural disasters are likely to be the least represented in the decision-making concerning responses needed to address the disasters. Their views, knowledge systems and adaptive strategies are likely to feature least in such interventions by the state and its partners in the formal economy.

In light of the foregoing labour market eventualities, it may be deduced that as long as African economies continue to be underdeveloped and to register low rates of economic growth while the majority of their citizens remain steeped in non-formal economic activities of low productivity and low value, natural disasters are likely to continue to pose a major threat to livelihoods. In addition, it may also be expected that under such circumstances African countries, being generally poor, are likely to have very limited capabilities to address the impact of natural disasters and are also unlikely to devise effective ways to qualitatively diminish the impact of such disasters through deployment of preventative measures. It is in this respect that focus should be placed on both the need to effect viable strategies to promote decent productive employment as well as to deploy adequate measures to address the impact of natural disasters through preventative, emergency, rehabilitative (or reconstructive) and developmental measures.

The task of promoting decent work needs to be placed within the above context in which the majority of the labour force is involved in relatively vulnerable forms of livelihoods and the majority of households are poor in absolute and relative terms and are vulnerable to natural disasters. The Decent Work Agenda calls for increasing productive employment, protecting labour rights and labour standards, providing social protection and social safety nets and facilitating social dialogue. These are goals that need to be incorporated into any interventions to address the effects of natural disasters in Africa. While the immediate intervention needs are of an emergency and rehabilitative nature, such measures also need to be complemented by long-term developmental interventions aimed at resolving the structural vulnerability of the majority of households in Africa. The nature of ILO activities aimed at addressing the consequences of natural disasters in Africa is discussed in section 7.
4. THE IMPACT OF AND RESPONSE TO NATURAL DISASTERS

The frequency of natural disasters often results in human beings developing risk-aversion and adaptive strategies. In areas where such disasters have become a norm rather than the exception, more complex mechanisms have tended to develop, and in areas which have been crisis-free for long periods the population often tends to be less well equipped to deal with such crises. The perception and response to natural disasters depend on the degree of development, the sophistication of the anti-risk (prevention) and risk-coping (adaptive) mechanisms and the frequency of the disasters. The major natural disasters in sub-Saharan Africa are in the form of drought, floods and fires.

4.1 Drought

The most recent droughts in Africa have been quite severe, even in comparison to previous ones in terms of intensity, duration, and the number of countries affected. Drought has occurred with increasing frequency in a large number of African countries. One of the most devastating droughts in recent years occurred in Ethiopia in the early 1990s. The drought inflicted considerable damage which resulted in high levels of vulnerability to food deficit, primarily due to crop failures and precious water resources.

Recent droughts in sub-Saharan Africa have had severe social, political and economic consequences at the national level. The consequences have included the following:

- loss of human life and reduced life expectancy due to malnutrition;
- loss of livestock, an important capital asset and means of livelihood that will take years to recover;
- dislocation of societies resulting in migration to urban areas and across borders;
- increased unemployment arising from reduced or disrupted production and increasing levels of poverty due to food shortages and rising food prices;
- loss of soil and vegetative cover, which may either be irreversible or may take many years to overcome;
- reduced underground water resources and increased electricity costs associated with switches from hydroelectric to other energy sources;
- declines in foreign-exchange earnings, resulting from reduced exports, increased imports, and reduced investment for future production of goods and services. Commodity prices of some export products collapsed, resulting in an even worse economy;
- social disruption and loss of self-respect and dignity as individuals, households and countries are reduced to begging for support from the international community.
In case of famine arising from drought, the most vulnerable population consists of children, followed by the aged and youth. Female-headed households and rural populations tend to be severely affected as well. In addition to these considerations, the nature of household resources, the degree of diversification in sources of livelihoods, and whether the head of household works in the formal or non-formal sector all have a bearing on the degree of vulnerability. Generally, those with a larger number of assets and sources of livelihoods and those with access to formal-sector employment will tend to weather the impact of drought better. Within the foregoing context, ethnic, cultural and class factors may fundamentally underpin the nature of vulnerability to drought as reflected in the nature of livelihoods and the type of assets that households can access. Gender considerations become relevant in that they affect the inter- and intra-household allocation of resources in a manner that is biased against women generally.

Some illustrations of the nature and impact of drought in Africa are:

- The Central African Republic experienced a major drought in 1974 such that the Oubangi river, the major trade route, was so low that it was not navigable for about 73 days. The low rainfall negatively affected the production of hydroelectric power supplied to the capital, Bangui. The flow of water was reduced so much that Enerca, the government-owned power company, was compelled to reduce power to its industrial customers by 50 per cent. This resulted in production losses and food spoilage among concerns dependent on electric power. Enerca’s power cut-backs cost the company US$1 million per month during the drought period. In addition, all major agricultural crops were affected by the drought. The peanut crop, which was the second most important food crop after manioc, was reduced drastically while the major export crop, cotton, was reduced by about 15 per cent over the drought period. Subsistence farmers, particularly in the northern part of the country, were also gravely affected by the drought as famine ensued and as use of stagnant water sources increased vulnerability to water-borne diseases.

- Between 1983 and 1993, Ethiopia experienced a series of three major droughts which resulted in more than a million deaths, all of which was compounded by one of the longest civil wars that occurred during the same period, experimentations in the relocation of villagers and the attempt to engage in decentralized forms of governance. The adoption of economic reforms along the lines of structural adjustment programmes subsequently further weakened the ability of the State to address the ensuing famine. Food shortages resulted in about 5 million individuals, constituting about 10 per cent of the population, being classified as food insecure. The Government embarked on labour-intensive projects to sustain destitute members of the labour force while relying on enormous amounts of food aid from donor countries and NGOs for most of the support. In the process, methods of rapidly assisting the needy were developed, while food distribution was rationalized. While the intensity of drought eventually decreased, it is clear that Ethiopia remains a country quite vulnerable to drought and related famines and that developmental efforts so far have not been able to increase the ability of this country to respond to such occurrences in the future. A recent UNICEF situation report noted that about 10 million people were affected by drought in Ethiopia. Major constraints identified by UNICEF concerned the presence of poor infrastructure and lack of adequate emergency assistance with respect to health, education and water; the need to address diseases such as measles; and the need to mobilize financial support from other donors.
As a consequence of drought, a number of governments and NGOs in Africa have introduced programmes to cope with drought. In Kenya, for example, the Food-for-Work (FFW) Programme was initiated in 1989 to replace large-scale distributions of free food that had taken place annually since the 1981-82 drought. Over 2 million people depended on relief food for survival during the 1982-84 period. During the 1992 crisis, the number of people dependent on free food distribution had risen to 6 million. Public Works Programmes (PWPs) were launched by the Government in 1984 when drought relief, not job creation, was high on the political agenda. The PWPs were based on popular participation in labour-intensive activities.

The 1991-92 drought in Zimbabwe was caused by reduced rainfall which was barely 50 per cent of the average, resulting in a national harvest that was just 20 per cent of the normal. The drought significantly affected employment throughout the sub-Saharan African region, but Botswana was one of the few countries of the region which was successful in the implementation of the Drought Relief Programme (DRP) after the 1991-92 drought. The implementation of different DRPs helped the countries of sub-Saharan Africa to face the costs of the drought. Zimbabwe has also had experience in implementing PWPs. The Labour-Intensive Public Works Programmes played a major role in Zimbabwe’s food security interventions through short-term employment provision. Between 1984-85 and 1991-92, more than Z$400 million were spent by the Government on wages, generating some 47 million days of work. During the 1991-92 drought, Zimbabwe’s commercial and communal farmers lost more than 1.5 million head of cattle. Drought also affects urban areas and industry. During the mid-1980s’ drought, the construction industry in Zimbabwe was forced to reduce its activities after water reservoirs fell to critical levels. In Bulawayo, the heart of Zimbabwe’s industrial sector, companies were almost forced to pull out and relocate elsewhere because of a lack of water, and half of the small businesses folded. The provincial town of Mutare with a population of 120,000 struggled for survival as water sources in the municipality dried up, causing mines and industry to close for extended periods. Unfortunately, currently Zimbabwe is faced with a similar drought problem that has been exacerbated by the problems arising from the land redistribution exercise that is under way.

Beyond its profound economic impact, some 18 million of the 119 million people, especially in the Southern African region were directly at risk of starving to death. The similar figure for the current (2002) drought is 13 million, half of them in Zimbabwe. Caught in the ravages of the drought were 572,000 large and 2.5 million small livestock. The amount of stock that was expected to survive at the outbreak of the drought depended on its duration and the effectiveness of the relief, as well as conservation measures that were launched.

In South Africa, Swaziland and Zimbabwe, sugar cane industries almost ground to a halt because there was no water for irrigation, thereby compelling countries to release or retrench labour. In 1992, it was estimated that the 1991-92 drought caused 80,000 jobs to be lost in agriculture. It was further reported that the deepening of the drought dramatically affected the material conditions of workers on the farms in East London, South Africa.

The impact of the drought on rural communal area incomes can be seen most clearly in a comparison of changes in average household incomes for both rural and urban areas. In Namibia, an evaluation of the 1992-93 drought’s socio-economic impact on affected households shows that the mean household income fell from a total of N$706 per month in January 1992 to N$504 per month in February 1993, while the median income declined by the same proportion, from N$320 to N$240. An equally alarming
statistic is that more than 200 households – a quarter of the sample – reported earning zero income in each of these two months (Devereux et al., 1993). These households survived on food aid, remittances, borrowing, begging, or meals shared with neighbours and relatives. If these households reporting zero income are included in the calculation, the average (mean) household income for all 900 households surveyed was only NS475 in January 1992, falling to NS348 a year later. Similarly, given the fact that crop farming and husbandry represents the single most important source of income in Zimbabwe, amounting to roughly 70 per cent of the total income for all rural households, the loss of cattle during the drought directly affected household income. Household income is also affected by the lack of crop production caused by the drought. The effect of drought on land and agriculture activities among communal households has been aggravated by overgrazing. The more obvious result of overgrazing and over-cultivation is soil erosion, floods, reduction of productivity and species shifts when the rains eventually return. During a drought, overgrazing leads to further degradation of pastures and arable areas in cattle farming areas. The deterioration of grazing capacity further reduces livestock numbers. In Southern Africa, the unequal access to land, which has resulted in high concentrations of rural Africans on limited communal land, merely aggravates the problem.

• Prolonged and severe drought has been a major factor in recent famines in the Sahel. In addition to causing crop failure, lack of rain reduces availability of water and grazing, thus decimating livestock herds upon which pastoralists depend for survival. In order to minimize risks of catastrophic entitlement failure, vulnerable households strive to diversify entitlement bases, especially when entitlements are threatened.

4.1.1 Household responses to drought

The households and communities have common mechanisms to avoid or postpone catastrophe (famine). Famine occurs only when entitlements collapse completely, leaving people without access to food, therefore at risk of starving to death. Famine is characterized by excess mortality and abrupt and drastic disruption of social and economic order. These often include collapse of asset prices and large-scale "distress migration" of destitute households.

The strategies adopted by drought-affected households in Zimbabwe and Namibia in 1992-93 were characterized by:

• a shift of expenditure from non-food to food items;
• raising cash in various ways and using the resulting income to buy food; and
• the inability to smooth consumption cycles over time.

There is clear evidence, however, that the food consumption fell in spite of the various smoothing mechanisms used by the household. One indication is that during the drought households sharply reduced the frequency of meals. At the peak of the 1992 drought, almost 30 per cent of the panel households took only one meal per day and another 50 per cent only two meals. In addition, a large majority (nearly 70 per cent) of households reduced the quantity served at meals. About a third of households consumed "wild foods" in this period. These foods include edible, naturally occurring plants, fruits and seeds, as well as animals and insects.
Sometimes the households substitute cheaper foods, replace preferred staples with wild foods, and deliberately reduce the number and size of meals. It is noticed often that the pastoralists respond to drought by taking herds further in search of pasture, and this has the consequence of greatly reducing: (i) access to meat, milk and remittance income for household members who remained behind in dry season camps; (ii) both size and frequency of meals and increased reliance on wild foods, although it could take an entire day to collect enough for just one meal. Even though there is increased reliance on wild foods, studies of several communities show that efforts are made to protect intakes of pregnant and lactating women, babies and young children, but despite these efforts young children’s diets are to some extent compromised during food insecurity. Poor maternal diet during pregnancy impairs iron status and increases risk of anaemia, diminishing work productivity and increasing chances of death from post-partum haemorrhage.

