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## LIVING IN CITIES

I came to the city because things started to go wrong where we lived. In the country, if you don't own land you can't earn a living. There's only agricultural work and that is hard work for women. Here you can do laundry or ironing or work in a house. I work in a school and do washing at the weekends and sometimes I fry snacks for people. Services are very few, practically non-existent. We don't have refuse collection, people just throw it on the street. Water is very scarce, I have to go a long way to fetch it. There is no school, no hospital – the nearest one is a maternity hospital, but there is no doctor. I cannot use the private clinic – I have no money.

Basidia Rulesindo, a woman from the Dominican Republic.

Thirty years from now, for the first time in history, more people will live in cities than in rural areas; and it is in the Third World that the urban explosion is taking place. Over 5 billion people will be urban dwellers by 2025, almost 4 billion of them in the South. In the North, where most people already live in cities, urban growth rates have decreased to less than 1 per cent a year, whereas in the South towns and cities are growing by an average of 3.6 per cent – four times as fast. Of the 24 mega-cities with over 10 million people by the end of the century, 18 will be in the Third World.<sup>1</sup>

Many factors are at work in the growing cities of the South. The prospect of employment, better standards of living and the amenities of urban life all pull people to the city, while increasing poverty, landlessness and conflict push them from the countryside. High rates of natural increase within cities add to the numbers of migrants. Urban populations in the developing world are now growing more than three times as fast as the populations of rural areas. Even though a high proportion of the citizens of Mexico City are unemployed, people still stream into the city in search of work and a better life.

**Mexico City: an urban nightmare**

The capital of Mexico is home to more than 20 million people. In the past 50 years, the population has expanded nine-fold and is expected to reach over 25 million by the end of the century. Mexico City suffers from severe air pollution, a lack of water, high unemployment and a critical housing shortage. One-third of the city's people live without sufficient water and electricity. Half of the city's rubbish is left on the streets to rot.

Lying in the crater of an extinct volcano at 2,500 metres, Mexico City was built on the site of the old Aztec capital. Even without the effects of people, the environment is a problem: the valley is flooded in the rainy season and there are dust storms in the dry season. The city, which lies on the San Andreas fault, is prone to earthquakes; the ones in 1985 killed at least 10,000 people and damaged or destroyed 500,000 homes. Excessive use of subterranean water has caused Mexico City to sink – in some parts over 9 metres. Now, water is so scarce that the only option is to pump it to the city from more than a hundred miles away over the mountains, at costs that are unsustainable.

Respiratory problems, and skin and eye infections are commonplace in Mexico City because of the high levels of pollution. A total of 130,000 factories and more than 3 million vehicles pour 5 million tonnes of toxic smoke and fumes into the city every year. During the rainy season, layers of cold air trap these pollutants in the valley, turning it into a hot gas chamber. Almost every day of 1991 saw the air register as unsafe by WHO standards. Although the public transport system is good, it is simply not good enough to cope with an ever-expanding population: pollution from private vehicles continues to increase. But industrial sources, including oil refineries, contribute most of the pollution. In March 1991, the Mexican government ordered the closure of the country's largest refinery – in the heart of the city – which was responsible for much of the city's pollution (up to a third was quoted in Mexico). The land is to be turned into a park. Attempts are also being made to slow down migration to the city by locating new industries in other parts of Mexico.

A new government programme aims to reduce pollution by almost 40 per cent within the next five years through a combination of measures including conversions from fuel oil to natural gas, tree-planting, and traffic management schemes, which include restrictions on vehicles entering the city on one day each week. But although there are already many rules and regulations to govern atmospheric and water pollution by industry, these are often openly flouted. NGOs like Casa Y Ciudad (described later in this chapter) are working with community organisations to promote a new approach to urban planning which will improve living conditions in the poorer districts of Mexico City.<sup>2</sup>

## THE URBAN ENVIRONMENT

Urban expansion is happening at such speed and on such a scale that the capacities of most Southern governments are severely strained. They cannot manage urban growth, nor provide for the basic needs of their citizens. The consequence is that there are unplanned, informal settlements in and around most of the major cities of the South where the basic infrastructure is inadequate and services are largely absent. The poorest people suffer the worst living conditions. They can only afford to live in makeshift settlements at the city margins on land unfit for housing, or in crowded city slums. Homes are constructed on unstable hillsides, on land subject to flooding or in contaminated areas close to industry. There are few or no basic services such as water supply, sewerage, garbage removal or electricity, except those organised by the slum-dwellers themselves. Roads and transport facilities are poor, medical care is inadequate and there are few schools. Air and water pollution levels are high, and there may be no opportunities for growing food, collecting fuel or safely disposing of waste. Sometimes a half of all the people in large Third World cities must live in these desperately overcrowded slums and squatter settlements. Employment is limited: few have jobs in the formal sector and in the world's poorest and most rapidly growing cities, up to 70 per cent of the population depends on income from activities in the informal economy.

Urban environments cannot be considered in isolation from the countryside: they are interdependent. Cities are major centres of production, consumption and communication but they depend on the hinterland for labour, resources and energy and draw in water, foodstuffs, and fuel from the surrounding areas. Cities also produce great quantities of waste: domestic and industrial as well as air and water pollution.

Supplying the materials that cities need is a major cause of environmental change: croplands, forests and water resources can all be degraded as urban areas grow. In Brazil, urban development has exacerbated deforestation and land erosion where, for example, trees have been cleared to make charcoal for industry and for urban markets. In India, the discharge of raw sewage and toxic chemicals into the Ganges from cities along the river has posed a major threat to the livelihoods of fishermen and to drinking water sources in the downstream villages. The Hooghly estuary, near Calcutta, is choked with untreated industrial wastes from more than 150 major factories around the city. Two thirds of Calcutta's population suffer from pneumonia, bronchitis or other respiratory diseases related to air pollution.<sup>3</sup>

Most Third World cities are without effective water and air pollution

regulations, while standards for handling waste are poor or absent. In consequence, bad health is a major environmental hazard of living in the city. It pervades the daily lives of poor urban dwellers – especially women and children – and erupts periodically in major disasters.

Cholera is a disease closely associated with urban poverty. By the end of April 1991, cholera had reached epidemic proportions in Peru: more than 166,000 cases had been reported and 1,075 people were dead. The epidemic began in the shanty towns along the coastal plain, then spread to the rest of the country – and across the continent. Cholera has now been identified in Ecuador, Colombia, Chile and Brazil, although it had been absent from these countries for decades.<sup>4</sup>

### **Farmers to shanty dwellers**

Cities can consume great quantities of arable land. By the end of the century, total urban area in the Third World will be more than twice the size it was in 1980.<sup>5</sup> As urban areas grow, villages become towns and the farmers who are shifted out of agriculture move into the shanties. Some move because they have no incentive to produce for urban markets where imported food is subsidised. Others are pushed off their land by large commercial developments.

Marabá, in the Amazonian State of, one of Brazil's fastest growing towns, today has 250,000 people, having grown twenty-fold in as many years, since the discovery of iron ore in the nearby Carajás mountains (Chapter 2). People have come from all over the country: some were small farmers, evicted from their land by violent conflicts; many were labourers who came to work on the construction of the Carajás railway or the Tucuruí dam. And thousands came in search of gold. Others came to Amazonia to find a plot of land to farm, only to be disappointed. They all end up in Marabá.

The officials and technicians working on the new Carajás railway and in the industrial zone live on the highlands. Poor people live in the shanties built on land that no one else wants – it is too dry and too polluted. Their shacks are made of whatever they can find: wooden planks, poles, straw, cardboard and, if they are lucky, iron beams. The wastes of the industrial park end up in the Itacaiunas river, Marabá's water source. At night when the wind dies down, charcoal smoke and sulphur settle on the shanties.

Marabá has nowhere near the level of services, housing or employment to cater for the new residents. There is no clean water, sewerage, refuse collection, public transport, schooling or health

care. Some of the poor migrants work at casual jobs on building sites and seasonally with the cattle ranchers. The women work as maids or in other menial jobs, or are forced into prostitution, as well as carrying the domestic burden – for most men are itinerant workers.<sup>6</sup>

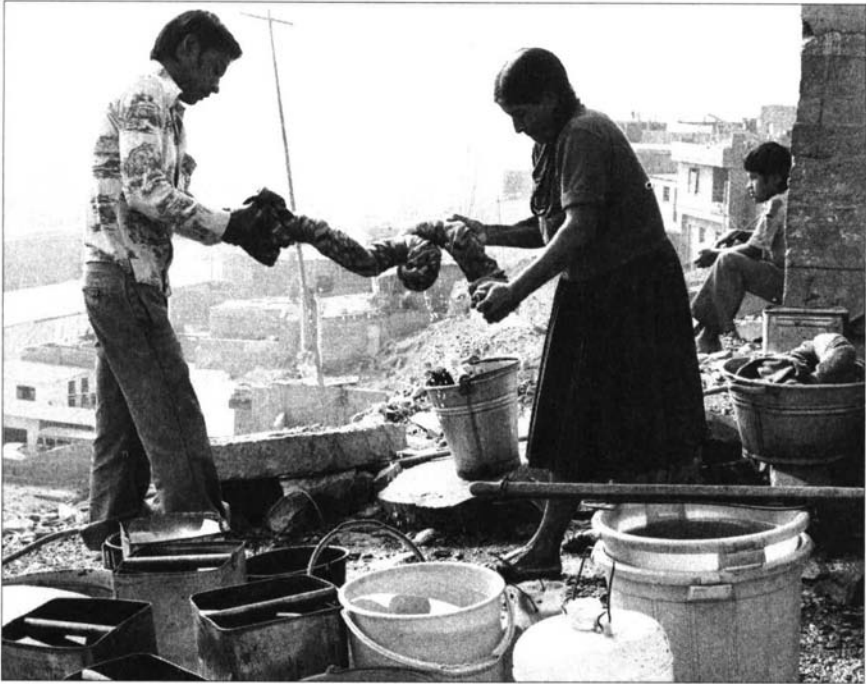
### **Living in the city**

Poor people in Third World cities use a wide variety of ways to gain a living space. Most live in illegal settlements in houses or shacks constructed from simple materials, often on public land. A few are lucky enough to be able to buy land and build on it – often without legal permission. Some may participate in official settlement schemes which upgrade existing slum areas or offer serviced sites to those who can afford to build their own homes. The rest will have to rent rooms or bed spaces for the night in crowded tenements, where conditions encourage accidents and the spread of disease. Poverty and powerlessness restrict their access to environmentally safe housing. The worst-off live on pavements and railway stations and under bridges.

Squatting on public or private land in self-built makeshift hovels has become the way of life of most of those who flood into the cities of the South. They hope that official permission will eventually be secured but, in the meantime, they may have to pay bribes to political parties and city officials to secure protection against removal. The common official response has been to clear these homes or at least to exclude them from civic amenities like water, roads, fair price shops, health and education. But without other options, poor people are forced to continue to squat.

On the night of 28 November 1988, Shanti lost her meagre possessions in the fire that consumed the makeshift houses in the Salimpur Netaji Colony, one of the many slums beside the railway track running through Calcutta. Shanti's shack was made of highly inflammable materials: plastic sheets, bamboo, jute bags and whatever else would give protection against scorching sun and torrential rain. For a colony of illegal squatters, occupying public land, no government services were available. Fortunately, the Calcutta Social Project, an Oxfam partner, provided emergency relief. Shanti is not alone; two-thirds of Calcutta's 11 million people build, buy or rent illegal dwellings, because they cannot afford even the cheapest legal house.<sup>7</sup>

The urban environment, both inside and outside the home, has a particular significance for women – a fact which is reinforced by cultural patterns. As home-makers and child-rearers, women are directly affected by the lack of water and sanitation. Their daily domestic tasks – cooking,



*Doing the washing is difficult when there is only one tap to supply several hundred families. Shanty town, Lima, Peru.*

washing and child care – confine them to the environs of the house. Women in seclusion, particularly in Islamic countries, must remain inside most of the time. Yet the internal environment is often dangerous: fumes from open wood and charcoal fires damage eyes and lungs. Household accidents are common where there is little protection from unguarded stoves and heaters, and where perhaps seven or more people live in one room.

Environmental disasters, too, can affect women more severely. In the aftermath of Bhopal, many suffered menstrual and other gynaecological problems; pregnant women gave birth to deformed babies; some infants were blind. In the demonstrations which followed the gas leak, women were especially active in protesting about the damage to themselves and their families.<sup>8</sup>

### **Community action**

We, the poor, have to organise because we have no alternative. The poor must help the poor and hope that society will change.