Throughout the African region, households have developed specific ways of responding to drought. The preventative measures used by Kenyan households during the 1983-84 drought are similar to those used by some other African countries. These measures include:

- sharing food supplies within family networks;
- cultivating drought-resistant crops;
- reliance on off-farm employment; and
- the production of cash crops.

Measures in response to an immediate food crisis have been developed by households to enable families to overcome the effects of reduced rainfall. These strategies, however, also carried negative consequences that often were unavoidable. While assuring immediate survival, many of these strategies increased the level of poverty for the household in the long term. The responsive strategies include the following:

**Foraging for food**

Family members would forage for whatever food supplies could be found in the area. Diets were supplemented with local plants, insects, and rodents. This is a traditional response to famine in Kenya and elsewhere.

**Food reserves**

Very few families had stored food. Therefore, this option was not a central strategy for survival. Food storage needs to be assessed in light of several factors:

- the capacity for excess production;
- the need for conversion of excess production into cash;
- the physical capacity of food storage and the ability to protect against losses from food storage structures (through rodents, insects, or wetness).
**Eating seeds**

The primary alternative source of food was to eat the seed that had been set aside for planting when the rains returned. While this strategy was useful in addressing the immediate problem, it carried the danger of prolonging the hardship period. When the rains did come, there was insufficient seed to plant full crops. Since cash reserves had been spent in order to buy food, there was no money available to replace the seed.

**Purchase of food**

Various staple foods were sporadically unavailable in the market. At times, families were forced to purchase and consume more expensive and less nutritious processed foods (such as refined flour and bread) to supplement their diets. The cash necessary to purchase food was not always readily available to households in need. Since the purchase of food was often the only remaining source of food, families were forced to seek cash through means such as:

- **selling animals** (particularly goats): this had an immediate effect of flooding the market and lowering prices, as well as the long-term effect of reducing farmers stock;
- **seeking employment**: this was a difficult strategy, given the scarcity of jobs;
- **selling possessions**: this was not a very successful approach, since most families had very little to sell (selling tools or farm implements had severely negative long-term effects since doing so reduced a farmer’s ability to grow food when more favourable climatic conditions returned; furthermore, as with animals, the selling prices were low during this time, and farmers could not get a fair price for their possessions;
- **loans**: this was mainly an option only for farmers who were members of organizations such as coffee cooperatives; few farmers owned enough land to support an adequate loan. In most cases, these farmers were cultivating borrowed land; and
- **other income-generating activities**: this included an increase in the production of baskets, sisal rope, and some carpentry work (these activities, however, were also subject to the depressed economy of the area, and their impact was therefore marginal).

Other strategies included:

- **livestock sales**: the livestock sales made a significant contribution to household incomes during 1992 in many countries of the region, e.g. Namibia, Botswana, Lesotho, Zimbabwe;
- **informal transfer**: a number of households in the communal areas received financial support in the form of remittances from better-off relatives;
- **asset sales**: selling domestic assets for food is a fairly drastic response to drought, and it indicates a failure of conventional sources of food and income to meet the household’s basic subsistence needs;
- **borrowing**: during the 1991-92 drought, some households in the communal areas borrowed food and/or money to buy food (24 per cent) because of the drought.
Informal social security systems - including gift exchanges, food sharing arrangements and soft loans - are well developed in the rural area:

- **demographic adjustments**: the search for food was given, for both children and adults, as the main reason for moving in almost half the cases of temporary migration recorded. In Zimbabwe, many rural households in the southern part of the country generated income by selling wild marula nuts; they often migrate temporarily to search for those nuts in neighbouring countries;

- **consumption modification**: it is extremely difficult to quantify the extent of rationing or even the scope of change in household diets induced by the drought. This difficulty is due to the absence of the baseline data on food consumption patterns of the different countries in the region;

- **rationing**: despite the increase in food purchases and the Government's and donors’ relief efforts, survey data from communal households in Namibia indicated that household food consumption fell over the period of the drought.

In Namibia, a mixture of strategies was applied. Households raised some cash for food purchases through selling livestock, but this option became more and more problematic during 1992 as herd sizes fell and the quality of animals deteriorated. Some household assets were also sold for food – mostly radios, bicycles, some cooking pots, and occasionally motor cars. About one-quarter of communal-area households borrowed food or money for food, almost entirely from informal lending sources (friends, relatives or shopkeepers). A quarter of households in the communal areas were eating wild foods of various kinds, ranging from berries and nuts to mopani worms, during the drought. Net adult migration amounted to 70 individuals out of 830 households. The drought resulted in 53 children leaving and 35 arriving at sample households. Children either accompanied parents or were sent to wealthier relatives for the duration of the drought.

In Zambia, the 1991-92 drought resulted in the impoverishment of many rural people, forcing them to dispose of important assets such as livestock and seed stocks. The need for seeds was met in part by the PAM programme, but the prolonged shortage of legumes, together with other dietary deficiencies, was the main cause of and increase in malnutrition. Households which managed to obtain credit and retain their oxen were able to make a good recovery. However, others who received no credit will again face difficulty before the next harvest. There has been a notable increase in inequalities within village society.

However, the drought has also had some more positive effects. The way the FFW programmes were organized and the food distributed has strengthened village-level organization and has often left communities with some improved facilities. There is also now a greater awareness of the need to diversify crops and to further develop various soil conservation methods. It is to be hoped that lessons learned from this study of the effects of the 1991-92 drought will be incorporated into future development strategies, so that the impact of future droughts on poor rural people can be ameliorated.

In West Africa, adaptive responses have included simple traditional mechanisms such as changes in crop selection, mixing and matching of crops with deficient or excess water, societal organizations and supplemental activities such as fishing, hunting and gathering. West
African cultivators, for instance, never needed a major shift in technology to contain a hazard such as drought.

Confronted by natural disasters, West African pastoralists and farmers have adopted a variety of responses: changing their farming practices and grazing patterns.

During some of Africa’s worst famines, household members accepted being hungry for a prolonged period, although they possessed resources to obtain food instantly, such as money, land animals and other productive assets. However, they chose to preserve their assets and to spend their money on maintaining their animals, buying staple seeds or hiring labour in order to safeguard their future livelihood.

Farm households try to manage their risks and to protect their minimum productivity through multi- and inter-cropping, spatial dispersal of fields and use of multiple seed varieties. Pastoral households act similarly by holding herds of mixed species and preserving last-resort grazing grounds. In the case of drought, households establish and maintain networks for credit-taking or social support which are resorted to during periods of food shortages.

Other measures of adaptation here also included gathering wild food, as well as experimenting with the domestication of local wild plants such as the bush or forest yam, a wild plant whose seeds are eaten and referred to locally as papaonua. Farm plots that normally were cultivated with a single food crop were now being planted with multiple crops. This strategy not only provided safeguards against crop failure, but was ecologically sound for preventing soil erosion. In addition, many farming households turned their attention to planting drought-resistant crops such as cassava and cocoyam. In order to safeguard the eventuality of food scarcity and prolonged hunger, farmers devised additional growing seasons for the major staple crops of maize, cassava and cocoyam. Other food-processing strategies included making a local soap from the mixture of oil palm and wood ash and finding natural substitutes for sugar in honey.

It is clear from the above examples that diversification has its advantages. People do not depend completely on crops, which could fail because of inadequate rainfall, or on animal herds, which could be destroyed by disease or poor range conditions.

In anticipation of disasters, most subsistence farmers try to ensure that they have enough grain for their households before they plant cash crops. Households can also invest in animals, which can be sold in times of hardship. Others will trade their excess grain for cash or gold and hide it.

The traditional mechanisms, as stated earlier, involving seasonal movements between wet and dry lands for cultivation or livestock grazing, crop selection and mixing constitute preventative measures as well.

It should be noted that in many cases the mechanisms for coping emphasized communal rather than individual efforts. Landlords and other wealthy creditors granted cash loans to affected farming households. A series of communal forms was established. Mutual-assistance partnerships in work and labour that helped others in farming duties were formed. Capital was pooled for joint ventures and, finally, the traditional village cooperative was resurrected.
4.1.2 Community responses to drought

The first formal response of drought-affected communities is to register for assistance as a "vulnerable group" with the local drought committees. This was the case for Namibia in 1992-93. Similarly, in Lesotho, the communities responded by establishing a mechanism for identifying vulnerable households. In the course of a poverty mapping exercise, the team which assessed the village drought in Lesotho in April 1992 in many villages visited affected communities, and it was surprised at how quickly and easily destitute households were identified by the villagers who were well aware of those in their communities most affected by the drought and hence suffering the most from it.

While community solidarity in working together for community facilities has probably been stimulated, the extent of people’s willingness and ability to help the poorer members of their own community should not be exaggerated. In Zambia, for example, a suggestion made to women farmers that those who had done well in 1992-93 might be able to help those who had poor harvests was not well received.

The drought also changed attitudes of communities to crop diversification throughout sub-Saharan countries. While farming communities still appreciate the qualities of hybrid maize, particularly in conjunction with fertilizer, they are also much more conscious of the dangers of over-reliance on this one crop. In Zambia, Mozambique and Malawi, for example, the government extension officers have remarked the greater interest that these communities have shown in new varieties of legumes and roots such as cassava and sweet potato.

Farmers may become more interested in storing greater amounts of maize and other crops on their farms under a liberalized marketing system in the hope of getting higher prices later, but this will require them to invest in improved storage structures.

In Namibia, especially in the central and eastern regions, willingness on the part of the communities to be involved in the implementation of the water projects was quite marked. Most of the excavations, pipe laying and backfill of the pipeline extensions as well as of water tank construction was done by the community members. This also helped community members to start taking responsibility in the regulation of their water supply through local water committees that were subsequently formed. This showed that when communication is treated as equal to other sectors involved in socio-economic development, it can pave the way for development through popular participation. It is especially pivotal when those goals require public behavioural changes. The Information and Public Relations Unit of the National Drought Task Force (NDTF) was thus established with the above tenet in mind.

In Kenya, pastoral communities have evolved a range of response strategies that traditionally have enabled them to cope with short-duration droughts without external intervention.

4.1.3 Government responses to drought

The responses of governments of the African region to the drought situation have been undertaken through various programmes. Some of these programmes are initiated by the
governments and others by NGOs. Most of these programmes create employment in order to alleviate the effect of drought on rural communities. The Governments of Zimbabwe, Botswana, and Kenya, among others, based their interventions on large-scale programmes such as the Public Works Programmes and the Food-for-Work Programme.

Each government initiated inter-ministerial committees to oversee the Programmes and ensure collaboration between various ministries in the implementation of the interventions based on own ministerial resources. The coverage of these Programmes has been considerable.

The interventions of NGOs have generally been complementary to those of governments. In Mozambique, for instance, in response to the 1991-92 drought, which aggravated the situation of about 5 million Mozambicans who had been displaced by the war, NGOs and donors intervened through different programmes, such as the World Food Programme and the Emergency Seed and Tool Programme (PESU). In the southern and central provinces of the country, the shortage of water was as critical as the shortage of food. Both rural and urban areas were affected. In Sofala Province, the river Pungwe was running at only 1 per cent of its normal flow rate, with serious consequences for the water supply to the cities of Dondo and Beira. In rural Sofala, it was estimated that 75 per cent of the shallow water and 25 per cent of medium-depth sources were dry or drying up at the time of year when they should have been near their highest levels.

In Inhambane Province, women were walking for a whole day to their only water source. In Gaza, there were reports of people drinking visibly contaminated water from drainage ditches. The Rural Water Department (PRONAR) and UNICEF have defined a two-phased strategy for mitigating the worst effects of the drought on rural water supplies.

In phase one, the existing capacity of PRONAR was maximized to construct new water sources in the most-affected provinces and to finance the rehabilitation and deepening of shallow wells. The second phase required capital inputs for the construction of deep boreholes. DHA/UNDRO, in coordination with the water programme, proposed to supply 20 per cent of drought-affected families with containers for storage and carrying water. In urban and peri-urban areas, programmes which have been developed include drilling additional boreholes, construction of dykes and barrages for water storage.

The worst-affected areas in Zimbabwe lost many of their traditional water resources (e.g. Beitbridge where 68 per cent of the sources were dry by the end of March). The Government prepared an Emergency Water Plan to address the problem of water shortage in the immediate, short-term, and intermediate timeframe. Immediate needs included extending small urban water systems, rehabilitating existing water systems, and establishing programmes for water distribution to critical points. Short-term needs included acceleration of drilling activities using public and commercial capacity and deepening existing dry boreholes. Activities in these two groupings, which planned to increase the water supply within six months, required US$20 million. The World Bank provided US$10.2 million for procurement of equipment and supplies, leaving a residual funding requirement of US$9.8 million. The WHO, in cooperation with UNICEF and the Ministry of Health, prepared to train staff and provide drugs and equipment to meet the additional demands.

In Kenya, NGOs operated somewhat differently than the Government in managing food distribution at the field level. Despite the different administrative techniques, personnel and information were shared by NGOs and government agencies. NGO field staff consulted closely
with local chiefs, church authorities, and local government administrators in identifying beneficiaries of food aid. These consultations were later formalized when recognized famine-relief committees were established by the Government. NGOs distributed food on either a weekly or monthly basis. They reported rations ranging from a low of 133g/person/day to a high of 500g/person/day.

Most NGOs combined food assistance with other activities, such as the establishment or maintenance of clinics and distribution of medicine (50 per cent of the NGOs) and the construction of wells and water-transport networks (25 per cent). Half of the NGOs distributed food through food-for-work activities, a departure from the more traditional food handouts. The achievements of Food-for-Work Programmes are notable: 3,173 workers built 264 km of roads; 1,173 workers planted 231,860 trees; 14,014 workers participated in soil-conservation activities; 6,913 worked on churches; 1,324 workers dug 36 wells; and 4,254 workers were involved in water harvesting, latrine building, or similar community projects.

In Tanzania, the World Food Programme (WFP) had successive emergency operations extending from 1997 through 2000. These operations have provided food assistance for between 1.1 and 1.4 million beneficiaries for varying periods of time within the four-year period. From December 2000 though April 2001, the WFP provided a total of 42,424 mt of food at an estimated cost of approximately US$15.7 million. According to the agro-climatic zone in which the district is located, the period of assistance may vary. Through the emergency food relief intervention, close to 1.3 million people in the most severely affected regions will be prevented from further deterioration of their nutritional status.

The Government of Tanzania in close cooperation with the Food and Agricultural Organization (FAO) provided other assistance. The FAO will procure the seeds, monitor their distribution, evaluate the impact and consolidate the statistical data. The WFP and its NGO partner network will assist in the distribution of the seeds to the respective sites.

4.1.4 NGO and donor responses to drought

The NGOs in Africa are effective and contribute to many projects of relief and development. The brief of the Donors and Non-Governmental Organization Unit in Namibia covered the following tasks during the 1991-93 drought emergency:

• assisting the process of mobilization of donor aid for the drought relief;
• facilitating the participation of NGOs in the national DRP;
• keeping records of donations and pledges and reporting progress on these to the NDTF.

Soon after the launch of the drought appeal and in light of the tasks cited above, the various NGOs operating in Namibia were called to a meeting for the review of individual capacities that could be utilized to assist in the implementation of the DRP. The NGOs were requested to make presentations regarding their capacities in terms of manpower, transport, logistics, storage facilities, etc.

Many of the ongoing programmes assisting the drought-affected areas are scheduled to continue through successive years. In Tanzania, for example, these programmes include those of the WFP, the FAO, UNICEF and IFA. In addition, there are a variety of ongoing development programmes that support the emergency interventions in food and agriculture.
enabling relief to be targeted towards meeting the needs of the most vulnerable and ensuring their quick recovery.

- **PRSP:** The Poverty Reduction Strategy Paper (PRSP) is specifically focused on the needs of the poorest families in Tanzania. The current PRSP recognizes that there is not enough being done for the rural poor and was determined that by June 2001 a new Rural Development Strategy (RDS) will be in place. Approximately US$200 million per annum in additional government spending should be possible under the Highly Indebted Poor Countries Initiative (HIPC), which should be allocated under the priorities established in the PRSP.

- **WFP School Feeding Programme:** The WFP has started several projects in the drought-prone areas which aim at reducing the vulnerability of the poorest farming households to both economic and climatic shocks. Among them, the WFP-assisted School Feeding Programme Project 6113 "Support to primary education in drought-prone and pastoralists areas" currently assists 80,000 primary-school children in the Dodoma, Singida and Arusha regions in Tanzania. As well as serving to enhance attendance levels and the cognitive learning capacities of the pupils, the consumption of the children is effectively an income transfer to the most marginal farming families.

- **WFP Support to Food Security:** In addition, the WFP has recently extended its Project "Support to food security in drought-prone areas through self-help schemes" for a further two years in order to assist the households to preserve and rebuild their productive assets which pertain directly to their food security. The Project’s food-for-work activities include the rehabilitation and construction of the irrigation and drinking water scheme, reforestation, gully plugging and upgrading of feeder roads. The Project also seeks to address some of the structural problems of poverty by providing related training seminars which focus on key issues surrounding gender awareness, market access and sustainable community management of the assets created. At least 50 per cent of project beneficiaries are women.

- **IFAD–PIDP:** Earlier this year, the Participatory Irrigation Development Programme (PIDP) was launched using a loan of US$17 million secured from the International Fund for Agricultural Development (IFAD). This Programme is targeting 12 districts in the central and northern regions which have repeatedly required emergency food assistance in recent years. The WFP is also supporting this Programme through its NGO partners and plans to expand its assistance in its country programme phase (2002-06).

- **CSPD:** UNICEF has been supporting the Child Survival, Protection and Development (CSPD) Programme in 55 districts in Tanzania with a total investment of over US$24 million in the year 2000. Ten of these districts are affected by drought.

### 4.2 Conclusion

Africa has been experiencing a number of natural disasters, among which drought and floods are the most frequent and disastrous. Such natural disasters have been aggravated by political conflicts at the national level and also spilling across borders. The impact of natural disasters has been such that individuals, households, communities, governments and donors
have all mobilized to respond to them. Given the frequency and intensity of natural disasters in Africa, it is of concern that very little has been done to effect preventative measures that would protect the livelihoods of those generally affected from year to year.

Generally, as can be seen from the foregoing review, natural disasters are treated as emergencies for which immediate and rehabilitative measures are often the most commonly implemented. Both governments and households appear always ill prepared for each eventuality and, once the impact of the disaster dissipates, life generally returns to normal without adequate anticipatory measures being embarked upon to protect livelihoods in the long term. Thus, for instance, Southern Africa is gripped in another drought whose impact on households continues to be not too different from what it has been in the past. Neither anticipatory, warning nor preventative measures appear to have been in place to ameliorate the impact of the drought.

At the heart of the problem is the inability of African countries to effect economic development which would not only lift the broader population out of vulnerability to natural disasters, but which would also equip governments to devote more resources to undertaking preventative measures of a long-term nature. There is thus a need to focus on long-term measures of rehabilitation and prevention which are directly linked to developmental imperatives.

The next sections review the experiences of Mozambique and South Africa with natural disasters. As will be seen, although both countries appear to have been able in recent years to adequately mobilize their domestic and external resources and agents to address the emergency and rehabilitative needs resulting from recent natural disasters, they are far from putting into place long-term preventative measures which would protect the livelihoods on segments of the population most vulnerable to natural disasters such as drought.
5. NATURAL DISASTERS AND POLICY RESPONSES IN MOZAMBIQUE: A CASE STUDY

The history of Mozambique reveals that the country is exposed to a diversity of factors and hazards that cause cyclical disasters. So far, the following causes of disasters were observed with certain regularity: floods, cyclones, drought, fires, pests, plagues and seismic factors. This high vulnerability of Mozambique is related to its specific geographical and climatic conditions.

With a population estimated at 16.9 million inhabitants and with a growth rate of 2.5 per cent, Mozambique has a total area of 784,090 km$^2$ of which 666 km$^2$ is marine. It is located on the eastern coast of Southern Africa and covered with savannah and secondary forests (70 per cent). About 45 per cent of the land has a potential for agricultural cultivation, and 60 per cent is classified as domesticated land (crop and permanent pasturelands).

About two-thirds of the Mozambican population lives in the coastal zone for security reasons. During the war, most coastal zones were relatively safe. Other reasons for which people are attracted to the coastal zone are related to easy access to food and employment facilities. Most of the infrastructure such as large cities, tourism, industry, commerce, and harbours are located in the coastal zone. The average population density in the coastal area is about 120 people per km$^2$, against an overall population density of two people per km$^2$ (MICOA, 2001, p.6).

With more than 100 rivers draining about 208 km$^3$ of water rich in nutrients into the coastal waters, about 80 per cent of this water enters the ocean from Sofala Bank, central Mozambique. The major rivers are Rovuma, Lurio and Zambezi in the north; Pungue, Buzi, Gorongosa and Save in the centre; and Limpopo, Incomati and Maputo in the south. Zambezi river, the largest river in eastern Africa, alone contributes to 67 per cent of the total river discharge in the whole country (Seatre and Jorge da Silva, 1982, in MICOA, 2001, p.3).

More than 50 per cent of Mozambican territory is part of international river basins from south to north: the Maputo, Umbeluzi, Incomati, Limpopo, Save, Buzi, Pungue, Zambezi and Rovuma. With the exception of the Rovuma river that forms the border between Mozambique and Tanzania, all rivers have their flood plains inside Mozambique. The largest basins are the Zambezi (1,200,000 km$^2$) and the Limpopo (412,000 km$^2$), and the smallest is the Umbeluzi (5, 600 km$^2$) (Vaz, 2000, p.1).

The climatic conditions of Mozambique indicate that the country is prone to cyclical natural disasters which result in substantial environmental and human health problems, as well as in profound socio-economic and political concerns which are far too predictable. This is associated with global climatic changes which have great importance for human adaptation to reduce the potential negative impact of climatic changes that arise from time to time.

Global climate change is in most cases referred to as the increase in the atmospheric temperature due to an increase in the CO$_2$ content in the atmosphere. The immediate consequence of the increase of CO$_2$ in the atmosphere is the greenhouse effect that results in an increase in the atmospheric temperature and consequently in global warming (MICOA, 2001,
p.2). Jain points out that the natural greenhouse effect arises due to some of the trace gases, called the greenhouse gases, which are nearly transparent to solar radiation but strongly absorb the infrared radiation emitted by the earth, giving the earth additional warming. In his view, concentrations of the greenhouse gases have been increasing substantially in the atmosphere, since industrialization, causing the much dreaded "enhanced greenhouse effect". For instance, carbon dioxide alone has contributed over 50 per cent to the "enhanced greenhouse effect" (Jain, 1991, p.2).

The increase in greenhouse gases into the atmosphere has become so high that it alters the natural balance of the atmosphere. Some sources point to the 0.05 C temperature rate increase per decade observed in Southern Africa during this century. Therefore, an increase in temperature could lead to an increase in evapotranspiration losses from crop fields and then increase in crop water requirements under a situation that is already experiencing a moisture deficit of about 35 to 40 per cent in some parts of the country (MICOA, 2001, p.34). In countries like Mozambique, where poverty is combined with a natural environment highly vulnerable to natural disasters, the latter can have severe consequences.

Most recently, floods have been the major cause of natural damage. According to Vaz, with the exception of the Rovuma, major floods have been recorded in all the international river basins shared by Mozambique. However, for the national river basins, only the Licungo has experienced floods of some importance.


Major issues associated with floods in Mozambique are categorized by MICOA (2000, p.3) as follows: (i) pollution of the water and coastal marine ecosystem, (ii) loss of critical habitats (mangroves, coral, the seabed, wetlands); (iii) loss of biodiversity, (iv) threat to endangered species; and (v) threat of the movement of landmines.

5.1 Socio-economic profile and vulnerability to natural disasters

Although Mozambique’s geographical position is located on the seaside, offering harbour and transportation facilities to the neighbouring countries and resource potential with a high variety of natural resources including large fertile land, several forest and wildlife resources, minerals, water resources and a large potential for hydroelectric power production, marine and coastal resources offering huge opportunities for rapid social and economic development, it is among the eight poorest countries in the world. Approximately 80 per cent of all Mozambicans live in rural areas, and about two-thirds of all rural citizens live in absolute poverty. Agriculture, the main activity in rural areas, accounts for about 32 per cent of the GDP, employs about 70 per cent of the labour force and accounts for 40 per cent of exports.
The estimated poverty index is 17 per cent. If we look at the relationship of expenses versus income, the average monthly expenses per household in the country account for MT 735,521, the equivalent to MT 151,948 per capita, while the average income per household was MT 598,530, the equivalent to MT 123,647 per capita (INE-IAF, 1998). This indicates that there is a deficit of almost MT 29,000 per capita. Although it should not be the real scenario because of possible sub-valorization of incomes, it shows that the levels of income are low and negatively affect the living standards of many households.