Dionisia Acosta, coordinator of an Oxfam project in the Dominican Republic.

One positive development of the growth of cities has been the evolution of community organisations to articulate the needs of poor urban dwellers like Shanti and find new ways to promote their interests. With the extension of political democracy and fair voting, the slum dwellers have been able to exert political pressure to try to solve their problems. Environmental disasters can sometimes be the spur to community action which brings long-term benefits.

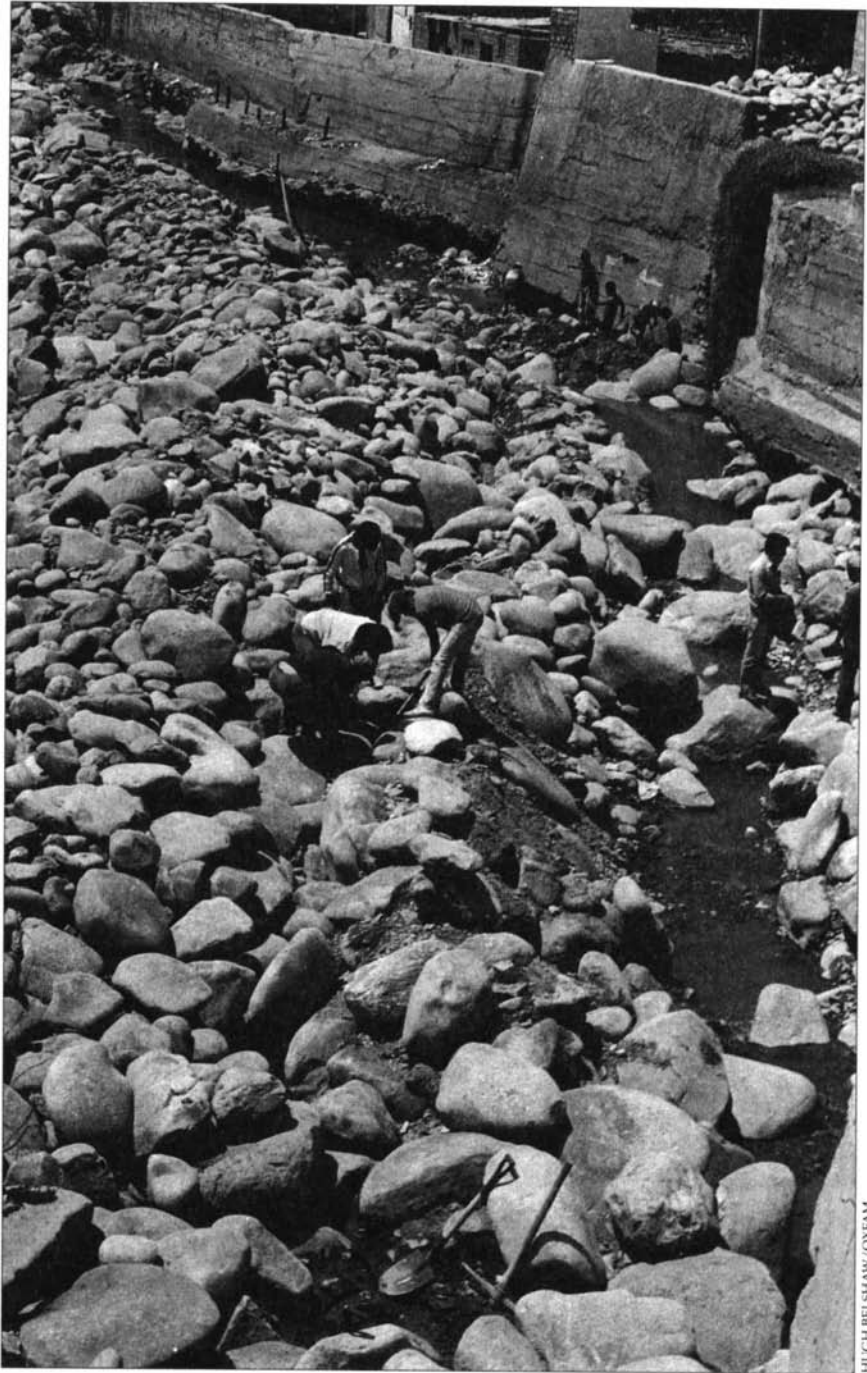
**Preventing disaster in the Rimac Valley: PREDES**

Every year, between December and April, floods and violent mudslides destroy lives and homes in Peru's Rimac Valley – a densely populated area of poor settlements close to Lima. From 1980 to 1983, villages and farmlands on the valley sides and floodplains were flooded or buried under more than 140 mudslides, caused by the collapse of waterlogged terraces. The two major routes connecting Lima to the rest of Peru – the central railway and the main highway – were severed. Damaged water supplies caused shortages in the capital throughout the long, hot summer months and when the Rimac River was blocked, hydro-electric power to the city was cut off.

Mudslides are not just natural disasters: human activity creates the conditions which precede them. Because the Rimac Valley has been stripped of its vegetation for fuel and building materials as the land has been settled, heavy rains do not infiltrate the soil, but cascade off the bare ground. Some of Peru's poorest people have settled here, close to Lima with its (largely illusory) attractions of better jobs and incomes. They try to farm the fragile slopes and floodplains.

There is evidence that, in the past, the Incas managed this vulnerable valley by careful terracing and water management. Where the terraces have survived, there is no erosion. Present farmers do not maintain the terraces and they farm in a different way. As market prices for their crops have fallen in the city, they have abandoned cultivation in favour of raising sheep. The result is overgrazing, more deforestation and eroded terraces.

Since the mudslides of 1983, a local NGO, Centro de Estudios y Prevencion de Desastres (PREDES), has been working with the poor communities of the Rimac Valley, first on disaster relief, lately on long-term measures for rehabilitation. The geologists, engineers and social scientists of PREDES have given advice to local groups on how to build defences against the floods and mudslides using local materials. They have helped people to choose safer sites for their homes, clear the rivers to cope with extra flows and build bank reinforcements. More important, PREDES has enabled local people to lobby the local and national government for assistance and better flood-planning services.



HUGH BELSHAW / OXFAM

*PREDES, an advisory organisation set up to help people living in vulnerable areas in the Rimac Valley, Peru, encourages communities to work together to build river defences in order to minimise the impact of floods and mudslides.*



The underlying goal is to raise awareness of the environmental dangers and provide people with the technical skills to design and implement preventive measures and the political skills to negotiate with local government for the resources they need.

PREDES has been highly successful in persuading local community groups to organise and maintain disaster prevention programmes. When severe flooding and mudslides came again in 1987, the benefits were obvious. In one valley where there had been no preventive work, 40 people died and all the houses were reduced to rubble. Where PREDES had worked with a neighbouring community, the defences had withstood the floods: there were no deaths and only a few homes were destroyed.

Since 1984, PREDES has been funded by Oxfam and the ODA and it has moved on from disaster relief to concentrate on the day-to-day social and economic needs of the Rimac Valley residents. In one area of the Valley – Chosica – PREDES is widening its area of concern, to raise consciousness about human rights issues. And it is designing a comprehensive approach to the problems of the Chosica district – from disaster relief through recovery and planning to reconstruction – which can be used as a model for community groups in other parts of Peru.

PREDES shows that community organisation is the key to reducing the vulnerability of poor people to environmental disaster while at the same time tackling their poverty. PREDES operates not as a funding agency (though it helps groups to procure funding) but as an independent adviser. PREDES believes that the gradual, bottom-up approach of changing the social, economic and political relations between marginal groups and the state is the only way forward. It responds to the capabilities of local people, attracts government resources and is more successful than the large-scale plans and projects of large agencies.<sup>9</sup> The PREDES way of working is a good example of the Primary Environmental Care approach discussed in Chapter 2.

Throughout the poor districts of Third World cities, community organisations are springing up to find collective solutions to common problems. These organisations rally communities either in the defence of basic rights (such as shelter or public services) or in opposition to projects and programmes which threaten freedoms, livelihoods or their environment. Community organisations may begin with a single issue, but they soon find themselves dealing with many other problems.

### **Changing attitudes**

Poor citizens show a great capacity to plan and build their own homes, and organise and defend their neighbourhoods. They often understand far more about local needs, incomes, climatic conditions and resources

than do government officials. Many governments and NGOs are beginning to see the advantages of channelling this energy and cooperating with poor communities to create better settlements.<sup>10</sup>

In the past, official attitudes towards squatters have varied from neglect to outright hostility. The authorities would try periodically to bulldoze informal settlements and push squatters beyond the city limits. Wherever the land they occupied attracted commercial interest, the pressure on squatters increased.

In recent years, there has been a shift of attitude among policymakers and planners towards recognising slum and squatter citizens as part of the solution. Informal settlements are increasingly seen as living environments better suited to the priorities and resources of poor people. Changes in official thinking and the growth in strength of community organisations have brought a number of experiments in low-cost settlement which involve people directly in the design and construction of homes and neighbourhoods.

Two approaches have achieved some success: settlement upgrading and site-and-service schemes. The first includes legalisation of an existing settlement and allocation of land titles as well as the provision of services. Security of tenure is believed to be the key to encourage squatters to invest in home building and improvement through their own savings or bank loans. In site-and-service schemes, families are allocated land and provided with basic infrastructure (roads, communal water taps, drainage) and services (post office, schools, clinics). Families are free to make their own design and complete their dwelling in a reasonable period of time. Often, building materials are supplied at subsidised rates. Families can use their own labour or engage contractors of their choice. Some schemes offer the families a basic dwelling unit to which they can add improvements later.

Women's needs, though, are frequently ignored. Home design and plot sizes and layout rarely consider the fact that many women will want to grow fruit and vegetables for their families, and use their houses as workshops or as shops to sell goods – such enterprise is often forbidden in low-income housing projects. Housing managers as well as aid donors and international financiers must start to recognise women's vital contribution in building new communities and maximise the opportunities for them to be full partners at every stage of the work.<sup>11</sup>

### **The participatory approach**

Both settlement upgrading and site-and-service schemes are based on a high degree of popular participation, often channelled through slum dwellers' own community organisations. Participation offers several positive features: it reduces friction between official agencies and

squatters; it mobilises the skills and resources of the community, keeping costs to the minimum. In addition, participation stimulates community interest in the maintenance of services, and the introduction of other kinds of improvements, such as neighbourhood security, where mutual cooperation is essential.

Even outside these official settlement improvement schemes, the quality of life can be changed when community organisations bring basic amenities such as drinking water, sanitation, roads, rubbish disposal, health care and education. Often their most important role is in helping citizens to articulate and fight for their rights.

### **Mexico City: Casa y Ciudad**

In the aftermath of the 1985 Mexican earthquakes, local residents' committees grew up in the parts of Mexico City that were badly hit. People had been living in rented properties and they feared that landlords would evict them in order to sell the land for development. Some land was being earmarked for green space. But poorer people wanted to stay near to the centre with its jobs and services. So, to strengthen their position, they began to refurbish their homes and neighbourhoods and campaign for better services, including rubbish removal.

Casa Y Ciudad (meaning House and City) is an NGO working with poor people in Mexico City to meet their housing needs. Since the 1985 earthquakes, Casa Y Ciudad has been part-funded by Oxfam, developing and strengthening participation in the Urban Popular Movement – a coalition of community organisations. Casa Y Ciudad, which is staffed by architects, planners, social workers and other urban professionals, works alongside existing organisations – neighbourhood associations, trade unions and educational institutions – and it concentrates on four priorities. First, its staff advise groups working with low-income families on the technical aspects of construction, and prepare alternative plans for low-cost housing in the city. Secondly, Casa y Ciudad works with local groups on wider urban problems, offering them advice on government policies and regulations, and analysing social and economic trends. Thirdly, Casa provides education and training on technical issues (such as carpentry and plumbing), on land and water rights and social organisation. Finally, Casa's communications activities provide neighbourhood groups with the resources for writing and printing newsletters and other audiovisual materials, and training in communication.