Mozambique is a country that shares all its main rivers with other countries and is the lowest riparian. The regime of these rivers is characterized as torrential, with high flows during the wet season from November to March and relatively low flows in the dry season from April to October. On average, 60 to 80 per cent of the mean annual flow occurs in a few months of the year. The river is highly restricted in the upstream countries; hence, the flow observed in Mozambique is about 1.5 times lower than that observed in the upper riparian countries (MICOA, 2001, p.8). Therefore, an international water resource management strategy is important.

In Mozambique water resource management can be conceived broadly in a context governed mainly by three of Gleik’s categories, namely control of water resources, political tool and development disputes. It is on this premise that any political economy of water resources in Mozambique should be perceived as embedded in a critical scenario of water scarcity that is well emphasized by the UNDP Report (Smith, 1999). "Potential ‘water wars’ are likely in areas where rivers and lakes are shared by more than one country" and "the possible flash points are the Nile, Niger, Volta and Zambezi basins".

In Mozambique, water reforms are under way and the proposed Water Resource Management (WRM) Strategy Framework is almost conceptualized and is being funded by the World Bank. It may be argued that this document follows in the last of Gleik’s categories indicated above for Mozambique. The WRM paper says at the beginning:

Mozambique’s water resources play an important role in the overall socio-economic development of the country. These resources may seem plentiful when taken as a sum total for the whole country. However, there is a significant difference across the country in the place and period for when water is available on a seasonal and annual basis. Conflicting demands for water have been experienced in certain areas that have been exacerbated during drought periods. The competition over access to water resources will continue to increase with further social and economic development. Mozambique’s development goals include comprehensive plans related to development of water resources to promote industrial production projects and enhance agriculture development, hydropower production, water supply and sanitation services and other sectors. However, the development interventions and related policies have revealed needs for strengthening of integrated water resources management and planning at national and local level (Damhaug, 2001, p.8).

The above characterizations point to the linkages that water resource management encompasses in a context of national development strategies. The first point depends on ownership and the capacity-building process: "The success and sustainability of a strategy development of this nature will heavily depend on the nation’s commitment to, and ownership of, the proposed reform and capacity-building process" and on an appropriate public and political environment. "A fundamental question concerning the desired level of integrated water resource management in Mozambique is whether there is public and political will to
support a strong regulatory body to manage and police the nation’s water resources across sector interests" (Damhaug, 2001, p.10).

The second point relies on civil society participation " …It is essential to build awareness and encourage water resource responsibility and management. At watershed and local level, there has been limited community involvement in WRM activities. The strategy sets out to propose immediate and long-term institutional arrangements for management of watersheds at the community level building upon traditional practices and institutions and integrating them into basin-wide approaches" (Damhaug, 2001, p.11).

Most people live in poverty and rely on subsistence farming that is highly dependent on rainfall which is often erratic and unpredictable. The Mozambican economy is based on natural resources, which are highly dependent on the state of the environment. The two main sectors are fisheries and agriculture. In 1997, fisheries and agriculture each contributed 40 per cent to total export earnings, totalling 80 per cent, underscoring the importance of environmental protection in the country.

Agriculture is the most important sector and is mostly carried out by peasant farmers who cultivate 92 per cent of the total cropland. Commercial farming occupies only 250,000 hectares, 8 per cent of the total land cultivated. Though the contribution of agriculture to GDP is 30 per cent, an estimated 80 per cent of the country’s population gains its livelihood from the sector, emphasizing the importance of agriculture to the nation (MICOA, 2000, p.2).

Formal forest exploitation consists mainly of round wood for industrial purposes and for export and is controlled by the Government. This type of exploitation is selective, and it targets economically valuable species and fuel wood for industrial purposes, e.g. the production of tea, tobacco, sugar, textiles and bakeries. The majority of the rural population and semi-urban areas practise informal exploitation. The forest products are mostly for immediate consumption or subsistence of the population, and they are seldom controlled. This includes exploitation of fuel wood, production of charcoal, and building materials (MICOA, 2001, p.42).

The concentration of populations in particular areas, such as around the main cities and along development corridors, has increased forest degradation in these areas. For example, the average deforestation rate in the country is estimated to be 4 per cent, but in Maputo and Nampula it was estimated to be 20 per cent and 10 per cent respectively (MICOA, 2001, p.43).

Fires are normally used in the country in field preparation for cultivation and hunting. Generally, such fires are largely uncontrolled, resulting in the destruction of large areas of natural forests as well as losses in the forest growth. According to MICOA (2001, pp.43-44), about 35 to 45 per cent of the total area in the country is vulnerable to uncontrolled seasonal fires.

Finally, and concurring with Jain (1991, p.3), the climate change induced by the man-made greenhouse effect has emerged as a major environmental challenge facing mankind today, including countries such as Mozambique. While the existence of the natural greenhouse effect due to the presence of some of the trace gases in the atmosphere has played an important role in keeping the climate of the earth habitable, it is the increase in this effect - "enhanced greenhouse effect" - resulting from the release of the greenhouse gases in the atmosphere due
to increased human activities that is causing the present concern. The "enhanced greenhouse
effect" or simply "greenhouse effect" has the potential to cause unprecedented climate change
on the earth to cause widespread destruction, catastrophe and changes on our planet.

5.2 Frequency and nature of recent natural disasters
in Mozambique

Many natural disasters have been invading Mozambique as a result of a
combination of several factors, mainly the global climate change, and are also exacerbated by
anthropogenic factors. Cyclones, floods drought, fires, pests, plagues and seismic events have
being recorded as the major causes of natural disasters that result immediately in mourning,
sorrow and despair with a long effect on peoples' living conditions, particularly the most
vulnerable, and consequently worsening the absolute poverty and slowing down the country’s
economic development.

The recent natural disasters discussed here are just examples of some of the
natural disasters in Mozambique.

5.2.1 Floods and cyclones

Floods

Historical data of the rainfall period show that floods have affected mainly the region
along the vales, rivers, lower zones and inconsistent drainage places (see table 8). The rainfall
period occurs from October to March/April. However, according to historical data, the
situation indicates that concentration of floods and cyclones from January to March becomes a
period of major risks of the occurrence of disasters, although there are data indicating cyclones
occurred in other seasons.

The major areas of floods are the following districts: Maputo: Matutuine, Boane,
Moamba, Marracuene, Manhica; Gaza: Xai-Xai, Chokwe, Chicualacualal, Mabalane,
Massingir, Chibuto, Massangena; Inhambane: Inharrime, Govuro; Sofala: Machanga, Buzi,
Nhamatanda, Dondo, Marromeu, Caia and Chomba; Manica: Machaze, Tambara, Mossurize,
Sussundenga; Tete: Mutarara, Mago, Zumbo, Cahora Bassa, Chiuta; Zambezia: Chinde,
Morrumbala, Mopeia, Maganja da Costa; Cabo Delgado: Pemba Metuge, Macomia and Palma
(GOM, 2000, pp.5-6).

Cyclones

The main zones of incidences of cyclones are located on the coasts of national territory;
however, some cyclones have occurred in parts of interior zones. Since 1946, about 32 tropical
depressions and cyclones have been registered.
The major incidents were observed in the following districts: Cabo Delgado: Pemba, Mecufi, Montepuez, Mocimboa da Praia, Palma and Mueda; Niassa: Cuamba, Maniamba and Maua; Nampula: Lumbo, Mossuril, Angoche, Membra, Moma, Ilha de Mocambique, Nampula and Nacala; Zambezia: Chinde, Pebane, Quelimane and Zambezi vale; Tete: South of Tete, Ulongoe and Furancungo; Sofala: North of Beira city, Beira and Buzi; Manica: Chimoio; Inhambane: Inhambane, Vilanculos and Massinga; Gaza: Limpopo vale, Xai-Xai, Macia, Chokwe; Maputo: Magude, Manhica and Namaacha (GOM, 2000, p. 5).

Droughts

In 1982-83, the country suffered from the worst drought in 50 years. Many people died from starvation, and there was a mass exodus of refugees to Zimbabwe. Droughts and famine in 1980, 1983, 1985 and 1992 resulted in 100,000 deaths and affected over 17 million people (MICOA, UNEP and UNCHS, 2000, pp.2/17).

Landslide of Tumbine Mountain

A landslide occurred on 19 January 1998 on Tumbine Mountain in Milange district, Zambezi Province. The mountain, with almost circular configuration and 8 km in diameter, has its topside located at 1,600 m of altitude.

The study and report (MICOA, 1998) on this event indicated that the landslide on Tumbine Mountain occurred as a result of chemical meteorization of the rocks, torrential rains, soil saturation, excessive elevation of the water level, crashing/crumbling of the ceiling of the subterranean water courses, dropping of block and flint stone, and strong torrents/floods of mud and water. An additional and large contribution to this occurrence was from agricultural activity, as well as hunting, fire, and the cutting of plants for construction, fuel wood, and charcoal at the top of the mountain and on its slopes.

As a result of the landslide, about 1,000 people died, more than 95 disappeared, and several were injured. More than 4,000 people lost their homes, and 1,000 hectares corresponding to 1,722 farms were destroyed.

The study (MICOA, 1998) concluded that the catastrophe constituted an environmental disaster and resulted from bad management of natural resources, mainly vegetation and soils.

Fire in Monapo district

In September 1999, a fire occurred in Monapo district, Nampula Province. The National Institute of Disaster Management (INGC) report indicates the cause of fire being associated with sparks from a kitchen. It originated from the fire in a house where there were only children. The fire was hastened by heavy winds at the time. The response from the firefighters was not enough to extinguish the fire due to obstruction of the access into the interior of the quarter. As a result, 316 houses were destroyed affecting 1,700 people. Fortunately, no one died.
**Plague and pest**

During the 1977 floods in Sofala Province, a plague of red grasshoppers invaded some areas of Dondo and Nhamatanda district devastating large cultivated areas. Because it happened simultaneously with the floods, it became important to separate the damage from floods and from plague. The combination of these factors worsened the disaster.

**5.3 Impact on livelihoods**

The impact of a natural disaster is extensive and practically immeasurable. Natural disasters result in deaths, displacement of people, destruction of houses and other infrastructure, and isolation of vast areas of the country due to destruction of vital social and economic infrastructure, including bridges, roads, power stations, water supply systems, hospitals, and schools. They contribute to the retardation of development in the affected regions. Indeed, most people who had struggled to rebuild their lives after a devastating civil war were suddenly faced with a new challenge.

**Table 8: 1997 floods - Damage by district**

<table>
<thead>
<tr>
<th>Damage Caused</th>
<th>Dondo (%)</th>
<th>Nhamatanda (%)</th>
<th>Buzi (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>House destroyed</td>
<td>61</td>
<td>50</td>
<td>72</td>
</tr>
<tr>
<td>Farm flooded</td>
<td>94</td>
<td>88.8</td>
<td>72</td>
</tr>
<tr>
<td>Animals lost</td>
<td>27.7</td>
<td>55.5</td>
<td>88.8</td>
</tr>
</tbody>
</table>


The above table shows that agricultural activities were the most affected, followed by homes. It is clear that agricultural activity is more sensitive to floods and that the main cultivation affected is maize, rice, beans, sweet potato, and manioc.