Casa Y Ciudad emphasises people's participation in decision making at every level of society. It helps neighbourhood groups to acquire the tools of empowerment, and works with other members of the Urban Popular Movement to develop an alternative vision for the city. This is

emerging from a number of local demonstration projects which are based upon people's perceptions of the problems, and community approaches to creating neighbourhoods that are better places to live in.<sup>12</sup>

## **WORKING WITH URBAN WASTE**

The collection and disposal of rubbish are major problems for Third World cities – but here too, community organisations are at work. While local recycling schemes are often struggling to survive in Northern cities, and make up only a marginal component of domestic waste treatment, recycling is commonplace in Third World cities. Rubbish collecting, sorting and selling provides an income for some of the poorest of urban dwellers – especially women and children. Community organisations in a number of cities are trying to help these people improve their living and working conditions, and increase their earnings by more effective recycling of the materials they collect.

### **Waste workers of Calcutta**

To the east of Calcutta, in an area called Dhapa where the city's wastes are dumped, thousands of people gain a living from the rotting rubbish. They pick over the piles of garbage, collecting rubber, tin, cork, glass, foil and other items which they sell to middlemen for recycling. Some use the heaps of rotting waste to grow vegetables which they sell in the city.

The Calcutta Social Project, started by a group of women in 1969 to work in some of the slums of the city, moved into Dhapa in 1981. In an abandoned shed, literacy and recreation classes were introduced for the young garbage pickers, and these were followed by training courses in carpentry, masonry and sewing so that, in future, the waste workers have other skills for earning a living. Now there is a primary health care clinic offering an immunisation programme, and a school for the children.

In 1984 and again in 1986, serious flooding threatened to bring epidemics and widespread pollution to the area as sewage channels and tannery effluent overflowed on to the waste tip. Older students, teachers and health workers teamed up to prevent disaster by disinfecting drinking water, distributing food, encouraging the waste workers to be inoculated and teaching them about oral rehydration therapy to treat diarrhoea. Oxfam has helped the Calcutta Social Project to sink a deep tube well for the health clinic at Dhapa and to build the school.<sup>13</sup>

The waste workers of Calcutta show what is possible with limited resources. Groups like this not only help large cities to run more smoothly, but they bring tangible benefits for their members. It is possible, even for very poor communities, to take on a variety of social and environmental activities which help to meet their basic needs, raise

their incomes and improve their social status. While outside support is often important for these groups to start making improvements, they have the capacity to innovate and adapt, finding new ways of solving the immense problems they face. Some groups, like the Zabbaleen in Cairo, develop a whole range of responses as they build on their original waste reclamation work.

### **The Zabbaleen in Cairo**

Originally from upper Egypt, the Zabbaleen (literally: rubbish collectors) are Christians whose predecessors were landless agricultural labourers. They occupy seven sprawling settlements on the outskirts of Cairo and they have been subjected to repeated evictions. The Zabbaleen community lives by the collection of Cairo's wastes which are hauled by donkey cart to be sorted in their settlements. The Zabbaleen earn their living by recycling materials from the waste. Organic materials are fed to pigs which they raise, and tin, plastics and glass are returned to the industrial system via local traders.

The right to collect refuse was formerly the monopoly of the 'wahiyya' – traditional administrators of the system. They received fees from householders and sold the Zabbaleen their licence to collect household refuse. Because of the Zabbaleen, the municipality has not had to establish a waste disposal system. Householders have been



*The Zabbaleen community earn their living by collecting, sorting and recycling Cairo's domestic and industrial refuse.*

satisfied with the low-cost service and the Zabbaleen have sustained their livelihood.

But the influx of poor migrants to Cairo strained the system. Poor households could not pay fees to the wahiyya and the Zabbaleen found the quality and quantity of refuse hardly worth recycling. An alternative plan emerged in 1981, after months of discussion between the municipality and a representative of the Zabbaleen. The Zabbaleen began to collect from the low-income areas and from commercial establishments. They, rather than the wahiyya, collected the fees for the service and transported the wastes – by donkey and by tractor – for recycling. The wastes are now processed at a recycling plant with a capacity of 35 tonnes a day. Oxfam and the Ford Foundation have contributed to the core costs of the scheme.<sup>14</sup>

This was a big step forward for the Zabbaleen as it involved taking over the management of the programme, setting up accounting procedures and a bank account and devising a system for contracting out, and supervising, the collection of wastes from the city.

The success with waste collection has encouraged the Zabbaleen to try other ventures. They started small businesses to add value to the waste products by recycling them. In 1985, with Oxfam support, a small fund was created by the Zabbaleen Association to provide credit for local entrepreneurs to set up workshops for carpentry, repairing vehicles and processing used plastics.<sup>15</sup> But the small business scheme soon revealed its weaknesses. Repayment rates were very low and the beneficiaries were almost all men. The very poor were excluded from the scheme because they could not guarantee the large loans.

In 1988, the small business scheme with its credit programme was expanded to include women. The loan size is now too small to be of interest to any but the very poor, and loans are given to women only after they have formed themselves into a group, whose members act as guarantors for repayment: if one individual defaults, the entire group is disqualified from receiving a subsequent loan. So far the repayment level is high – 98 per cent of loans are recovered. The scheme presently covers 24 groups and more than 70 women. They use the credit to invest in goats and pigs, and to set up handloom weaving and other small businesses. In addition to the practical benefits, women are becoming more self-confident, going out of their homes in groups to make their repayments.

The Zabbaleen enthusiasm and determination is also at work in the field of health and sanitation. The local Association for the Care of Garbage Collectors is trying to change health attitudes and behaviour through providing antenatal care, vaccinations, nutrition advice and the low cost treatment of diarrhoea.

But many problems remain for the Zabbaleen. Poor drainage is one of them, for many of the city's drains are clogged with discarded plastics. Paradoxically, the provision of better drinking water without simultaneous improvements in drainage capacity has added to the problems – for three years the Zabbaleen community has been trying to persuade the city authorities to act. Another problem is the limited space available to the Zabbaleen for all their activities. With no permission to extend their residential borders, their compounds are overcrowded and insanitary – with humans, animals and garbage all competing for space.

## **WAYS FORWARD**

Whether it is in Mexico City, Calcutta or Cairo, community organisations are emerging as major actors in the struggles of poor people to secure shelter, security, basic services and the protection of health and livelihoods in the city. Alone, this approach cannot begin to solve the massive social, economic and environmental crises that Third World cities face. But small-scale, people-based solutions point the way: they are resourceful, affordable and sustainable.

Raising Southern cities to present Northern levels of consumption and greenhouse gas emissions... is probably impossible and would be a disaster if successful. Northern urban development will require less wasteful resource consumption, less fossil fuel use and less pollution; Southern urban development will require more provision of goods and services, but with less pollution and more efficient resource use.<sup>16</sup>

In most Southern cities, there is neither the investment nor the political will to improve conditions for the poorest people. What funds there are continue to be wasted on Western-style models of urban development that are too expensive and totally inappropriate for Third World cities. Increasingly, it is argued that urban 'environments of poverty' can be improved only by programmes, devised in partnership with local people, which help them to develop their own housing and services, using local materials, local labour and the organisational strength of local communities.<sup>17</sup> What they need urgently from governments is the fundamental support which makes this possible – investment in basic services, secure access to land for building and tougher environmental regulations, which are fully implemented, to limit pollution.



MIKE GOLDWATER/OXFAM

*Despite the devastation all around, daily life goes on. A shepherd takes his herd through the ruins of Nacfa, Eritrea. People went on living here, in underground shelters, for years during the war.*



## 8

## CONFLICT AND THE ENVIRONMENT

We were attacked at 8 in the evening, when it was dark. There was no time for us to collect our things, we just had to run...Everything was destroyed... they burnt our houses and our crops; all our animals were lost. We ran to save our lives.

Chief Chipawa, an Angolan refugee in Zambia, describing a UNITA attack in November 1985.

Oxfam was established as a response to war and famine 50 years ago during World War Two and has remained closely involved in relief and development work in many war-afflicted countries. The absence of major wars between the leading states of the developed world since the Second World War has coincided with growing numbers of wars and armed conflicts in the South, both within and between states. All but two of the 127 armed conflicts recorded between 1945-89 have been in the South.<sup>1</sup> Although most have been so-called civil wars, many of them have had international involvement.

In the sense of dispute, conflict is universal in human societies. Where channels of dialogue are blocked and basic needs go unmet, growing resentment can erupt into violence: the two sides define their interests in irreconcilable terms and violence is a possible outcome. When one or other side acquires arms, the violence escalates into armed conflict. This may be at a local level, as in Brazil or Bangladesh, where armed conflict has occurred over land rights; but the term is more usually applied where one side to the conflict is government or army.

The Northern image of conventional warfare which includes formal declarations of war, battles and battlefields, and distinctions between soldiers in uniform and civilian populations, does not help in understanding armed conflict in the South. The reality of conflict for so many of Oxfam's Southern partners is an unpredictable continuum of lesser or greater violence, from occasional harassment to mass murder and devastation.

### **Civilian suffering**

The nature of war has been changing; nowadays, far more of the casualties of armed conflict are civilians. Whilst during the Second World War 52 per cent of deaths were of non-combatants, now, according to the International Committee of the Red Cross, more than 90 per cent of those killed are civilians.<sup>2</sup> The total number of war-related deaths since 1945 has been estimated by the UN to be in excess of 20 million.<sup>3</sup> Civilians and their livelihoods have not only been the main victims but often the main targets. Wars have resulted in 17 million refugees around the world and a further 24 million people have been displaced within the borders of their own countries – most of them as a result of conflict.<sup>4</sup>

In 1989, as much as half (£20 million) of Oxfam's total overseas expenditure was related to conflict.<sup>5</sup> A large part of those funds was spent on emergency work in response to the needs of refugees and those internally displaced by wars.<sup>6</sup> In Africa, where the problem has been most severe, 70 per cent of grants are spent on conflict-related work, assisting the civilian casualties. Oxfam is involved in emergency relief in many conflict-ridden African countries, including Ethiopia, Sudan, Angola, Mozambique, Somalia and Liberia. In many countries, conflict has created a semi-permanent emergency and undermined prospects for longer-term development work.

The lives and development efforts of poor people are affected by conflict both directly and indirectly. The most direct effect of war on people's livelihoods is in the terrible destruction of lives, resources and infrastructure by armed conflict, particularly bombing and the laying of mines. Even where military activity is at a fairly low level, people may find it difficult or impossible to maintain their normal way of life. Land mines have inflicted terrible casualties and caused severe economic disruption in many of the countries where Oxfam works, such as Cambodia, Angola, and, more recently, Iraq.

### **THE REFUGEE CRISIS**

Conflict during the 1980s has created a dramatic and unprecedented rise in the numbers of refugees from wars in places as far apart as Afghanistan, Cambodia, Southern Africa, Central America and the Horn of Africa. The UNHCR estimates that in 1991 US\$164 million was required to meet the needs of the world's 17 million refugees. When people cross the border into another country, they are classified as refugees and are guaranteed international protection and the support of UNHCR. But the millions of people forced to move from war-zones within their own country receive no such attention. There is no agency mandated to protect or care for people displaced by internal conflicts.<sup>7</sup>

The majority of the world's refugees are women and children, whose husbands, sons, fathers or brothers have been killed or are fighting. Women face special problems as refugees because of their gender. They are very likely to be harassed and their needs are frequently not recognised. Many will not have been accustomed to decision-making roles but they are faced with building new lives for themselves and their families. They are very likely to be ill and distressed as a result of the traumas they have suffered.

In the Horn of Africa, many thousands of people have been forced to flee their homes because of the combined effects of poverty, environmental degradation and war. The Horn accounts for 60 per cent of Africa's refugees – some 2 million people who have been uprooted from their countries. Another 10 million people have been internally displaced within their own countries. During the 1977-78 Ogaden War, an estimated 650,000 refugees fled from their homes in war-torn Ethiopia into Somalia, putting unprecedented pressures on an already fragile environment and economy. Ten years later, the flow of people was reversed when, according to UNHCR sources, 440,000 Somalis fled into Ethiopia to escape fighting in the north of their country in mid-1988. There were also massive movements of people into and out of Sudan. By the mid-1980s nearly half a million people were estimated to have migrated into Sudan from Ethiopia and Eritrea as a result of the combined effects of war and famine.<sup>8</sup> In 1987, the civil war being waged in the south of Sudan caused 350,000 people to move into western Ethiopia.



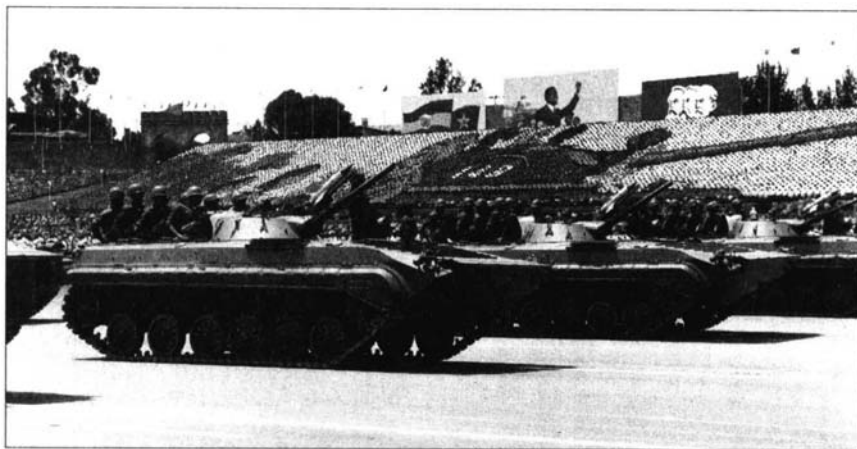
*Malawi is home to many thousands of refugees from neighbouring Mozambique, and its economy is under strain as a result. This is a woodlot at Dedze, for building materials and fuel for nearby refugee camps. Refugees can place great demands on environmental resources in the countries where they find sanctuary.*

In addition to the misery of the people involved, migration can lead to neglect of the land and loss of agricultural production and can cause immense problems in the places where the refugees make their new homes. Massive movement of people has a ripple effect as competition for resources between newcomers and local people leads to further tensions and increased environmental degradation – and potentially more conflict.

Malawi, for example, already one of the poorest and most densely populated countries in Africa, is having to accommodate large numbers of refugees fleeing from the civil war in neighbouring Mozambique, where there has been almost continuous war since 1960. From a trickle of refugees in 1970, the numbers have increased dramatically. In 1986, 70,000 people crossed to Malawi in one month when the Mozambique National Resistance (MNR) launched an attack to try to split the country in two. There are now 980,000 refugees living in Malawi, more than one-tenth of the population, to whom Malawians must give up land and with whom they must share their country's meagre resources. There is increasing pressure on Malawi's health services and water supplies. Environmental damage is on the increase as more and more trees are cut down for firewood and building.

## ARMS DIVERSION

In addition to the poverty and suffering caused by the direct impact of armed conflict, the diversion of scarce resources into military expenditure has crippling indirect effects on development prospects. It is estimated that during Colonel Mengistu Haile Mariam's fourteen-year long regime in Ethiopia, 65 per cent of its national budget was spent on



*Military parade, Addis Ababa, Ethiopia, to celebrate the 13th anniversary of the Mengistu regime, in 1987.*

'internal security',<sup>9</sup> diverting desperately needed resources away from development towards the military. Government expenditure on health and education combined is dwarfed by military spending in a number of countries, as illustrated in figure 8.1. Services such as agricultural extension are often abandoned, partly because of the danger involved in carrying them out, and also the need to pay for military hardware and activities.

**FIGURE 8.1**

**Total amount spent on arms, health and education in Ethiopia, Sudan and Somalia in 1987.**

	<i>Arms millions</i>	<i>Health millions</i>	<i>Education millions</i>
Ethiopia	\$472 * (9 per cent of GNP)	\$67 (1.3 per cent of GNP)	\$225 (4.2 per cent of GNP)
Sudan	\$800 (6 per cent of GNP)	\$27 (0.2 per cent of GNP)	\$563 (4.2 per cent of GNP)
Somalia	\$23 (2.4 per cent of GNP)	\$2 (0.2 per cent of GNP)	\$6 (0.6 per cent of GNP)

Source: *World Military and Social Expenditures, 1991*, Sivard<sup>10</sup>

\* Note: Given the end of the civil war and demobilisation of the old army, there is a likelihood that this figure will go down.

The effect of the diversion of resources to military spending has been well documented. Total global spending for military purposes amounted to US\$980 billion in 1990, or US\$185 for every person on earth. The international trade in conventional arms is a profitable and thriving business. During the past 20 years arms with an estimated total value of US\$588 billion were traded. The USSR and America alone account for 65 per cent of this total, with France, Britain, West Germany and China also acting as major suppliers. Developing countries are the biggest market for these arms. In any country, military expenditure is a drain on resources that could be used more productively, but it is particularly serious in developing countries. Many Third World governments spend twice as much on the military as on health or education and a few – Angola, Iran and Pakistan, for example, spend twice as much as on both combined.<sup>11</sup> In 1988 African countries imported \$4.9 billion worth of arms amounting to roughly 10 per cent of the world's arms imports.<sup>12</sup> Clearly, even a fraction of these vast resources used constructively for appropriate kinds of development work would have made a difference to the lives of poor people.

## POVERTY AND CONFLICT

Poverty and conflict are often closely linked. In most developing countries there are huge disparities in access to power and control over resources. Existing social, political and economic structures reinforce the dominance of privileged elites and the powerlessness of poor and marginalised sectors of society. This unfair distribution of wealth, power and land is a recipe for conflict. Those with power battle with disadvantaged groups to hold on to their advantages. For example, settled farmers are often in conflict with pastoralists, urban with rural populations, one ethnic group with another, black with white, peasants with landowners.

### El Salvador

During the 1980s, much of Oxfam's work in Central America was a response to poverty and suffering exacerbated by armed conflict. As in the case of El Salvador, the roots of this conflict lay in the unequal distribution of power and resources.<sup>13</sup>

El Salvador is the smallest Central American republic, a mountainous country about the size of Wales. The population density is high – seven times higher than neighbouring Honduras – and almost all of the people derive their livelihood from the land. In the 1930s, coffee was the basis of the country's economy, producing over 95 per cent of export earnings, financing some infrastructural development and providing extensive seasonal employment. The eastern provinces of Morazán, La Unión, San Miguel and Usulután cover nearly one-third of the country and used to be vital to El Salvador's coffee production. These agricultural activities were virtually the only sources of employment in the region.

The expansion of cash crops in the eastern provinces resulted in the decline of subsistence crops of maize and beans which destroyed the means of survival of peasants farmers. Environmental problems associated with monocropping for export were common, such as overuse of pesticides leading to health problems and contamination of soil and water supplies. Most of the wealth created fell into only a few hands. The country was said to be run by a national oligarchy of the 14 families most closely involved with the export of agricultural products. Those same families played a key role in government and the military establishment. Military governments had been in existence almost continuously since 1932 following an uprising of landless peasants which had been savagely suppressed.

When the economy began to decline in the 1970s, the inequities upon which it was based became very striking. Employment opportunities plummeted and by 1975, 40 per cent of the rural population nationwide was landless and jobless. Much destruction of pine and tropical

deciduous forests had taken place in the lowlands when the large plantations were established. With the collapse of employment opportunities, peasant farmers were forced to move into marginal lands to try to make a living. Many people moved higher up the mountain slopes, where they produced two harvests of maize or sorghum a year on land that was unsuited to cereal production. The serious erosion which followed years of intensive cropping is probably irreversible.

Increasingly, throughout the 1970s, poor people throughout the country became involved in organisations to press for fairer access to the country's resources. Efforts to bring about political and economic change through electoral means were met with brutal repression. As many landowners demonstrated their unwillingness to consider structural change and prepared to use violent means to defend their interests, more and more people became convinced of the need to resort to arms. Unequal access to power and land meant a diminishing resource base for those dependent on land for their survival. This inequality in access to power and land was the underlying cause of the full-scale civil war in El Salvador that was raging by 1979.



*Guerrillas in El Salvador.*

### **Environmental destruction as a tool of war**

In addition to the untold suffering caused by war, the environmental consequences of armed conflict can be severe. Environmental degradation was a feature of the countryside before the civil war in El

Salvador but, according to one aid worker in the area: 'the wholesale destruction of the environment became a "military objective"'. The strategy adopted by the armed forces involved indiscriminate bombing of the rural areas in which the guerrilla organisations were assumed to have their social and logistical base. According to the human rights organisation Americas Watch, in the early 1980s the north and east of the country became known as 'free fire' zones in which bombing was 'a systematic and, apparently ... deliberate, practice'. A Salvadorean peasant from Morazán described it at the time like this:

The whole area is subject to bombing, strafing, rocketing and machine-gunning from the air, by the military. At worst, this results in deaths and injuries within the civilian population. At best, it prevents people from working in their fields. The military systematically burn large tracts of brush and trees each year to reduce undergrowth for the [guerrilla fighters] to hide from air attacks. This burning has resulted in destroying 75 per cent of the water table in the area – and is gradually going to convert it into desert.

Attempts by the inhabitants to preserve or repair their environment have all too often been thwarted. Hills which were reforested after being denuded in armed conflict in 1981, are now almost totally bare again due to aerial bombing.<sup>14</sup> Rocketing and strafing caused a fire which destroyed all the pine trees in a community wood planted only ten months earlier.

Massive migration resulted from the civil war: about one million people were killed or forced to leave their homes, almost one-fifth of the population of El Salvador. Some fled to urban areas within the country, whilst others made the hazardous journey to the United States via Mexico. Many thousands fled over the border into Honduras and about 8,000 of them formed refugee camps at Colomoncagua. They came from north Morazán, and were mainly women, children and elderly men. The establishment of the camps was a difficult task because of the physical conditions and the unfriendliness of the host government and military authorities. The camps were enclosed and social interchange between the refugees and the local Honduran population was prohibited. For people who were accustomed to living off the land and being self-reliant in respect of most staples, this new life of dependency was an alien one.

### **The Gulf War**

Destruction of enemy infrastructure and key resources has long been a strategy in war. The devastating environmental consequences of modern warfare were clearly illustrated by the 1991 Gulf war. Kuwait and Southern Iraq and Iran were severely affected by smoke from burning oil



following the firing of oil wells by the retreating Iraqi army. Some scientists claim that, at a high estimate, three million barrels of oil a day were burned from more than 600 wells for nearly ten months. 'Black rain' containing dust and hydrocarbon particles and 'oil rain' have fallen on Kuwait, Iraq and Iran. Up to one-third of Iran is said to have suffered from black rain at one time or another since the end of the war. This could have serious effects on Iran's main agricultural area, between Bandar Khomeyn in the north and Bandar Busher on the coast.

The social and environmental effects of the Gulf War on Iraq's agriculture and water supplies have been devastating. The breakdown of electric power supplies following Allied bombing has created a cycle of contamination. More than 90 per cent of the sewage treatment plants in the country are out of action which means massive amounts of untreated domestic and industrial sewage are pumped into the rivers. A Harvard Study Team which visited Iraq in 1991 reported that:

In all of the seven southern governorates surveyed, the onset of unsanitary conditions and the increase in water-borne diseases followed the loss of electric power in the first days of the war.<sup>15</sup>

Agricultural production has been sharply reduced as a result of the breakdown of the electrically-powered network of irrigation pumps. The Harvard Team estimates that the irrigation network is currently operating at 40-50 per cent of pre-war capacity. In addition, there is an acute shortage of fertiliser and seeds because the main fertiliser plant at Al Qaim was destroyed during the war. Before the war, Iraq produced 30 per cent of its food needs. Today it produces 10-15 per cent.<sup>16</sup>

In May 1991, Oxfam began an emergency relief programme in Iraq, working through local authorities in the south by providing spare parts and pumping equipment for water and sewage treatment and cooperating with UNICEF to re-establish primary health care. In the north-east of Iraq, Oxfam is working in cooperation with UNHCR to provide shelter, water supplies and sanitation to Kurds in the Sulaimaniya region.<sup>17</sup>

### **The wider impact of the Gulf War**

The repercussions of conflict in causing suffering, threatening livelihoods and disrupting economic development can extend far from the war-zone. A report commissioned by Oxfam and five other development agencies identified 40 developing countries which had experienced costs greater than 1 per cent of GNP as a result of the Gulf War.<sup>18</sup> The total cost to these 40 countries is estimated at US\$12 billion. Worst affected are Jordan (32 per cent of GNP), Yemen (10 per cent of GNP), and Sri Lanka (4 per cent of GNP). The list includes most of the

poorest countries in all regions and four African countries – Ethiopia, Sudan, Mozambique and Liberia – where millions of people were at the time facing starvation as a result of drought and war.