Table 9 (see next page) compares affected populations with poverty in selected areas.
Table 9: Population affected by 2000 floods and poverty index - Mozambique

<table>
<thead>
<tr>
<th>Province</th>
<th>Total</th>
<th>Affected</th>
<th>In need</th>
<th>Displaced</th>
<th>Dead</th>
<th>Disappeared</th>
<th>Poverty index (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maputo City</td>
<td>1,018,934</td>
<td>50,500</td>
<td>50,500</td>
<td>8,364</td>
<td></td>
<td></td>
<td>47.48</td>
</tr>
<tr>
<td>Matola City</td>
<td>433,138</td>
<td>420,000</td>
<td>20,000</td>
<td>2,721</td>
<td></td>
<td></td>
<td>65.60</td>
</tr>
<tr>
<td>Maputo Province</td>
<td>400,813</td>
<td>400,813</td>
<td>179,845</td>
<td>89,750</td>
<td>37</td>
<td>15</td>
<td>65.6</td>
</tr>
<tr>
<td>Gaza Province</td>
<td>1,030,719</td>
<td>742,863</td>
<td>398,160</td>
<td>252,025</td>
<td>439</td>
<td>80</td>
<td>64.7</td>
</tr>
<tr>
<td>Inhambane</td>
<td>444,668</td>
<td>137,583</td>
<td>101,368</td>
<td>26,400</td>
<td>96</td>
<td></td>
<td>82.6</td>
</tr>
<tr>
<td>Sofala Province</td>
<td>257,908</td>
<td>196,081</td>
<td>197,081</td>
<td>95,200</td>
<td>101</td>
<td></td>
<td>87.9</td>
</tr>
<tr>
<td>Manica Province</td>
<td>316,045</td>
<td>62,000</td>
<td>62,000</td>
<td>16,857</td>
<td>26</td>
<td></td>
<td>62.6</td>
</tr>
<tr>
<td>Tete Province</td>
<td>1,156,627</td>
<td>25,500</td>
<td>25,500</td>
<td></td>
<td></td>
<td></td>
<td>82.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5,158,852</td>
<td>2,035,300</td>
<td>1,034,454</td>
<td>491,317</td>
<td>699</td>
<td>95</td>
<td></td>
</tr>
</tbody>
</table>


The estimated costs of the flooding are estimated as follows:

Table 10: Direct and indirect costs of flooding ($ millions)

<table>
<thead>
<tr>
<th>Description</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss in asset patrimony (direct costs)</td>
<td>273</td>
</tr>
<tr>
<td>Reduction in production (including multiplier effect)</td>
<td>247</td>
</tr>
<tr>
<td>Reduction in exports</td>
<td>48</td>
</tr>
<tr>
<td>Increase in imports for consumption</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>599</td>
</tr>
</tbody>
</table>
The above tables are just limited illustrations of the different scenarios the country has had to face in the last two years as a result of floods. Hence, Mozambique’s limited resources were thrown into the rescue and relief efforts. Many of the major transport routes were cut, and economic activity was reduced dramatically. Rising prices and food shortages became the order of the day. Hundreds of thousands of people sought food and shelter in hurriedly constructed resettlement camps.

The resultant damage requiring repairs is far more extensive than that resulting from a normal rainy season. For instance, unpaved roads suffered various types of damage:

- major erosion gullies due to the passage of large volumes across or along roads;
- roads flooded and impassable;
- softening of the road surface due to high groundwater levels;
- washouts of culverts and small bridges;
- loss of the gravel surface due to the exceptionally heavy rain;
- deposition of large volumes of eroded material on the road (Muonima and Markland, 2000, p.1).

Due to the 2000 flooding, Mozambique has lost over 10 per cent of its total productive fields, as well as the crops in the field, and about 40,000 head of cattle were washed away.

The damage caused by floods, many only recently rehabilitated, was extensive and continues to be an inconvenience to the daily lives of many people.

5.4 The institutional framework and interventions

To address the issues related to disaster management, the Government of Mozambique created the National Institute of Disaster Management (INGC) under the Ministry of Foreign Affairs and Cooperation. The creation of this state organ is a corollary of government intervention experienced in disaster management with several origins. The first organ responsible for disaster management was the National Directorate of Calamities. At that time, this institution was solely responsible for all intervention programmes. Indeed, it was more an operational institution for emergency. It had its great peak of activities during and just after the war period, helping people’s rescue and resettlement.

Following the experience during the time that the INGC was conceived to be a coordination institution rather than an operational institution, it was understood that the role players should be from the market, private sector, agencies, NGOs and civil society in general.

In order to understand the nature and role of the INGC today, it is important to understand an institution that has been growing from the beginning with lack of experience in terms of management in its broad sense, although with long experience in operational interventions. Thus, the challenge faced now by the INGC is to transform it into an independent, autonomous institution through legislation. It has to adopt an interventionist approach in collaboration with other stakeholders, related government departments, international agencies, and NGOs, acting as coordinating institution with an important role in preventative, emergency and rehabilitative measures. Human resources capability and transformation for the new phase appear to be some of the main challenges with know-how and
skills. Another challenge appears to be more on the need for decentralization within the country. Decentralization means to be not only spreading representatives of the institution across the country but also using their capability to intervene in a very clear and sustainable manner at the local level.

The strategy of the Government of Mozambique focuses, primarily through the INGC, on contingency planning to enable anticipatory/preventative measures to take place.

According to the Government, the main objectives of the contingency plans in case of flood disaster and cyclones are:

- localization of the risk zones, preparation of the of contingency actions, and advising the population about the occurrence of disaster;
- identification of the routes for evacuation and accommodation;
- inventory of the existing means and their strategic localization; and
- determination of additional resources for response and mitigation.

The last objective will enable the mobilization of the financial and material resources, in particular the human capital, to intervene in the rescue of the population affected and the restoration and normality of life thereafter. In short, the plan reflects what should be done before, during and after the occurrence of disaster (GOM, 2000, p.2).

It is in this context that it is argued that there was success in the interventions that have enabled several activities to be performed. For instance, it is said that the population affected, suggested to be 676,713 people among displaced and isolated, benefited from the distribution according to a criterion of the cultivated area.

On the other hand, following the catastrophic scenario the Government reacted immediately involving:

- state officers and staff, the army, air force, navy and fire brigades;
- a support fund for relief operations, rescue and humanitarian assistance in about MT 23,248 million;
- reinforcement of preliminary/prior warnings of flood threats;
- creation of 106 centres for reception of displaced people;
- mobilization of all resources on health for epidemic prevention and vigilance.

It is also argued that because of the better implementation of the process by the Government, it was possible to motivate foreign involvement for rescue and other assistance consisting of more than 2,668 foreigners, of which seven were ministers, four secretaries of state, three ambassadors, 231 medical doctors, 92 journalists, 86 pilots, 1,046 military and 850 marines, among others (GOMBF, 2000, p.16).
The following tables present the level of assistance offered:

Table 11: Population assisted after the 2001 flood

<table>
<thead>
<tr>
<th>PROVINCE</th>
<th>TOTAL (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maputo City</td>
<td>1</td>
</tr>
<tr>
<td>Matola City</td>
<td>1</td>
</tr>
<tr>
<td>Maputo Province</td>
<td>25</td>
</tr>
<tr>
<td>Gaza Province</td>
<td>46</td>
</tr>
<tr>
<td>Inhambane Province</td>
<td>6</td>
</tr>
<tr>
<td>Sofala Province</td>
<td>17</td>
</tr>
<tr>
<td>Manica Province</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: (GOMBF, 2000, p.14).

Table 12: Accommodation centres and number of displaced by provinces

<table>
<thead>
<tr>
<th>Province</th>
<th>Total population</th>
<th>Accommodation centre</th>
<th>Displaced (number)</th>
<th>Household (number)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maputo City</td>
<td>1,018,934</td>
<td>7</td>
<td>7,913</td>
<td>1,583</td>
<td>0.78</td>
</tr>
<tr>
<td>Matola City</td>
<td>433,138</td>
<td>7</td>
<td>2,661</td>
<td>532</td>
<td>0.50</td>
</tr>
<tr>
<td>Maputo Province</td>
<td>400,813</td>
<td>30</td>
<td>82,850</td>
<td>16,570</td>
<td>20.67</td>
</tr>
<tr>
<td>Gaza Province</td>
<td>1,030,719</td>
<td>49</td>
<td>252,025</td>
<td>50,405</td>
<td>24.45</td>
</tr>
<tr>
<td>Inhambane Province</td>
<td>444,668</td>
<td>8</td>
<td>6,910</td>
<td>1,382</td>
<td>1.55</td>
</tr>
<tr>
<td>Sofala Province</td>
<td>257,908</td>
<td>2</td>
<td>44,941</td>
<td>8,988</td>
<td>17.43</td>
</tr>
<tr>
<td>Manica Province</td>
<td>316,045</td>
<td>3</td>
<td>14,545</td>
<td>2,909</td>
<td>4.60</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4,002,225</td>
<td>106</td>
<td>411,845</td>
<td>82,369</td>
<td>10.29</td>
</tr>
</tbody>
</table>


From the above table, it is clear that only 11 per cent of the total population in affected areas moved but as 30,000 km² of the national surface were completely inundated, it was obvious that the situation in the country after the floods, particularly in the southern zone, was very serious.

In the earlier stages, the Government oriented its efforts to guarantee food, safe water, clothes, blankets, medication and other materials.
Table 13: Number of families, places of resettlement, plots and houses built

<table>
<thead>
<tr>
<th>Description</th>
<th>Resettlement places</th>
<th>Potential needs in plots</th>
<th>Availability of plots</th>
<th>Houses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maputo City</td>
<td>3</td>
<td>1,780</td>
<td>1,780</td>
<td>1,780</td>
</tr>
<tr>
<td>Matola City</td>
<td>5</td>
<td>1,618</td>
<td>1,618</td>
<td>1,618</td>
</tr>
<tr>
<td>Maputo Province</td>
<td>14</td>
<td>4,727</td>
<td>3,266</td>
<td>3,887</td>
</tr>
<tr>
<td>Gaza Province</td>
<td>30</td>
<td>16,844</td>
<td>8,726</td>
<td>4,832</td>
</tr>
<tr>
<td>Inhambane Province</td>
<td>8</td>
<td>1,563</td>
<td>653</td>
<td>2,937</td>
</tr>
<tr>
<td>Sofala Province</td>
<td>9</td>
<td>1,242</td>
<td>1,140</td>
<td>1,050</td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td>27,774</td>
<td>17,183</td>
<td>16,104</td>
</tr>
</tbody>
</table>


From the 27,774 families that needed support in house construction by August 2000, about 62 per cent had plots made available and 36 per cent obtained access to houses built in response to the event (GOMBF, 2000, p.30).

5.5 The roads case – Labour-based contribution to recovery

One of the priority needs in the country following the flood disaster was related to road accessibility, as most roads had become inaccessible. In general, the National Roads Administration (ANE) had the task of re-establishing access to many people isolated by the floods. Therefore, the main roads serving the flood-affected areas were the priority for reconnaissance and initial repair work. It was difficult to assess the condition of many of the tertiary roads that had been damaged. Immediately following the rains, surveys by helicopter or light aircraft were the only means to get an overall picture of what was happening (Muonima and Markland, 2000, p.1).

Following the survey, it was possible to present some estimates a week after the floods for the repair of tertiary roads in the affected provinces. The total account for repairing came to nearly US$8.5 million for 3,800 km of damaged road. Two international agencies, the DFID and SIDA, expressed interest in financing emergency repair works on tertiary roads. In addition, some NGOs, such as Save the Children, World Vision and Oxfam, expanded their emergency relief activities to involve road repairs.

Apart from the formal action of road repair, there were several informal initiatives on the ground to cope with road accessibility. Muonima and Markland (2000, p.2) point to an impressive example of the peoples’ desire to overcome their problems and return to normality, so efforts were made by transporters, shopkeepers and communities in general to work together to re-establish at least the minimum of access to permit supplies to be delivered to those affected by floods. They also indicate that on a more formal level, the ECMEPs, state-owned contractors, worked seven days a week to repair major breaches in main roads. Emergency
repair contracts were hastily prepared without the need to tender, and this flexibility allowed much to be achieved.

In order to drive for a better outcome of the operation, a repair strategy was set up following the criteria according to Muonima and Markland (2000, pp.3-4):

- restoration of basic access to isolated areas was a top priority;
- creation of employment for people in the flood-affected areas was important;
- emergency repairs should be completed to sufficient quality to survive the next year’s rains, until longer-term repairs could be put into place;
- permanent repairs should be carried out to drainage structures;
- opportunities should be provided for the Mozambican private sector to be involved in the works, whilst recognizing its limited experience in labour-based methods;
- the majority of experience of labour-based work in the regions affected by the floods lay with the state-owned Feeder Road Programme contractors, the ECMEPs.

Following this strategy, four activities were identified: general repairs; transport of filling material; spreading and compaction of imported filling material; and construction of culverts.