Increases in oil prices, loss of remittances from workers in the Gulf, loss of export markets, and withdrawal of aid are some of the ways that countries have been affected economically. The increase in oil prices during the Gulf War adversely affected all oil-importing countries, resulting in further stress for fragile economies struggling to meet their foreign exchange needs. In Zambia, for instance, costs of fuel for transportation increased dramatically as a result of the Gulf War.<sup>19</sup> Many thousands of workers, mainly from India, Bangladesh, Sri Lanka, and Middle East states such as Yemen and Egypt, were forced to leave their jobs in Kuwait and Iraq, thereby cutting off a valuable source of income to their families, and accentuating poverty at home.

## **ENVIRONMENT AND CONFLICT**

The Gulf War illustrates both the far-reaching human suffering and the environmental devastation that result from war. Environmental degradation can also be a factor generating conflict as pressure on a shrinking natural resource base leads to competition for control of resources. A vicious circle of environmental degradation and conflict can develop, where inequitable distribution of natural resources leads to environmental degradation, which exacerbates conflict over shrinking resources. Further environmental damage takes place as a result of the conflict, with disruption of agriculture or destruction of forest cover. The resource base is further diminished and insecurity increases so that any peace achieved is only tenuous, with a strong potential for future conflict.

Together with poverty and drought, conflict is one of the key factors in a complex syndrome that has pushed many countries, in Africa especially, towards food insecurity and political disintegration. All the indications are that conflict will remain a continuing problem on the continent. The consequence of this cycle is that lives are shattered and long-term development made difficult or impossible.

### **The Horn of Africa**

The interrelated causes and effects of poverty, conflict and environmental degradation are well illustrated in the Horn of Africa, an area in which Oxfam has had substantial involvement over a long period. The countries of the Horn – Ethiopia, Somalia, Djibouti and Sudan – are amongst the world's poorest. It is an area where African and Arab cultures, Christianity and Islam, pastoralism and sedentary farming meet. Underdevelopment, environmental degradation and drought, coupled with the effects of war, have contributed to

devastating famines. Over the past 20 years these have claimed the lives of millions of people and displaced many millions more.

Throughout the Horn of Africa, traditional methods of coping, such as mutual food lending and seed banks, are eroded as the margin of survival of rural civilians is squeezed. An Oxfam report concluded that the variety of ways in which people survive has proved to be more important than the provision of food relief, in withstanding famine.<sup>20</sup> When war disrupts 'coping strategies', destitution and starvation for the poorest people can easily follow. All the famines in the Horn of Africa which have witnessed extremely high casualties, have been conflict-related, whereas starvation is rare or unknown in famines where conflict is not a feature.<sup>21</sup>

Hunger and malnutrition are recurrent problems in this region. In 1991 the UN estimated that 6 million people in Ethiopia, and 7.7 million in Sudan were at risk from starvation.<sup>22</sup> Since 1955, wars in the region have caused 5 million civilian deaths and as many people again have been severely disabled. A report of the United Nations Environment Programme in 1989 comments:

While the causes of political conflict in this region are complex and multifaceted, deteriorating environmental conditions clearly contribute to instability. Environmental degradation has heightened political tensions, aggravated existing conflict and in some cases been a catalyst for hostilities.<sup>23</sup>

Longer-term management of the region's scarce and fragile natural resources in the interests of all its people cannot be successful unless there is an end to conflict. Rangelands and water are essential resources right across the region and demand cooperation across national boundaries for proper management. The Ethiopian highlands are the source of nearly all the water used to irrigate commercial crops in Sudan and Somalia. Ethiopia has made little use of irrigation so far but there is now a possibility of dams being built on the Ethiopian headwaters of the Blue Nile and the Shebelle, which could create more tension with countries downstream. Rangelands for pastoralists often span national boundaries. Catering for their needs will require regional cooperation if their livelihoods are to be sustained and they are not to join the ranks of refugees already uprooted by conflict and worsening environmental conditions.

### **Ethiopia**

The World Bank classifies Ethiopia as being the world's second poorest nation with a GNP of only \$120 per head in 1989.<sup>24</sup> Eighty per cent of its population are dependent on agriculture for their survival. Between 1970-80 real average annual GDP growth is estimated to have been only

0.6 per cent, and the trend during the 1980s was downwards. In 1990, Ethiopia's debt service ratio was 36 per cent.<sup>25</sup> Ethiopia earns most of its foreign exchange from export of one primary commodity – coffee. It was affected by falling prices between 1979 and 1982, in 1987, and again in 1989 with the collapse of the International Coffee Organisation's (ICO) quota system.

Famine in the Ethiopian highlands helped to trigger the 1974 revolution which overthrew Emperor Haile Selassie. That famine, like the more recent famines in the region, had its roots in socio-economic conditions and government policies as well as environmental degradation. Traditionally the highlands of Ethiopia were the main farming areas of the country. Owing to the combination of drought, deforestation, poor agricultural practices and population pressure, the fertility of the land had deteriorated markedly by the early 1970s. Ethiopia has been largely deforested; in 1900, 40 per cent of the country was covered with forest but today this is down to only 4 per cent. An estimated 77 million hectares of land has suffered serious erosion, and 1 billion tonnes of topsoil are reckoned to be lost each year. Protests against corruption, inflation, unemployment, food shortages and indifference to the famine in Wollo Province escalated into the 1974 revolution.

Falling agricultural production resulting from drought, soil erosion, and other problems, had gradually driven farmers out of the highlands into marginal areas not suitable for intensive agriculture. A slow movement of people out of Wollo and Tigray provinces developed towards the west and south. After the famine of 1984-5, the post-revolutionary Mengistu government decided that in order to speed-up migration, people should be forcibly moved and resettled. The plan was deeply unpopular, as was the 'villagisation' programme which forced people to leave their homesteads and to live in concentrated settlements. Their crops were bought by the government at very low prices, providing little incentive to raise yields. A former Oxfam country representative reported that the resettlement programme was detrimental in that it displaced indigenous farmers, accelerated environmental degradation and impoverished the settlers both culturally and materially.<sup>26</sup> The unpopularity of the resettlement programme fuelled the conflict between the people and the government which eventually contributed to the overthrow of the Mengistu Government.

Up until 1991, fighting had gone on for 30 years between the government of Ethiopia and the Eritrean People's Liberation Front (EPLF), who were fighting for an independent Eritrean state, and since 1975 between the government and the Tigray People's Liberation Front (TPLF). Fighting in some of the most drought-prone areas of the country has aggravated poverty by undermining rehabilitation programmes and



*Tigrayan soldiers, with weapons captured from the Ethiopian government troops against whom they were fighting.*

efforts to prevent famine. Relief work has been essential, including the 'cross-border' transport of food into Eritrea and Tigray with large international donors channelling food through non-governmental organisations, including Oxfam.

Oxfam's work in Ethiopia has consisted of a combination of relief and development work at community level aimed at helping communities meet their basic needs, strengthen their coping mechanisms and withstand periods of stress by rehabilitating the degraded environment. For example, in Eritrea, Oxfam contributed to a three-year programme which involved 75,000 families.<sup>27</sup> Each family received seeds and tools and 15,000 families were given either oxen or camels for ploughing. Another 5,000 pastoral families were helped to restock their herds. Community activities were part of the programme too, with village water supplies and irrigation schemes in some areas. An initial reforestation project involved the planting of 95 acres and the repair of nearly 3,000 acres of terracing. Oxfam hopes to support the local Eritrean relief and development agency, ERA, in its efforts to establish 500 small agricultural workshops. They aim to produce and repair tools, which will make village communities more self-sufficient.<sup>28</sup>

### **Sudan**

In South Sudan, Oxfam is concentrating its efforts on the less insecure west bank of the Nile and is currently funding many development

projects which assist war-displaced people to return to the countryside and begin to farm again.

Oxfam field staff report that since the war, people are showing a renewed interest in traditional agricultural technologies such as the use of oxen for ploughing and traction, and local seed varieties. Integrated agricultural systems were very much part of the southern Sudanese economy. The Sudan Relief and Rehabilitation Association (SRRA), have set up local seed banks and employed local farmers to grow out the seed and multiply stocks.<sup>29</sup> The aim is to produce 160 tons of local varieties of maize, sorghum and groundnuts which will be distributed mainly to women's groups and cooperatives. Seed can thus be bought locally for a fraction of the cost of buying outside the area. The SRRA is also promoting systems which incorporate piggeries, chicken hatcheries, fishponds and intercropping. Sim-sim and sorghum, for example, are being planted together. Lack of foreign exchange has encouraged the use of non-chemical means of pest control; an effective insecticide can be made by boiling up tobacco leaves. Provision of basic tools, often using scrap metal from derelict trucks, is important, and traditional trading routes are once again being used for exchange of cattle for grain. The almost total absence of transport infrastructure means that people are travelling by foot and bicycle, often over huge distances, to barter their goods. People are increasingly concerned about excessive cutting of timber, mostly for construction purposes. Agroforestry projects have been started, including tree-nurseries.

But the continuing armed conflict seriously hampers this type of work by making it impossible to plan more than six months ahead. Environmental rehabilitation upon which people's livelihoods are based is essentially a medium- to long-term activity which is made very difficult in conditions of such instability.

### **Surviving and rebuilding**

Oxfam experience with refugees who had fled from the war in El Salvador and were living in camps in Honduras, illustrates how important community-led organisation can be in helping people rebuild their lives.

UNHCR provision of shelter, food and health services to over 8,000 people concentrated in one of the camps at Colomoncagua, a remote settlement a day's drive from any sizeable town, was a daunting task. The refugees were determined not to become passive recipients of aid programmes designed and delivered by outside agencies. It was assumed that their return home – their eventual goal – could be later rather than sooner and a long-term approach was adopted. They quickly formed teams and elected coordinators to identify ways to ensure that

their needs for food, shelter, health care, education and social organisation, were met. Community development was central to survival.

Training and production workshops were set up as an important first step, with part-funding from Oxfam. In this way, the refugees could build on existing strengths and also develop new skills. The workshops were initially in practical skills such as carpentry, tin-smithing, pottery, tailoring, shoe-making and weaving. On the insistence of the refugees, workshops expanded to include literacy and community health care, with teachers increasingly being drawn from amongst their own numbers. With the support of aid agencies, the refugees became increasingly ambitious in their aspirations. Training was given in administrative skills, and a semi-industrial approach to workshop management was developed, employing new machinery and thereby developing skills in maintenance, repair and recycling of equipment. This culminated in the inauguration of a technical school in 1986. With women forming the majority of adults in the camp, the traditional sexual division of labour was overridden, and vehicle maintenance, for example, was often carried out by women.

With material and educational assistance, the refugees of Colomoncagua had successfully built what amounted to a sizeable, almost self-contained town. Public health infrastructure included chlorinated water systems, latrines, showers and laundries; an irrigation system and terracing meant that in spite of restricted space, the camp was self-sufficient in vegetables. Collective kitchens were used as a way of saving fuel; and fishponds and small animal husbandry were organised collectively, to maximise productivity.

Colomoncagua was one side of the story; meanwhile, in northern Morazán from which the refugees had fled, those left behind also managed to achieve a degree of development in spite of the armed conflict around them. Together with some of the people who began filtering back into the area from about 1985 onwards, they formed community development councils to try to secure basic rights and needs. These in turn joined together to form a region-wide association, Patrimony for the Development of Communities of Morazán and San Miguel (PADECOMSM). Refused credit from official sources because they lived in a war zone, PADECOMSM began to administer a revolving loan fund, with money provided by development agencies.<sup>30</sup> Through this, small amounts of credit were provided for the production of basic grains. Between 1984 and 1987, there were serious droughts which brought many other communities to the brink of disaster. Peasant communities that had benefited from the PADECOMSM revolving loan fund, were better able to withstand the pressures.

### **Return to El Salvador**

The refugees looked upon themselves as part of PADECOMSM, so when they were able to return from Colomoncagua to Morazán there was close and positive cooperation between them and the PADECOMSM membership. As part of a much larger re-population process, the returning refugees were settled in a newly created town which they named 'Segundo Montes', in memory of one of six Jesuit priests assassinated in 1989. Cooperation was crucial to the success of the plan, which involved integrating over 8,000 people, with a recently acquired high level of technical skills, with communities who were in much the same material conditions as they themselves had been when they had left some nine years earlier. The returning refugees were essentially dependent for food on what the PADECOMSM members could produce. Given the problems of subsistence farmers in meeting even their own needs, the scope for friction was enormous. The potential for ecological disaster was even greater as the land which had been abandoned for so long was to be intensively, 're-colonised'. Recognising the importance of human development to achieving more sustainable development, the refugees were eager to share their newly acquired skills. Largely as a result of the high degree of social organisation and PADECOMSM's credit project, food production was greatly increased. Several farmers said they had doubled their output, and sufficient extra food was produced to feed the returning refugees as well.

In spite of having operated under enormous constraints, the returned refugees and PADECOMSM members have together managed to avert disaster in their area by creating a positive cycle of self-help and co-operation to counter the effects of environmental degradation and conflict. The biggest single constraint on the regeneration of the environment was the war.

The Government was initially hostile to the repatriation and the armed forces insisted that permits had to be obtained for supplies. Access to essentials such as building materials, tools and fertiliser was severely restricted and repression continued. Yet, despite attempts to undermine the efforts of the community to build new livelihoods for themselves, Segundo Montes has survived and prospered.<sup>31</sup> The signing of a peace agreement in January 1992 at last brought the prospect of an end to the civil war in El Salvador.

### **CONFLICT IN A CHANGING WORLD**

The late 1980s and early 1990s have seen global political and economic changes happening at breath-taking pace. In Latin America, military dictatorships have been replaced by elected governments and in Africa moves towards multi-party democracy are gathering pace. This is not to



suggest that the lives of millions of poor people have materially improved, or that armed conflict has lessened.

The end of the cold war and moves towards the resolution of proxy East/West armed conflicts in the South should offer real opportunities to take advantage of the peace dividend to promote sustainable development. However, as the Worldwatch report, *State of the World 1992* states, 'At roughly US\$980 billion in 1990... global military spending is way out of line with the diminishing magnitude of military threats. Efforts to ward off far more pervasive environmental and social hazards, meanwhile are grossly underfunded.'<sup>32</sup>

At the same time the likelihood of new armed conflicts is very real. The political and economic collapse of the former Soviet Union (the Commonwealth of Independent States) and other former communist states and the disintegration of the nation state in many parts of Africa have resulted in a resurgence of ethnically-based movements and brought previously suppressed religious and ethnic tensions back to the surface. Fragile new democracies, particularly in Africa and Eastern Europe, will be unable to meet popular economic expectations at a time of acute economic crisis. To reduce tensions and conflict in the South, the North needs to show political will to create the conditions for equitable and sustainable development.

Just as a new set of relationships is taking shape between East and West, one that dismantles mutual threats and creates a climate of economic cooperation, so is there a need for a new partnership between wealthier countries... and the developing world... that embraces the common goals of restoring the planet's health and promoting sustainable progress.<sup>33</sup>

Conflicts will not be resolved without a wider notion of security which includes not only the absence of wars, but recognition that action to reduce poverty and injustice and tackle environmental problems are essential to global security.

A more dynamic role for the United Nations is also key to resolving conflict. A revitalised UN system would have a crucial role in conflict mediation, curbing the arms trade, protecting human rights and responding to humanitarian need. The UN also has a crucial role to play in the realisation of North-South agreements on global environmental issues and greater equity in international economic relations.

The enabling context for sustainable development must operate also at the national level. Popular pressure for political and social change in the South is leading to calls for democratic participation, equity, good governance and respect for human rights.

## 9

## THE POPULATION QUESTION

When we talk of emancipation, we are not saying that we should be emancipated from childbirth and motherhood. What we are saying is that we should be given the right to choose when to start motherhood and how many children we want to have.

Miriam Tabingwa, a founder-member of Action for Development (ACFODE) in Uganda.

**I**n recent years, high population growth rates have been a feature of many countries in the South. At the same time, environmental degradation is also occurring at an unprecedented rate in many of these countries. It is tempting to see the rapid increase in numbers of people in the world as a major cause of environmental degradation. However, the relationship between environmental degradation and population increase is highly complex and not fully understood. It is certainly not possible to make a simple, direct link between the two; there are too many other factors at work. The link is increasingly the subject of research and debate.

From an Oxfam perspective, the debate must include consideration of poverty and inequitable access to resources both within countries and between North and South. We need to look behind the global statistics and consider the different situations in different countries. If we are to understand the causes of rapid population growth, we must also consider the social, cultural and economic pressures on individuals and the choices open to them, which together influence the number of children they have. For it is the life choices of individuals and family groups which together go to make up the raw data of the statistical information.

### **Patterns of population growth**

The global population reached 5.4 billion in 1991. On the latest UN estimates, this will rise to 6.2 billion by the turn of the century, and to

11.5 billion before there is stabilisation.<sup>2</sup> Overall, population growth rates are slowing down – from 2.1 per cent in the late 1960s to 1.8 per cent in 1992 – but the global statistics conceal wide variations between North and South and between different regions of the South.<sup>3</sup> Over the next ten years, growth rates of 0.5 per cent are expected in the industrialised North, with 2 per cent growth in the South. Rates in Latin America and Asia are slowing down but in sub-Saharan Africa, which has most of the poorest countries, rates are still increasing, although in some countries the spread of AIDS may have an effect.<sup>4</sup> It is difficult to predict to what extent AIDS might reduce population growth rates, but because the death-rate from AIDS is highest among children and young adults, it could have a serious effect on future development in certain countries.

More important than growth rates are the actual numbers of people added each year and the amount of resources they consume. Every year, there are 93 million more people, perhaps 98 million by the end of the decade. Whatever reduction takes place in growth rates, the world's population will be nearly half as large again by 2025, because the parents of the future generation have already been born.

### **Resource depletion**

The population statistics are a cause for concern in terms of the capacity of Southern economies to support fast-growing populations against a background of highly inequitable distribution of resources and access to technology. But to equate sheer numbers with resource depletion and environmental damage is to miss a highly significant point. Even though the total population of the industrialised countries is much lower than that of the developing countries, it is clear that the former generate significantly more damage per person to the global environment than do people in the developing countries.

Commercial energy consumption is a useful measure of environmental impact per person. Four-fifths of the world's commercial energy is used by a quarter of its population living in 42 countries; one fifth of the world's energy is used by three-quarters of the population living in 128 countries. An average person in a 'high consumption' country uses 18 times more energy than a person in a 'low consumption' country. Moreover, although the high consumption countries' populations are stable or declining, consumption levels continue to rise.<sup>5</sup> Examples from Bangladesh and the United States of America further illustrate the disparities. The population of Bangladesh is set to expand in 1992 by 2.9 million people (growth rate 2.5 per cent) and that of the US by 2 million (growth rate 0.8 per cent). But each Bangladeshi consumes energy equivalent to 3 barrels of oil per year and each US citizen 55 barrels. The total impact of the Bangladeshi increase will be 8.7

million barrels, that of the US will be 110 million. In terms of the consumption of a non-renewable natural resource and the pollution which that consumption generates, the US bears a huge responsibility for global environmental degradation even though its population growth rate is only 0.8 per cent.<sup>6</sup>

The impact of the population of the rich countries with high levels of energy consumption is directly related to global warming and the depletion of the ozone layer – environmental problems which will affect North and South alike. The environmental impact of people in the South is largely related to depletion of natural resources such as forests and soil. These problems are widespread but mainly localised in their effects and are most serious for the day-to-day lives of the poorest people. But it is not just poor people, forced to over-use scarce resources, who are responsible for environmental degradation in the South. For example, in the case of the destruction of the Brazilian rainforest, it is the activities of rich land speculators, as well as small-scale farmers, which have caused deforestation.

### **A view from the South**

People in the South can find the Northern preoccupation with the 'population problem' highly offensive. They see this anxiety as based on a concern for the preservation of power and a lifestyle of extravagant consumption, rather than a genuine worry about the future carrying capacity of the planet. Only when the North shows some sign of being prepared to reduce its consumption of scarce global resources and to tackle inequities in the world economic system will people in the South believe that concern over population increase is anything other than selfish.

While many people in the South would not deny that rapid increase in population presents a major problem for some countries – though not all – they believe that one of the main causal factors for rapid population growth is poverty – and until poverty and inequality are addressed, nationally and internationally, population growth is unlikely to slow down.

### **POVERTY AND POPULATION GROWTH**

The countries with the poorest people are in general those with the highest rates of population growth. These are the people who are landless or are trying to survive in marginal areas of low agricultural potential or in the squatter settlements of the urban fringes. Poverty, high population growth rates and the low status of women are all interconnected and are symptomatic of fundamental inequalities in people's access to power and resources. Yet it is too simplistic to say that

increasing population pressure leads inevitably to environmental degradation.

Increasing population is only one of a number of complex, interacting social, economic, political and ecological factors which contribute to environmental degradation. It is neither the most direct nor the main cause, let alone the only cause, of environmental degradation.<sup>7</sup> In some countries, it is not a major concern. Yet in other countries, such as Rwanda and Pakistan, the effects of rapidly increasing populations are clearly a problem, for different reasons.

### **The case of Rwanda**

About the size of Wales, with a population of 7.5 million growing at 3.5 per cent each year, Rwanda is already more densely populated than any other African country.<sup>8</sup> At this rate of increase there will be 10 million Rwandans by the end of the century and double that by 2025. Ninety per cent of Rwanda's population depends on agriculture. A third of the population are extremely poor with hardly any land.<sup>9</sup>

Serious efforts to reduce soil erosion have been made but in general, fallow periods are shorter, and soil fertility is declining. Farm holding sizes have been reduced to an average of less than half a hectare per family and are often very fragmented. More than half the cultivated soils are on slopes of 10 per cent gradient or more. Many of the steepest slopes used to be tree covered and the soils that are exposed when trees are felled are acid and fragile. Within a few years of being cleared, the soil and nutrients that were held in place by the forestry cover are washed away by increased surface runoff. Recent figures show the nutritional value of food produced per person to be falling steadily since 1984 and the population steadily rising.<sup>10</sup> For poor families who lack access to sufficient land to make ends meet, migration offers a possible solution.

Christine and Emmanuel are in their mid-sixties and live in south-west Rwanda. They have six children. One single girl, the widow and three children of one of the sons, another son and his wife and three children, and one disabled son, all still live at home – seven adults and six children in all. Their plot is very small, about one-tenth of a hectare, but they also farm another small plot belonging to their son, Joseph, and they look after a friend's pig and piglets, which provide manure. They grow beans, sweet potatoes and soya, with some coffee and bananas (to make beer) as cash crops. In 1989, their crops failed because of drought and they were forced to rely on food aid and eating the bitter bananas which would have been used to make beer for cash. Christine believes that the famine had been coming for some time, and she had noticed climatic changes and a decline in soil fertility. In 1990, with better rains and

the produce from Joseph's land, things might have improved; but the price of coffee fell and the prices of necessities increased, owing to the war and devaluation.

Joseph, their second son, decided to leave the area and look for land elsewhere. He walked 140 kms. to Bugesera, in another part of the country, in search of land. Most of the land was already taken, many people were looking and there was resistance to strangers moving in. An arrangement he made with a local farmer to buy a small piece of land came to nothing and he had to start looking again. He found a very small plot which he could use for one season only with no guarantee for the future. They survived the period until the harvest with the help of the landowner. Then Joseph went east to Tanzania to look for land. But Tanzania had just decided to repatriate all Rwandans so Joseph hurried back to try again to find better land before all the others arrived back. He managed to renew his arrangement with the first farmer but it was not recognised by the authorities. When people arrived back from Tanzania, there was nothing for them to come back to. Many went to the local parish in search of food aid and others turned round and went straight back to Tanzania.

Migration is important both on an informal basis and in a more organised way with government support. But environmental and economic trade-offs are involved where internal migration is organised at the national level. People from land shortage areas have moved to the areas around the Volcanoes National Park and other previously forested areas, to valley bottoms previously used for grazing, and to more marginal areas such as Bugesera, the area to which Joseph migrated. By 1990, no more land was available in these areas. Some suggest that the Nyabiringo Valley which runs for 150 kms. through the country should be used but it serves as a reservoir for the headwaters of the Nile. Others suggest using the Nyungwe Forest and the Akagera National Park but both are regarded as important ecological conservation areas and would not support intensive agriculture.

Many thousands of people have migrated into the surrounding countries of Uganda, Burundi, Zaire and Tanzania in search of land, work, and safety from political harassment. But surrounding countries may be reluctant to allow this to continue. In a survey carried out in 1984 on the effects of migration,<sup>11</sup> it was found that poverty, measured by food consumption per head, was most severe not amongst the 20 per cent with least land but amongst the next 20 per cent with more land. This was because some members of the families with least land had been forced to migrate in order that those remaining could survive. Food

security then improved for those remaining. Those with a bit more land struggled to survive on it and suffered progressively as years went by.