For implementation, the project benefited from previous years' experiences in repairing damage after extensive flooding in Inhambane Province. It was decided that a combination of mechanical and labour-based techniques would be used. Therefore, soil would be hauled and stockpiled by equipment-intensive methods, then spread and compacted using labour-based methods. This technique would be used in the many areas where it was necessary to raise the road surface or fill breaches.

However, although focusing on an employment target for people affected by the floods, labour-based work was limited in certain areas in favour of mechanized methods for haulage, often from distances of over 20 km away.

In the face of this scenario, it was decided that contracts for the transport of filling material and culvert construction, consisting of easily defined work, would be awarded by competitive tender to national contractors, whilst the contractors who had been involved in the Feeder Road Programme (FRP) would be awarded the labour-based components of the works, i.e. general repairs and spreading and compaction (Muonima and Markland, 2000, p.4).

In order to make the process flexible, the emergency repair work on individual roads for provisional repairs started as and when possible. Initially funds were used from the annual maintenance budgets that were available to the provinces. These works permitted the establishment of precarious access along many of the most important of the tertiary roads. The roads selected coincided with those included in the formal emergency works programme (Muonima and Markland, 2000, p.5).
5.6 The Chokwe case – Support for employment recovery

For several reasons, the important programme designed by the Ministry of Labour for the "recuperation of the conditions for development of economic activities and employment generation in areas affected by the 2000 floods in Mozambique, incorporating measures of vulnerability reduction, prevention and enforcement of national capacities to respond to sudden declines on employment" was not present at the Rome International Reconstruction Conference (MT and ILO, 2001).

This situation may suggest that secondary relevance was given to the employment-generation strategy after the disaster, which accounted for about 300,000 work posts being affected by the floods, as one of the consistent ways to enable real transformation on the ground. This kind of awareness was embodied by Ministry of Labour authorities but without success in favour of other priorities given apparently by other government departments and donors. For instance, although the international community responded well during the Rome International Reconstruction Conference after the floods, the attention given to the employment dimension of the disaster was very poor.

However, following its mandate, the Ministry of Labour supported by the ILO undertook a specific employment programme in one of the most affected areas during the 2001 floods. The support came directly from the ILO's Director General to implement a Project for Quick Impact on Employment (REIP) in implementation partnership with the Human Development Programme at Local Level (PDHL) executed by UNOPS. This project was implemented in an area visibly affected by floods in the Chokwe district, aiming at showing the international community how it is possible to respond, in an efficient manner, to the challenge of employment caused by floods (MT and ILO, 2001, p.3).

Basically, the support programme for employment in areas affected by floods aims to:

- enforce the national capacity to respond appropriately to employment challenges as a consequence of crises;
- incorporate an employment dimension in the policy and programme of reconstruction and rehabilitation;
- promote employment through reviving local economies.

It was understood that among the affected areas particular emphasis should be given to agriculture and informal business. While in the agriculture sector the disappearance of resources and loss of crops have affected the capacity of the small farmers to resume their normal activities, in traditional business, apart from the prejudice in the marketplaces where there is trade, the weak economic power of the operators - mainly women - and the consequent decapitalization after the floods limited the return to an activity that before had already shown little profit (MT and ILO, 2000, pp.3-4).
5.7 Strategy and lessons learned

To implement the project, the following strategies were considered:

- creation of a national capacity at different levels (national, provincial and local);
- promotion of inclusion of an employment dimension in all programmes and intervention of reconstruction and rehabilitation;
- decentralization and local coordination;
- sustainability, opting for actions that produce results in the target groups and that are persistent for long periods (MT, 2001, p.4).

To pursue this project, ten public-public (bipartite) partnerships were established as well as four public-private and one public-public-private (tripartite) (MT, 2001, p.6).

As a result, the following outcomes were produced:

Table 14: Projects undertaken

<table>
<thead>
<tr>
<th>Type of action</th>
<th>Total beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional training and self-employment/creation of micro enterprises</td>
<td>84</td>
</tr>
<tr>
<td>Temporary employment in rehabilitation work</td>
<td>87</td>
</tr>
<tr>
<td>Cattle breeding fomentation (cattle and caprine)</td>
<td>700</td>
</tr>
<tr>
<td>Rehabilitation of marketplaces (small traders)</td>
<td>310</td>
</tr>
<tr>
<td>Training in small business management</td>
<td>150</td>
</tr>
<tr>
<td>Employment in the created structures rehabilitated by the project</td>
<td>20</td>
</tr>
<tr>
<td>Reinforcement of the capacity of local authorities</td>
<td>34</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,385</strong></td>
</tr>
</tbody>
</table>


In summary, the project has benefited 1,385 vulnerable citizens (direct support) in terms of the local responsibility function (capability reinforcement) besides indirect beneficiaries and future beneficiaries of the investments. About 86 per cent of the total beneficiaries were women.

The report on the project points to the following lessons:

- a strong focus on gender translated into a greater number of women in the project;
- a choice of actions aiming to reduce the vulnerability of the people for the present and in the future;
- a strong impact on employment as well as on the amelioration of quality and for the employment benefit a possibility of access to new work opportunities.
The same report acknowledges the following limitations:

- the need for prior training and rigorous criteria to choose local partners;
- selection/choice of initiatives and location of interventions with community involvement;
- the need for strong sensitization of all stakeholders for rigorous management of the funds allocated;
- involvement of the beneficiaries in the control and use of funds and the need for the reinforcement of partnership and private participation.
6. NATURAL DISASTERS IN SOUTH AFRICA:
A CASE STUDY

6.1 Background

Like most of the Southern African countries, South Africa is also prone to several natural disasters. The most common causes of natural disasters in South Africa, as in other countries in Africa, are floods, fires, droughts, cyclones, pests and plagues.

South Africa occupies 1,227,200 km² at the southern tip of Africa. It is the seventh largest African country. The coastline is nearly 3,000 km.

In terms of its topography, South Africa presents an interior highland which is a continuation of the African plateau stretching north to the Sahara, with 1,200 ms as average elevation. The plateau rises to the Drakensberg Mountains (3,300 m) south and east; the Great Escarpment descends to the coastal lowlands. The marginal coastal lowlands vary from 80 to 240 km in width. The country has a regular coastline with few natural harbours.

The population of South Africa is estimated at 41.2 million (1995). The annual population growth is 2.2 per cent, the fertility rate is 4.4 births per female, and the crude birth rate is 23.4 per 1,000; 12 per cent of births are to teenagers. The life expectancy is 63 years for males and 68 years for females. The crude death rate is 9.4 per 1,000. The population density is 33.8 persons per km² and presents an uneven distribution; the concentrations are in KwaZulu-Natal (21 per cent of the population), Gauteng (17 per cent), Eastern Cape (17 per cent). The urban population is estimated to be 57 to 63 per cent, so that the rural population is 37 to 43 per cent. The major urban areas are Cape Town, 2.2 million; Johannesburg, 1.9 million; Durban, 1.1 million; Pretoria, 1.1 million; Port Elizabeth, 854,000 (http://lcweb2.loc.gov).

Water shortages are a chronic and severe problem in much of South Africa. The country has no commercially navigable rivers and no significant natural lakes. Along the coastline, there are several large lagoons and estuarine lakes, such as Lake Saint Lucia in KwaZulu-Natal. The Government has created several artificial lakes, primarily for agricultural irrigation.

South Africa's largest river, the Orange River, originates in the Drakensberg Mountains and flows to the west and northwest, draining the highlands of Lesotho before being joined by the Caledon River between Eastern Cape Province and the Free State. The Orange River forms the border with Namibia before emptying into the Atlantic Ocean.

The major tributary of the Orange River, the Vaal ("foul", for its murky cast) River, rises in the Drakensbergs and flows westward, joining the Orange River from the north in Northern Cape Province. Together, the Orange and the Vaal Rivers drain almost two-thirds of the interior plateau of South Africa. Other major rivers are the Breede, the Komati, the Olifants, the Tugela, and the Umzimvubu, which run fairly short distances from the interior plateau to the ocean, and the Limpopo and Molopo Rivers along the northern border with Botswana and Zimbabwe (http://lcweb2.loc.gov).
Climatic conditions vary noticeably between east and west, largely in response to the warm Agulhas Ocean current which sweeps southward along the Indian Ocean coastline in the east for several months of the year and the cold Benguela current which sweeps northward along the Atlantic Ocean coastline in the west. Air temperatures in Durban, on the Indian Ocean, average nearly 6° C warmer than temperatures at the same latitude on the Atlantic Ocean coast. The effects of these two currents can be seen even at the narrow peninsula of the Cape of Good Hope, where water temperatures average 4° C higher on the east side than on the west.

Rainfall varies considerably from west to east. In the northwest, annual rainfall often remains below 200 mm. Much of the eastern Highveld, in contrast, receives 500 mm to 900 mm of rainfall per year; occasionally, rainfall there exceeds 2,000 mm. A large area of the centre of the country receives about 400 mm of rain, on average, and there are wide variations closer to the coast. The 400-mm "rainfall line" has been significant because land east of the rainfall line is generally suitable for growing crops and land west of the rainfall line only for livestock grazing or crop cultivation on irrigated land (http://lcweb2.loc.gov).

6.2. The socio-economic profile and vulnerability to natural disasters

Despite the appearance of self-sustaining economic growth during the post-war period, the country's economy continued to be susceptible to its historical limitations: recurrent drought, over-reliance on gold exports, and the costs and consequences of the use of disenfranchized labour. While commercial agriculture developed into an important source of export revenue, production plummeted during two major droughts, from 1960 to 1966 and from 1981 to 1985. Gold continued to be the most important export and revenue earner; yet, as the price of gold fluctuated, especially during the 1980s, South Africa's exchange rate and ability to import goods suffered.

6.2.1 Post-apartheid reconstruction

As the African National Congress (ANC) shifted away from its liberation agenda toward a leadership role in Government in the early 1990s, ANC economists, together with government and private-sector consultants, developed a blueprint for development in the late 1990s. This Reconstruction and Development Programme (RDP) analysed nationwide living standards and proposed ways to improve government services and basic living conditions for the poor. The RDP detailed the extreme poverty of at least 17 million citizens who were living below internationally accepted minimum standards. The report estimated that 4.3 million families were without adequate housing, and some 12 million people lacked access to clean drinking water. Most homes and many schools and hospitals lacked electricity. An estimated 4.6 million adults were illiterate.
The RDP envisioned sweeping government programmes to raise living standards: building houses and roads, providing services, upgrading education, and creating jobs to narrow the gap between rich and poor. By late 1994, the Government had begun to implement its highest RDP priorities: a US$135 million school lunch programme; a US$14 million programme of free medical care for children and pregnant women; provision of water and electricity to rural communities; and phasing in free, compulsory primary education for children of all races. To help finance the RDP, the Government also undertook negotiations to sell some national assets to private citizens, despite the ANC's earlier opposition to privatization (http://lcweb2.loc.gov/cgi-bin).

6.2.2 Environmental trends

South Africa has a wealth of natural resources, but also some severe environmental problems. The mainstay of the economy, the mining industry, has introduced environmental concerns, and mine owners have taken some steps in recent years to minimize the damage from this enterprise. Agriculture suffers from both land and water shortages, and commercial farming practices have taken a toll on the land. Energy production, too, has often contributed to environmental neglect.

6.2.3 The labour force

Agricultural employment in the formal economy declined from the 1970s, reflecting the trends toward mechanization in agriculture and increasing urbanization. During that time, the Government also changed its definition of agricultural employment to exclude many farmers who owned small plots of land and produced primarily for subsistence or for local markets. Impressive growth in the services sector - including trade, finance, insurance, restaurants, hotels, and other business and social services - accounted for most of the jobs created during the 1980s and the early 1990s. The services sector also included the country's large domestic workforce, estimated at more than 800,000 in the early 1990s.

The distribution of labour continued to change in the 1990s in response to global and regional market factors and political change in South Africa. For example, despite the importance of mining revenues throughout the twentieth century, the mining industry employed a dwindling share of the workforce - only about 7 per cent in 1995, down from nearly 10 per cent a decade earlier. More than 200,000 mineworkers had been laid off between 1987 and 1993, according to the industrial umbrella organization, the South African Chamber of Mines.