In common with many developing countries, there are very strong economic, social and cultural pressures towards high fertility in Rwanda and people tend to have several children. In an effort to tackle what was seen from the outside as a population problem, the National Office of Population Activities (ONAPO) was created in 1981 with funding from USAID. Its objective was to balance population growth and available resources. Unfortunately ONAPO activities were not integrated with other aspects of primary health care and were not a government priority. This made ONAPO ineffective. After seven years, only 4 per cent of women were using contraceptives and many more had become prejudiced against them because of side effects which went unexplained and were not dealt with. Much greater medical supervision was needed than was available. ONAPO activities were re-launched in 1989 and there has been a marked increase in contraceptive use, up to 12 per cent in 1992. The reasons for this increase are presumed to lie in the cumulative effect of several factors, including community education activities, the 1989 famine, the modification of the position of the Catholic Church, and the integration of family planning and health services.

At present rates of population growth, Rwanda will have to accommodate 3 million more people by the end of the century. The key issue is not so much whether or not Rwanda could eventually support a larger population, but whether it can do so fast enough to keep up with the rate of population increase.<sup>12</sup> In a country completely dependent on agriculture, which is pushing at the limits of available agricultural land, the question is what development strategy could be devised to absorb a further 3 million people in such a short space of time. Further agricultural intensification and land redistribution could offer some possibilities since 16 per cent of the population owns 40 per cent of the land. But experience of land reform elsewhere (as shown in Chapter 5) does not give cause for optimism, and migration offers limited possibilities.

Oxfam field staff working in Rwanda have become increasingly aware that, despite resources having been relatively well managed, the problems facing the country are extremely serious. Pressure of a rapidly rising population is probably already an important factor in food shortages, conflict and environmental degradation – and ways ahead towards solutions are far from clear.

### **The case of Pakistan**

Pakistan is another country where, at a national level, there are significant environmental and development problems. They have been

described in detail in the National Conservation Strategy (NCS), a comprehensive report presented to the government in May 1990. National Conservation Strategies were prepared in many countries as part of the follow-up to the World Conservation Strategy published in 1980.<sup>13</sup>

The birth rate in Pakistan has changed very little in the past 40 years but the death rate has fallen substantially, resulting in a population growth rate of 3 per cent, one of the highest in the world. The population has increased from 31 million in 1947 to 123 million in 1990 and is projected to rise to 162 million by the end of the century.<sup>14</sup>

These large increases in population have been accommodated by three major agricultural advances which occurred in the 1960s: increased water from the Indus river for irrigation; many more tubewells; and the use of high-yielding grain varieties. There seems to be little hope of gaining much more now from these 1960s innovations. According to the National Conservation Strategy document, for the past 30 years the ecosystem has been greatly damaged and natural resources are being depleted at an alarming rate. Forest cover is down to 5 per cent of the land area; various forms of land degradation have affected 60 per cent of the land – soil erosion threatens 11 million hectares; water-logging and salinisation 5.5 million hectares; destruction of river and mangrove systems are threatening many plants, animals and fish with extinction; and the level of pollution, mostly from human effluent, is described as ‘horrific’.<sup>15</sup>

In addition, there is pervasive land hunger which increases pressure on the forests and aggravates water supply problems for agriculture and public health. Agricultural technology has enabled Pakistan’s food production to keep pace with population growth for the past 40 years. But it has probably not been sustainable in the recent past. It remains to be seen whether food production can meet the needs of the increasing population in the future and particularly whether distribution systems will ensure that food requirements of all the people are met. The National Conservation Strategy document is outspoken in laying a large part of the blame for the present predicament on neglect of women’s development which is closely related to poverty, population growth rates and environmental management.

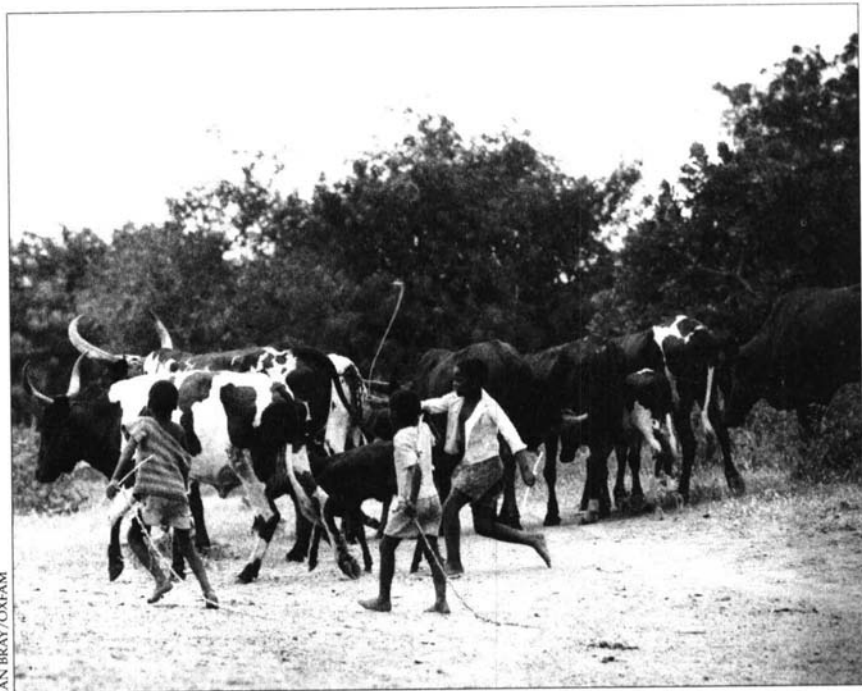
## **WHY DO PEOPLE WANT CHILDREN?**

Desired family size is conditioned by a wide range of factors – cultural and religious views, the status and level of education of women, the general social and economic situation, and attitudes to replacement of children in situations where infant mortality rates are high, and access to health and birth planning services limited.<sup>16</sup>



Large families are seen in some societies as a sign of high status. Men may see it as 'macho' to have a large family, and producing many children, preferably males, is seen by women in many societies both as their principal social role and as a means of providing security in their old age. Gender relations, determined by social and cultural attitudes, are slow to change; it is because of the low social and economic status of women in so many societies that the bearing of male children is highly valued. Where women are able to claim an equal role in decision making, and take control over their own lives, there are other possibilities for status-conferring activities open to them, besides child-bearing. Early marriage, a feature of many societies, can be another reason for high birth rates.

In the rural areas of developing countries, where people have access to few resources beyond the family, children provide labour and income for family survival. A large family provides the only insurance for old-age; security depends on the number of surviving healthy children a family produces. Male children are often important in securing continued ownership of land or property so women will wish to ensure that they have one, preferably more, sons. In countries where health care provision is limited and child mortality rates high among poor families,



*Young herders, Mozambique. Children are a valuable source of labour in a rural family, and take responsibility for caring for animals at an early age.*

many children may be born but only a few may survive. Women may need to have several children to ensure enough survive into adulthood. Rwanda, for example, has one of the highest infant mortality rates in the world and one of the highest fertility rates.<sup>17</sup> In economic terms at the household level, large families are the only source of security, in the present and for the future, for millions of the very poor, and especially for women.

Clearly there are many complex and inter-related factors contributing to large families and so to rapid population growth – but poverty appears to be a major underlying cause.<sup>18</sup>

For the urban poor, it can be rather a different story where, instead of being a source of wealth or insurance, a large family may be a drain on resources. Cities are nevertheless growing very rapidly throughout the developing world because of a combination of migration and natural population increase, as described in Chapter 7. People perceive and express their needs differently in rural and urban areas depending on their access to land, income, employment, health and education services. Leela is an Indian woman trying to cope in a harsh urban environment:

Leela is known to an organisation supported by Oxfam. She had eight children. One boy died when he was one year old. She was pregnant again and had no milk to feed him so he weakened and died. Her eldest daughter committed suicide because she was unhappily married. Leela explains that she had eight children because her husband wanted them to make him wealthy – but now times have changed. They live in the city where everything costs money – school fees, medicines, clothes, food and fuel for cooking. Her next daughter is pregnant. Leela told her: 'Have only two children – any more is crazy!'.<sup>19</sup>

In spite of cultural, social and economic pressures to do otherwise, many poor families do take the decision to limit the number of children they have. But it is often very difficult for them to get access to the contraceptive information and services they need, and to overcome family or cultural pressures.

## **WAYS FORWARD**

Tackling the interlinked problems of poverty and rapid population growth calls for an integrated response including most importantly poverty alleviation, improving the health, education and status of women, and providing access to birth planning information and services.

Actions to address poverty must involve tackling the inequitable access to resources both within and between countries.

**Focusing on women**

The role of women is central to finding solutions to problems of poverty, environmental degradation and rapid population growth. The poorest people are usually women. Women often have no decision-making power over their fertility; and women play a crucial role in the management of natural resources as the means of providing for their families. For example, in Sri Lanka, India, Colombia and Chile, all countries where Oxfam works, it has been shown that fertility rates are very closely linked to the health status, education and income-generating capacity of women.<sup>20</sup> When women's prospects are improved and they gain the strength to take decisions for themselves, they are more likely to limit their families.

In Sri Lanka, female literacy rates are in excess of 80 per cent and there is a strong primary health care programme which encourages rural women's involvement. The general fertility rate declined by 18 per cent between 1965-70 and by the same rate again between 1975-80. Desired family size is steadily declining also. The Indian state of Kerala has a strong public health sector and a female literacy rate more than twice as high as India's average. Infant mortality is less than one-third the national average, giving parents confidence that their children will survive to adulthood. A comparison with the Indian state of Uttar Pradesh is illuminating: with 85 per cent lower female literacy and infant mortality four times higher, the fertility rate was more than double that of Kerala.<sup>21</sup>

Education is one key factor enabling women to take control of their lives and their fertility. In addition, lack of education can translate into poor health and nutrition for women and their children, which leads in turn to high infant mortality and so to more births. Some observers believe that education is the most important factor in improving women's lives.<sup>22</sup>

**The need for birth planning**

Access to appropriate birth planning information and services is also essential so that when people take decisions to limit child-bearing, they are able to act on their wishes.

There is a very clearly established need for birth planning which at present is not being met. The World Fertility Survey<sup>23</sup> carried out in 41 developing countries between 1972 and 1984 revealed that about 300 million couples wanted to limit their families but lacked access to appropriate and acceptable family planning services. More recent figures taking into account increased use of contraception indicate that the number of women using contraception could increase by 100 million if their contraceptive needs were met.<sup>24</sup> If appropriate services were

available to all the people who wanted them, it is estimated that the number of births would be reduced by 27 per cent in Africa, 33 per cent in Asia and 35 per cent in Latin America. The prevalence of present contraceptive use is 20 per cent, 30 per cent and 40 per cent in those regions respectively, compared with around 70 per cent in Europe.<sup>25</sup>

This striking unmet need for family planning is borne out by the desperate measures taken by women – the immense number of illegal and dangerous abortions, the numbers of abandoned children and even infanticide.<sup>26</sup> Abortions are estimated at 50 to 70 million per year, mostly in developing countries.

The following stories from Rwanda and Vietnam illustrate the problems faced by many of the world's poorest women.

Born into a rural family in Rwanda, Odette was the third of eight children. She did not go to school because her parents could only afford to educate some of the children and sent the boys to school. She stayed at home helping with farming, cooking and looking after the younger children. She was married about ten years ago and moved away from her home area. Since then, Odette has had six children of whom four survived. At present she is able to feed all the family on the produce from the family plot of land and is able to educate the older one. She would prefer not to have any more children for a while. She feels weak from repeated pregnancies, breastfeeding the youngest child and doing all the work on the farm but she considers herself lucky that her husband helps in the fields. Odette visits the health centre 5 kms. away when she is pregnant and receives advice there on some contraceptive methods. She would like to have a contraceptive injection at a different centre 20 kms. away but her husband would never agree to her taking the time it would need to get there and back. He does not like to use contraception because he believes that children are a blessing from God. Odette agrees, but she would like to have a rest before having the next child.