In 1994 and 1995, officials revised employment statistics to incorporate into national accounts employment in the former black homelands, which are home to almost one-half of the black South African population. With these revisions, the Government estimated the national workforce in mid-1995 at 14.3 million people. Unemployment statistics also were being revised to incorporate workers outside the formal economy. In 1995, the Government estimated unemployment at 32.6 per cent. Unofficial estimates ranged to 40 per cent or higher, and officials acknowledged that the rate was as high as 47 per cent in some rural areas (http://lcweb2.loc.gov/cgi-bin).
6.3 Frequency and dimensions of recent natural disasters and the impact on livelihoods

South Africa, like many other Southern African countries, has been experiencing many natural disasters as a result of general global climate changes and anthropogenic factors. There are many causes of natural disasters, such as floods, cyclones, droughts, fires, seismic events and pests that negatively affect many people in a cyclical manner, thus worsening the living conditions of people, particularly those most vulnerable. Following are some examples of natural disasters that South Africa has been experiencing from time to time.

Floods

Like in most Southern African countries, the historical data of rainy seasons in South Africa show a concentration of floods and cyclones from December to February, constituting a period of major risks of occurrence of disasters.

The major flood areas are Northern Mpumalanga (Kruger National Park, Lowveld) and Western Cape Peninsula, Cape Town, Johannesburg (Alexandra, Nothclift, Louis Trichat).

Droughts

The South African climate is prone to drought. The climate is semi-arid with variable rainfall in certain areas. As a result, South Africa faces water scarcity in many places, particularly in the Karoo where the rain is very scarce. South Africa has more than 550 government dams that are important for storing water and regulating water flows, thus reducing flood damage. The country uses too much water, and the demand for water now far exceeds the supply.

Drought is defined as water stress or lack of rainfall. But lack of rain is only one of the causes of drought. Water stress can also be caused by lack of adequate water storage facilities or from the over-consumption of water. This means to a certain extent that people can cause drought. There are ecological droughts resulting from failures in the natural or ecosystem management; meteorological droughts occurring when the average rate of rainfall is below 75 per cent of the norm; and hydrological droughts happening when land surfaces change and water evaporates more quickly (http://library.thinkquest).

The physical effects of drought are decreased crop production, complete failure of crops to grow, animals dying, rivers beginning to dry up, drinking water decreasing, etc. Social, cultural and economic effects such as destruction of subsistence farming, loss of income from farms because of lack of crops to sell, loss of jobs, malnutrition and disease become common, all of which can result in severe illness and even deaths.

In South Africa in 1991, the Luvuvhu River in the Pafuri region of South Africa Kruger National Park was no longer flowing. The rivers and streams dried out, leaving only one large pool as an oasis of life in the parched wilderness. Indeed, deaths of animals (i.e. 120 crocodiles, impala, kudu, baboon, plovers) and plants as well changes in the habitat were the visible result of this drought.
By 1995, South Africa’s Kruger Park had suffered more than a decade of drought. The prolonged dry spell forced buffalo herds to group together in their search for the few remaining spots of fresh grass and water. That, in turn, led to a tuberculosis epidemic that struck half the park’s buffaloes - and many lions as well. Animals can usually cope with short-term natural variations in climate, but they may not succeed if dry periods persist for decades or centuries (Carey, 1999, p.1-2).

Theories associated with drought have been put forward to suggest a cyclical nature of rainfall and consequently a cyclical nature of drought. For example, by 1908 a South African scientist based in Natal had found evidence of an 18-year cycle of wet and dry years. Another study carried out in the upper Vaal catchment of South Africa revealed two distinct patterns of rainfall cycles. First, the cycles of drought followed by high rainfall are a common feature in the Vaal catchment. Second, the length of drought in the area varies considerably, while there is also variance in the quantity of rainfall received in each wet period (SARDC).

Fires

Fires happen in the dry season, the time of the most extensive biomass burning. Like in other Southern African countries, August and September are the peak months for fires.

From 16 to 20 January 2000, intensive and extensive fires occurred in Southern Cape Peninsula, Western Cape Province. It was a once-in-a-century event that left a large percentage of natural vegetation burned, homes destroyed and meagre firefighting resources exhausted. Specific figures indicate that in the South Peninsula Municipality over 8,000 hectares, 20 per cent of the natural vegetation, burned. Over 10,000 hectares were burned in other fires in the Province, damaging especially vineyards in the Stellenbosch area, the farming region around Tulbagh, and the West Coast National Park. Over 70 houses were damaged or destroyed, and over 2,000 shacks were razed near informal settlement areas east of Cape Town. More than 1,200 firefighters, including members of the police, defence force, metro emergency services, local municipality, professional firefighting organizations, and volunteers, fought the fire. The total cost of the suppression effort so far is estimated at US$3 million, and the insurance industry expected over US$500 million in damage claims.

On 5 September 2001, a fire in Kruger Park killed 23 people. Nineteen local residents who had been hired to cut grass for thatch fled as fire, fanned by winds, advanced on their temporary camp and trapped them. Four game rangers died in an attempt to rescue the victims. The following day, 20 people died in fires that raced through parts of Kwazulu Natal, to the south. Six children were burned to death inside a locked room, an 83-year-old woman died fleeing the flames, 55 cattle were burned along with 20 homesteads. Four others were killed as fire engulfed their car (Calvin, 2001, p.1).

SAFARI 2000, the Southern African Regional Science Initiative, brought together nearly 2000 African, United States and international scientists in a multidisciplinary research effort aimed at understanding the sustainability of the region’s sensitive and pressured ecosystems. Based in Pietersburg, an intensive six-week field experiment began on 13 August 2000 combining observations from NASA’s Terra and Landsat 7 spacecraft, NASA’s ER-2 high-altitude research aircraft, and several other aircraft and ground stations. The experiment targets observations on fire and smoke from space (NASA News, 2000).
6.4 The institutional framework and interventions

To address the problems related to natural disaster management, the South African Government approved the Green Paper and White Paper on Disaster Management and established the National Disaster Management Centre.

The White Paper sets out the Government’s disaster management policy for South Africa. The policy applies to all government institutions and other role players, as well as all activities related to disaster management.

The purpose of the White Paper is twofold:

- to inform the public of the Government’s objectives and how it intends to achieve these objectives;
- to inform government agencies and state organs of these objectives and what needs to be done to achieve them.

In terms of the scope and purpose of government policy, the White Paper indicates that the primary responsibility for disaster management in South Africa rests with the Government. This is encapsulated in terms of section 41(1)(b) of the Constitution of the Republic of South Africa. All spheres of Government are required to "secure the well-being of the people of the Republic" (http://www.policy.org.za/govdocs/white_papers).

In terms of policy, the aims are to:

- provide an enabling environment for disaster management;
- promote proactive disaster management through risk reduction programmes;
- improve South Africa’s ability to manage emergencies or disasters and their consequences in a coordinated, efficient and effective manner;
- promote integrated and coordinated disaster management through partnerships between different stakeholders and through cooperative relations between all spheres of Government;
- ensure that adequate financial arrangements are in place (http://www.policy.org.za/govdocs/white_papers).

There is a rationale for the establishment of the National Disaster Management Centre. In South Africa, the capacity for managing disasters varies from ongoing service and infrastructure provision, as part of longer-term development initiatives, to that of emergency
preparation and response (usually triggered by a rapid-onset event). Currently, however, there are a number of shortcomings that hamper effective disaster management. These include the lack of:

- an effective and comprehensive disaster management strategy;
- coordination and clear lines of responsibility for those involved in disaster management;
- government capacity, particularly of local government and in rural areas, to implement disaster management;
- integration of civil society into effective disaster management activities, particularly those concerned with risk reduction.

The National Disaster Management Centre should ensure that an effective disaster management strategy is established and implemented. Understanding that national coordination is urgently required, the Centre should coordinate disaster management at various levels and promote and assist the implementation of cross-sectoral disaster management activities. Therefore, the Centre should primarily function as a coordinating structure that is a repository and conduit of information pertaining to disaster management. It should, therefore, greatly strengthen the existing capacity for tracking, monitoring and disseminating information on phenomena and activities that trigger disaster events. It should also act in an advisory capacity to the Inter-Ministerial Committee.

The Green Paper acknowledges that the development of disaster management strategies must be undertaken before the event. Disaster management requires effective community-based strategies which will include programmes and measures to prevent or reduce the severity of hazard impact; ensure the preparedness of the arrangements and of the community itself; provide an effective response should an impact occur; and provide for the recovery of a community affected by such an impact.

The aim of the Green Paper on disaster management is to ensure that an effective disaster-management system is realized and implemented by way of national policy which will be reflected in the White Paper (http://www.polity.org.za/govdocs/green_papers).

Following disasters, the information available shows that in one way or another the Government in coordination with several institutions like NGOs has been reacting to help people to re-establish normal life after every event. The South African Defence Force (SADF), police, firefighters, and the local government institutions in coordination with provincial and national government authorities have been the heroes of the rescue programmes in several places in South Africa. The fire in Cape Peninsula and the floods in Mpumalanga are just some examples of this scenario.

South Africa has proceeded to establish a Command Centre whose mandate is to ensure the implementation of relief measures following the summer 2000 floods. The Command Centre is expected to:
prepare and provide reports about flood damage to the Cabinet and the Emergency Relief Committee (ERC);

prepare and present a factual report about the outcome of the emergency reconstruction programme to the Cabinet and the ERC;

coordinate and manage the programme of emergency reconstruction and the provision of emergency relief;

prepare and present to the President, the Cabinet and the ERC an accurate report on the progress and the results of the Presidential Reconstruction Project; and

establish a database of flood damage to infrastructure, the implementation of emergency reconstruction, and the provision of emergency relief.

The Command Centre was allocated a sum equivalent to US$3.5 million for its operational purposes. On examination of the impact of the floods of 2000, it was estimated that the cost amounted to about US$500 million. In 2001, the Centre was allocated about one-fifth of that amount to address the consequences of the drought, a large sum of which was earmarked to four of the most affected provinces. The Kruger National Presidential Reconstruction Programme, for instance, entailed the following projects: reconstructing buildings and bridges; the provision of temporary shelters; the restoration of amenities (repair of schools, clinics, community centres, minor roads, bridges, etc.); and restoring agricultural facilities such as irrigation and water supplies, dams, and pump stations.

Some of the lessons learned so far relate to the need to rationalize the execution of tenders, the need to utilize previously disadvantaged groups in undertaking reconstruction work, and the need to integrate the work of the Centre into broader developmental initiatives in each province, since it was recognized that the reconstruction in which the Centre was engaged was part of a broader issue of disaster management in which a number of issues were still unresolved.

6.5 Lessons learned

The information available suggests that in general the actions or interventions focus more on rescuing the population in order to minimize the immediate effects of the disasters. Indeed, it appears that the general perception is to minimize loss of life and other socio-economic and ecological effects. Too little is directed to empower people to be able by themselves to maximize their capability to deal with disasters to the extent that is humanly possible.

South Africa is clearly a country prone to natural disasters, and there is a potential for frequency increasing as a consequence of climate changes.
• The impact of natural disasters is aggravated by the unequal socio-economic and spatial conditions.

• South Africa has pursued various strategies to counter the effects of natural disasters, but it is recognized that the strategies were inadequate because of lack of clear proactive and reactive policy on disaster management.

• The loss of life and economic and ecological disruption can be minimized by enhancing households’ coping strategies, preparedness, advanced warning and timely responses.

• Labour-based intensive reconstruction programmes are not seen as essential and fundamental to support people in a sustainable manner and are not much explored.

• The resettlement programmes are not going well, in some case maybe due to the lack of clear information and involvement of the target people in all stages of the process.
7. CONCLUSIONS AND RECOMMENDATIONS

This report has reviewed the nature and impact of natural disasters in Africa, as well as the nature of the policy interventions that have been implemented to address them. It has been indicated that a comprehensive review of such natural disasters should range over those emanating in the following areas: geomorphologic occurrences such as earthquakes and volcanic eruptions; biological occurrences such as desertification, deforestation and fires; water-related occurrences such as floods; climatic and atmospheric disturbances such as drought and cyclones; and soil-related occurrences such as land degradation.

In Africa some of the foregoing natural disasters appear to occur in periodic cycles, and others are highly unpredictable. However, many African countries are prone to such major disturbances as floods, droughts and fires, while some countries may experience earthquakes and cyclones more often. The issue of desertification, while of major concern, continues to be debated, with some analysts insisting that the major problem perhaps may be that of land degradation rather than desertification per se. It can also be stated that some of the major natural disasters may be aggravated by human activities at the national and global levels.