A recent Oxfam report on Kyanh district of Vietnam found that the local Women's Union branch was very well-informed about methods of contraception but unfortunately only one method was available to its members. This was a form of intra-uterine device which caused such severe side-effects that most women found it intolerable and had to have it removed. Some women had undergone as many as four abortions and most had had at least one. Vietnam is no different from other countries in that contraception is regarded as very much a woman's problem and male contraceptive methods are hardly used at all. One in three pregnancies end in abortion – there are 1 million each year. Women want

quite small families, two or three children, which is not surprising in a country where women marry late, the great majority are literate and most are engaged in work outside the household. A better birth planning service is obviously badly needed in which personnel are trained to offer advice and follow-up, and which can offer a wider choice of methods for women and men, suited to their personal needs.

Birth planning can have a significant effect on improving the health of women and their children. The negative effects on women's health of too many pregnancies, too early, and too closely spaced are well documented. It is estimated that 25 to 40 per cent of the half million maternal deaths worldwide per year (mostly in developing countries) could be avoided by proper family planning provision. The health of those who survive, and their children, would also be improved if they were able to plan their families. Good birth planning programmes should enable people, especially women, to decide how many children to have, and when to have them.

### **'Population control'**

In the past, there has often been an over-emphasis on narrowly focused approaches which have led to target-oriented birth control programmes. The aim has been population control, rather than concern for the well-being of the individual and their family. They have been coercive in implementation and counterproductive in terms of reducing rates of population increase.

Partly as a reaction to such coercive programmes, development planners have tended to emphasise reduction of poverty as the best, or even the only, way to slow down population growth rates. For a while, access to contraception was considered to be of secondary importance. But lack of emphasis on provision of contraceptive advice can lead to 'coercion' of a different kind where women are forced to go through unwanted pregnancies because they lack access to the means to control their fertility. The level of unmet demand, and the number of abortions, attest to the need for contraceptive information and services to be more generally provided as part of development programmes.

Oxfam field workers and project holders in some countries have been well aware of the negative effects on people's health and well-being of coercive birth control programmes. These provided an array of inducements and targets, often financial, to health personnel and clients, which often led to abuses and even to violence. Features of such coercive methods of birth control delivery have been the lack of information, the limited range of methods, often unsuitable for individual circumstances, with a heavy reliance on sterilisation. These programmes were frequently put in place without wider health care support.

In Bangladesh, for example, payment of financial incentives for sterilisation led to abuses amounting in some cases to infringements of human rights. A more appropriate and effective approach would include sensitive provision of information, choice of methods and follow-up. Bangladesh is one of the world's most densely populated countries. To deal with the high population growth rates, successive Bangladeshi governments, under pressure from multilateral and bilateral agencies including the World Bank, USAID and some UN agencies, formulated various 'five-year' plans to deal with the high population growth rate, which was perceived by some international agencies to be the country's major problem.

The story of a Bangladeshi couple illustrates the problems of abuse which can arise in target-orientated birth control programmes.

Taibur and Shakina Rahman have six children. They live in a small village in Noakhali, Bangladesh. Shakina is 35 years old. Her oldest daughter is 22 and already married. Shakina's right leg is paralysed so she cannot do any work outside her home. Taibur, her husband, is a landless agricultural labourer. Their second daughter has come back to live at home as her husband divorced her. One of their sons, Babu, has a job on a tea stall, and is able to send his parents some money.

The Rahman family is fairly typical of rural Bangladeshi families. Their daily food consists of rice or wheat which they eat with peppers or lentils; they can no longer afford oil and onions. They depend on cast-off clothes and are worried about their debt to a relative of Taka 300 (£6). They do not know how they will ever repay it.

Shakina was told by a village health worker that if she was sterilised, she would receive in return Taka 175, a sari and a ration card entitling her to 40 pounds of wheat every two weeks. The wheat came from the UN World Food Programme, intended to feed vulnerable families. It is, however, often used by local officials to bribe people into having sterilisations so that they can meet their sterilisation 'targets' and so receive their wages on time. Shakina agreed to have the operation to help feed her family. Taibur was also told that if he would agree to a vasectomy, he would receive Taka 200, some clothing, and a card entitling him to 40 pounds of wheat monthly.

Taibur and Shakina are now both sterilised but neither has received a single ounce of wheat from the local office, despite the ration cards and promises that entitle them to a regular supply.<sup>27</sup>

### Birth planning

The experience of Taibur and Shakina Rahman illustrates the unacceptable aspects of some birth control programmes. It is generally acknowledged now that the approach to contraceptive provision should be one of birth planning rather than birth control with the latter's overtones of coercion and disregard of individual needs. Birth planning is about ensuring that contraceptive provision and advice is integrated with other health and education initiatives, especially those that focus on the status and rights of women.

Provision of good quality birth planning services and advice can play a highly significant role in enabling women to take control of their fertility. In the context of general poverty alleviation measures and initiatives to improve the health, education and status of women, birth planning provision can play an important part in reducing population growth rates.

Oxfam attempts to take a sensitive approach to birth planning services, supporting organisations which try to assess people's needs, provide information and advice. Birth planning should be an integral part of primary health care programmes involving advice, choice of methods appropriate to people's needs, and follow-up.

Oxfam also supports projects which are involved in sex education, female literacy and provision of information to women about broader aspects of their health. In Western Kenya, for example, Kima hospital runs a health care programme supported by Oxfam which provides



*Sex education is an integral part of this women's health scheme in Recife, Brazil.*

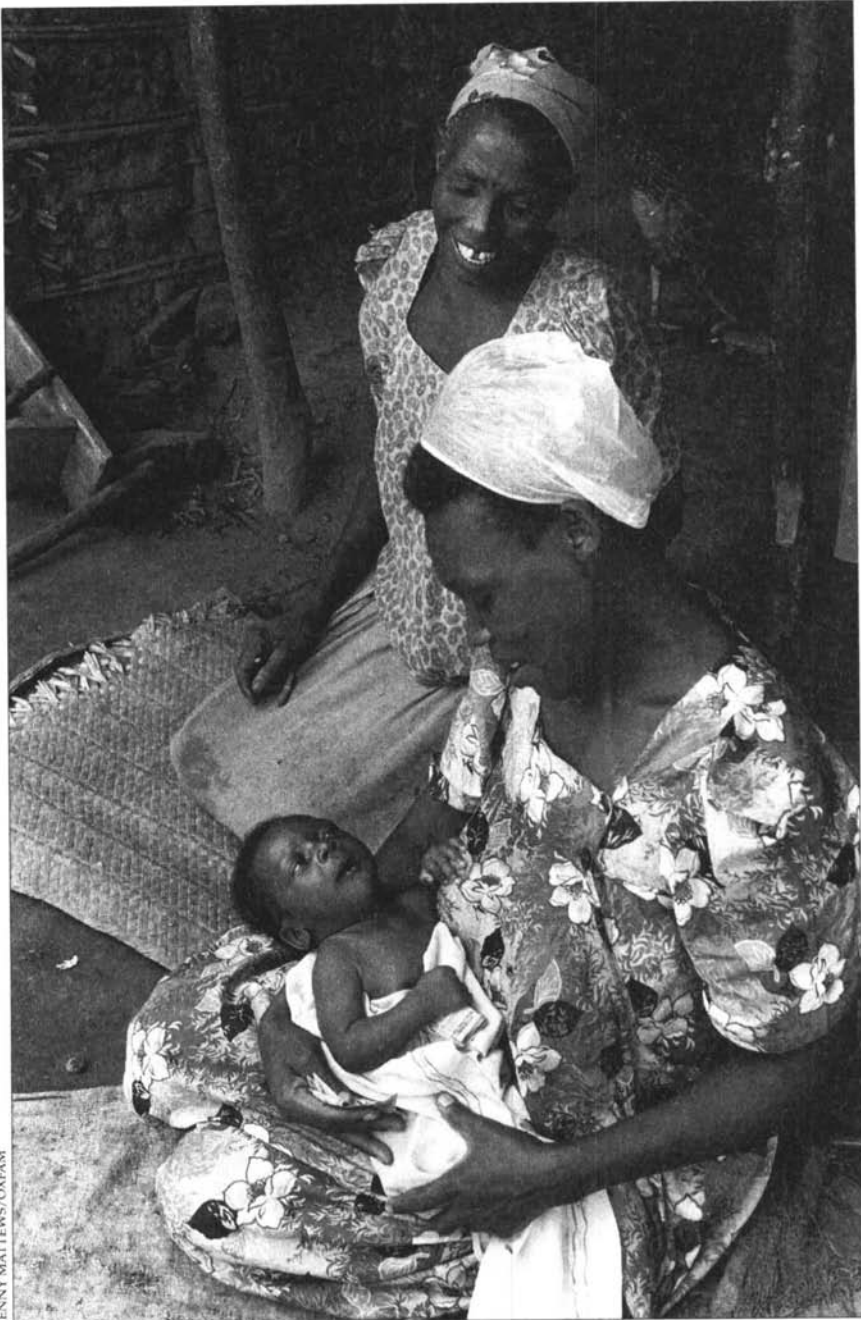
birth planning advice and services as one part of a broader programme which is designed to improve people's health and quality of life. Traditional birth attendants are trained in nutrition and provision of contraceptives. General development work includes, for example, improvement and protection of water supplies, and agricultural extension services. In 1990, about 5,500 women attended talks about birth planning at the clinic. Close to 1,000 of the women who participated have decided to use some method of birth control.

Working with teenage girls has been an important part of the work of the Centre for Information and Advisory Services in Health (CISAS) in Nicaragua.<sup>28</sup> Set up in 1983 to offer community health information services, by the late 1980s, CISAS had decided to concentrate its efforts on working mainly in the area of women's health, including giving priority to sex education with teenage girls still in school and to working with health professionals at the women's hospital in Managua to tackle issues of fertility control, pregnancy and childbirth. Workshops run by the Centre provide an opportunity for women and teenagers to start to make their own choices through gaining understanding of how their own body functions and an awareness of reproductive rights, including contraception.

Oxfam's experience in Pakistan demonstrates an evolving approach to the integrated provision of birth planning services in a country where, as described above, rapid population growth is recognised as a constraint on sustainable development. Oxfam and the Family Planning Association of Pakistan (FPAP) have had a long relationship which has changed over the years in response to improved understanding of the problems facing the women FPAP was involved with. Over a period of almost 40 years, the Association's strategy for providing family planning services has evolved from one of simply making contraceptive supplies available to one of integrating the delivery of contraception with very broad education and training programmes aimed at improving women's lives. In 1965, Oxfam started contributing to an educational campaign to provide information about birth planning. Resistance from elderly relatives and the restrictions of the purdah system still proved powerful obstacles preventing women from taking up birth planning services. A more integrated approach was developed, working with traditional health practitioners to provide mother and child health care services including birth planning. This approach proved highly successful and was eventually extended to include traditional birth attendants.

Despite small successes at an organisational level, it was realised that social, cultural and economic factors prevented many women from participating in the Association's programmes. So in 1978, FPAP embarked on a more broad-based programme to develop women's self-





*Traditional birth attendants (TBAs) can often be the best way of getting information across to new mothers. This is Amina Nakabugo, a Ugandan, who has been delivering babies for 40 years, with Nulu Kawayi and her son, Moses. Amina recently did a TBA training at the Semuto hospital. Maternal and child deaths are prevented by teaching basic antenatal care and hygiene practice to TBAs.*

awareness, confidence and solidarity to a point where they would be able to take control of their fertility. This was done through practical programmes of skills development, health education, adult literacy, income generation, and workshops. In 1991, Oxfam funded 30 grassroots workers in over 25 urban and rural locations, who helped women to organise a wide range of activities – educational, health training and services, including birth planning. Oxfam has also funded FPAP for day-care services, skills development and awareness-raising in urban slums, and is now supporting a similar programme in five rural areas.

Oxfam believes that it is the right of people, particularly women, to be able to choose the number of children they want, when they want them and when to stop having them. The priority is to listen to the needs of the people concerned and to fund birth planning information and services, usually in the context of primary health care systems. Special attention should be given to informed choice and back-up health services. Women should be consulted at an early stage and be involved in programme design. Male awareness and participation is particularly important. Birth planning services should be part of a broader programme of reproductive health care which includes sex education for women and men.

If population growth rates are to be reduced, the priorities must be to tackle poverty, improve the status and education of women, and respond to their right to control their fertility by providing access to birth planning information and services. The improvement in the quality of life of individual men and women and their children that results from the provision of good birth planning programmes should be an overriding reason for investing in them.