From the point of view of employment, it has been noted that African economies have three major sectors which absorb labour, namely the formal sector with about 10 to 20 per cent of the labour force engaged in wage employment except in the relatively more developed economies of South Africa and North Africa; the urban informal sector with about 25 per cent of the labour force engaged in low-productivity pursuits in services and resource-based activities; and the communal sector in which 55 per cent or more of the labour force may be engaged primarily in subsistence activities.

The formal economy in most of Africa is driven by resource-based industries whose production is primarily aimed for export markets, while the other sectors are also resource based but with the labour force engaged in them living on the verge of subsistence and relying fully on available natural resources. It is thus not an exaggeration to state that both African economies and households are highly vulnerable to natural disasters and that when such disasters occur their effects are likely to be amplified at the microeconomic and macroeconomic levels.

Natural disasters have many implications on humans and on the economy, some among which are the following: destruction of economic assets and directly productive activities; dislocation of social capital and social cohesion; inducement of adaptive responses and strategies; displacement of communities and attendant migration of people; increased unemployment and underemployment; an increase in primary diseases; and reduced economic performance at the national level resulting in a weakened capacity of the State to undertake various activities.

The actual effects resulting from particular natural disasters have differed depending on the nature of the disaster and its duration. Droughts and floods appear to have had the most frequent and disastrous consequences in a number of countries in Africa, while land degradation even if gradual continues to affect an increasing number of people as well.
Policy responses have occurred at the community and state levels and have encompassed institutional measures and preparedness usually entailing:

- the establishment of a national coordinating agency that coordinates interdepartmental activities within government and collaborative activities with national and international non-governmental organizations, bilateral agencies and international bodies;

- preventative measures aimed at reducing the impact of natural disasters such as irrigation schemes, adoption of drought-resistant crops, flood-control infrastructure, mechanisms to prevent the spread of fires and awareness raising and preparedness for natural disasters and early warning systems;

- emergency relief activities aimed at addressing the immediate needs of affected communities;

- welfare activities to address issues of poverty and destitution through food-for-work and labour-intensive activities; and

- rehabilitative measures primarily aimed at restoring conditions prevailing prior to the natural disaster or increasing the capacity of communities to protect themselves and to resist or address the negative consequences of natural disasters.

It may be noted that measures aimed at addressing natural disasters in Africa are not generally located within a larger framework that addresses the vulnerability of the country and communities to such disasters and the constrained capacity to deal with them arising from underdevelopment, low levels of productivity, and endemic poverty at the household, community and state levels. Thus, not only do the various agents attempting to address the effects of natural disasters proceed in their own relatively separate ways to undertake their activities, but the activities of governments are also aimed at promoting economic growth and employment creation relatively unrelated to the eventualities of natural disasters.

It has been suggested that a number of considerations need to be borne in mind on any discussion and review of the nature and impact of natural disasters in Africa. First, it is important to note that the vulnerability to natural disasters may be due to political, social and economic factors for which policies in the control of governments can be held responsible. In addition, political economy factors of a historical nature often have a bearing on why certain communities or categories of people may be more susceptible than others to particular natural disasters.

Secondly, the capacity to deploy preventative, emergency, rehabilitative and welfare measures to address the impact of natural disasters very much depends on the economic well-being and capacities of the country, the state, communities and individuals affected. This is an important consideration, since many disasters which would otherwise be manageable if resources were adequate and if households were better endowed tend to have devastating effects in Africa because of endemic underdevelopment and poverty.

Thirdly, the inability of African countries to diversify away from resource-based economic activities, which are the engines of most economies, or for that matter to efficiently utilize revenues from such resources has meant that the multiplier effects of natural disasters which destabilize major forms of production and exports are replicated throughout the economy, at times crippling affected economies.
Fourthly, most interventions have been driven by welfarist considerations such that indigenous knowledge systems and adaptive responses and strategies have been ignored, thus limiting the impact and sustainability of policy interventions that appear eternally driven by government in cooperation with donors.

Finally, while the issue of gender has not been given a particular focus in this report, it is important for this aspect to be explicitly addressed with respect to the diagnosis of the vulnerability of natural disasters and their impact on women and men and the design of preventative, emergency and rehabilitative measures.

7.1 The role of the ILO in natural disasters

The ILO has recently established at headquarters level the InFocus Programme on Crisis Response and Reconstruction (IFP/CRISIS) which is contributing to filling a niche hitherto inadequately covered, namely knowledge and tools development and country-level rapid needs assessment, programme formulation and implementation focusing on employment, socio-economic integration of crisis-affected groups, social dialogue, protection and other human security challenges in crisis contexts. It has also drawn attention, at different levels, to the unique role of the ILO and its constituents in the crisis domain and the capacity building needed for effectively tackling this colossal problem.

The Programme's main objectives are to:

- develop a coherent ILO framework and comprehensive capacity to respond speedily and in an effective manner to the different crises - armed conflicts, natural disasters, financial and economic shocks and difficult social and political transitions;
- promote the socio-economic reintegration and poverty alleviation of the crisis-affected groups - refugees, internally displaced people, returnees, demobilized combatants, retrenched workers, the increased numbers of disabled persons and female heads of households, etc.;
- increase awareness at the national, regional and international levels of the importance of tackling the employment problems, inequalities and other social concerns in crisis situations and of the ILO’s unique expertise and comparative advantage in this area;
- build the capacity of ILO constituents and ILO structures to play a greater role in crisis monitoring, prevention and tackling of adverse consequences.

Recent activities have involved knowledge development and tools development, capacity building, advocacy and resource mobilization, country-level rapid needs assessment, programme formulation and implementation follow-up. With its limited staff, the Programme has made some significant achievements, among which are the following:

- positioning the ILO as a visible player in the crisis-response arena;
- increasing emphasis on employment and other decent-work challenges in crisis-response agendas;
• increasing recognition and appreciation of the ILO’s crisis-response capacity, especially in several major crises where IFP/CRISIS has intervened, including as part of the inter-agency response;
• increasing sensitivity of some donors to provide funding for programmes covering employment and other ILO concerns in crisis contexts;
• increasing utilization at the different levels and by different actors of the key tools and knowledge/research outputs produced by IFP/CRISIS;
• progressively increasing the number of ILO staff with crisis-response capacity as a result of the IFP/CRISIS capacity-building training activities and joint country interventions;
• spreading the crisis-response culture which has gradually become pervasive in the ILO, particularly in the field structures;
• strengthening the internal partnerships gradually to provide a more coherent ILO response to specific crises;
• generating, through country-level interventions, visible job recovery and vulnerability reduction for the targeted victims of the crises;
• stimulating greater interest and involvement of the ILO’s constituents in its crisis-response work;
• creating considerable demand in international and other fora for the ILO’s technical inputs and insights on crisis response.

One of the major lessons arising from the experience with natural disasters in Africa is that there is a need for an integrated approach to address the impact of natural disasters and that there is also a need for coordinated action among the various agencies. It is in this respect that the establishment of IFP/CRISIS provides a useful entry point for executing those lessons. IFP/CRISIS provides technical assistance, knowledge and tools for addressing various aspects of the impact of natural disasters through empowerment, capacity building and mobilization of other partners. IFP/CRISIS, in line with the ILO mandate, focuses on an integrated approach to promoting decent employment as a focal point of intervention. This is a strategic approach that addresses the major developmental problem in Africa manifested in the unemployment and underemployment of the majority of the labour force, the elimination of which would greatly reduce the vulnerability of households to natural disasters but would also enhance their ability to address the negative impact of natural disasters.

Thus, following the Mozambique floods of 2000, IFP/CRISIS together with the Ministry of Labour of Mozambique formulated an Employment Recovery and Reduction of Socio-economic Vulnerability Programme which entailed building new markets in secure locations, restoring livestock to peasant farmers, providing training and retraining in skills and production of implements for agricultural activities, construction and other trades so as to facilitate individuals getting back into productive and income-generating activities. IFP/CRISIS followed these rehabilitative measures by the preparation of a much larger programme for external funding to reactivate small businesses in collaboration with local communities and other international donors. The key lesson being experimented with by IFP/CRISIS is the need to ensure that emergency, rehabilitative, and reconstruction measures aimed at addressing the impact of natural disasters are integrally linked to developmental measures so as to ensure the sustainability and resilience of the interventions in the face of drought.
7.2 Recommendations to the ILO

While human beings may be limited in what they can do to address the causes of natural disasters, they can fundamentally alter the degree to which human action aggravates the impact of such disasters and the degree to which different countries and communities within them may be vulnerable to them. The latter aspect is related to the structural political, economic, and social factors within individual countries and globally. For the ILO, it is important to stress the importance of employment as an integral component of the development agenda which is really the main mechanism for reducing vulnerability to the negative impacts of natural disasters and for enhancing the capacity of households and governments to embark on preventative, emergency, rehabilitative and reconstructive measures that are sustainable in the long run. It is in this respect that the recommendations proposed by the recent ILO workshop should be endorsed (InFocus Programme on Crisis Response and Reconstruction, Workshop Report, May 2001):

• It is important to operate in the framework of a common programme. In Africa, it is necessary that natural disasters should be addressed in the context of overall development and employment strategies which (a) promote equitable development and sustainable growth so as to impart to a given country and affected communities the capacity to withstand negative impacts arising from natural disasters and the capacity to address such negative impacts when they arise; (b) reduce the proportion of the labour force that lives and works in low productivity pursuits in the non-formal sectors relying on natural resources primarily which make them vulnerable to the negative impacts of natural disasters. The ILO’s Jobs for Africa Programme should provide the relevant framework in the African context.

• There is a need to have integrated approaches to preventative, emergency, and rehabilitative interventions encompassing social, economic and political spheres.

• All agents (government departments, CBOs, NGOs, bilateral and multilateral agencies) should work together collaboratively within the broader framework in an integrated manner. It is important that the specialized mandates of individual organizations, agencies and departments are not pursued separately and hegemonically, but that they are located and pursued within a broader strategic context addressing the structural and incidental considerations pertaining to natural disasters and their impact in Africa.

• Regional and global approaches to natural disasters should complement national-level interventions.

If the above approach is to be realized, it is necessary that all the major organizations such as the ILO, UNDP, UNEP, UNOPS, OCHA, UNCHR, ICRC, ICFTU, IOE, ICRC and bilateral agencies support with financial and technical resources country-level programmes arising from the Jobs for Africa consultative processes while also pursuing their own mandates within such overall programmes and strategies. Other recommendations which follow from the above approach are the following:

• It is necessary that more research is undertaken to study the adaptive strategies that have been developed by local communities to anticipate and address the negative consequences of natural disasters so as to incorporate the lessons from such strategies into future interventions of both a long-term and short term nature.
Interventions should utilize the most abundant resource, which is labour, and should complement the development of productive labour-absorbing economic activities in the formal and non-formal sectors with a view to transforming the latter sectors and integrating them into the formal economy.

Social policy should be complementary to the promotion of productive activities which enhance the capacity of households to withstand the negative impact of natural disasters and their capacity to reduce their vulnerability to them.

There is a need to address policy, class, or politically determined factors which underpin the vulnerability of particular communities to natural disasters. This can in part be achieved by ensuring that both overall strategies and disaster-related interventions are designed and implemented in a participatory manner involving affected and interested communities and parties particularly at the community and civil society levels.

It is necessary to promote the monitoring and evaluation of recurrent natural disasters in Africa and the collection, storage and dissemination of data and information pertaining to natural disasters in Africa and efficacy of interventions deployed to address them.

Research regarding the degree to which women suffer the brunt of the negative effects of natural disasters needs to be undertaken and related to the need to promote the economic participation of women in productive activities and organizations and agencies addressing the overall strategies which address the underlying factors to vulnerability to natural disasters and their immediate and lasting effects.

More generally, it is recommended that the ILO InFocus Programme should collaborate very directly with the Jobs for Africa Programme in Africa in an effort to better integrate its activities into the programmes and projects arising at the country level as a consequence of the activities of this Programme. Not only should programming related to addressing natural disasters be undertaken within this context, but so should resource mobilization at the global level. Disaster management agencies established by governments together with UNDP Country Offices should be focal entry points for strategizing and implementing interventions related to natural disasters.
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