

# Come rain, come ill

**Heat, mud, wet clothes and dripping vegetation: perfect breeding ground for water-related diseases. Here Robert Chambers describes how the diarrhoeas, worms and fevers of the rainy season are not just painful and inconvenient. They can lock poor families into a remorseless seasonal cycle of increasing poverty.**

The great majority of rural people in tropical environments are cultivators or labourers. For them the worst time is usually during the wet season between the onset of the rains and the end of the harvest. Food is short, food prices high, cash reserves low and agricultural work hard. Much human physical energy is needed for land preparation, sowing, and weeding at just that period when there is least to eat. There are many local names for this lean and hungry season: it is only too well known.

The hungry season is also a sick season. Tropical rains encourage the breeding of disease-carrying insects, fungal infections and bacteria. Diarrhoeas are at their worst after rains have washed faeces into unprotected water supplies. In moist, warm weather, cooked food left standing is rapidly overgrown with bacteria. Malaria, guinea worm disease, dengue fever and skin infections increase and spread during the rains.

Exhausted by hard work, weakened by lack of food, shivering in their wet clothes, people are easy prey to disease. Women and children are particularly vulnerable. Anticipating long days of digging, planting and weeding, rural women tend to take their babies off the breast when the rains begin. Burdened with heavy work in the fields, women have less time for cleaning, preparing food or caring for their children. Meals are either prepared in bulk and kept simmering in the pot or cooked late in the evening when the day's work is over. Children often fall asleep dirty and hungry before the family eats. Even those mothers who continue to breastfeed find that their milk is reduced. Either way the smallest children suffer from lack of nutritious food at a critical time in their development.

Since women tend to conceive a month or two after harvest, the rains are also a time when many women are in late pregnancy. And their hardship can be extreme. In one village in the Gambia, a medical team found that in the month of August, women in their last three months of pregnancy lost an

average of 1.4kg of weight. Children born to such women at these times are correspondingly small with poorer chances of survival.

As so often, those who are poorer suffer more. They may need, desperately, to be able to work at this time: farmers to secure future food for the family; landless labourers because they must earn at this time – perhaps the only time in the year – when work can be found.

So this is the time when poor people are at their poorest. Regularly, seasonally, they are screwed down again and again into their poverty. This is also when they are most vulnerable to becoming yet poorer: when they have least, in stocks of money or food, as buffers against contingencies.

Sickness can be disastrous. Land must be tilled and crops sown and weeded in the early

*The hungry season is also the sick season: A Bangladeshi woman tries to cool with water a fever probably caused by water.*



part of the season otherwise valuable nitrogen in the soil is either consumed by weeds or flushed away by the heavy rains. As a Gambian woman put it: 'Sometimes you are overcome by weeds through illness or accident'. Illness can mean a smaller crop or no crop at all.

As long ago as 1957, B. H. Farmer wrote of the effects of malaria in Sri Lanka: 'incidence of the fever was unfortunately highest during the rainy season just when the stricken cultivators should have been busy with their main crops'.

Guinea worm disease presents another dramatic example of lost production through illness. Coinciding with the two peak agricultural periods in Ghana, it is the major preventable cause of work loss. The female worm is ready to lay eggs at the beginning of the planting season after its year maturing in the victim's body. Emerging from a blister in the leg its offspring are washed into wells and pools to infect others. Untreated victims can be completely disabled for over five weeks at this vital time of year.

The severe and irreversible effects of even quite a short illness is illustrated by a landless family in the Philippines. Tiyo Oyo, the head of the family, was stricken by cholera, very ill for a month, and had to be taken to hospital. Tiya Teria, his wife, handled the crisis. Antonio Ledesma reports:

“The week's stay in the hospital cost the family \$15, with food not yet included. Another \$16 had to be provided to buy dextrose when Tiyo Oyo was in a critical condition. Fortunately, one of the drugstores in Pototan agreed to provide a guarantee for the Sumagaysays in the hospital. To cover the expenses, Tiya Teria had to sell their *carabao* (buffalo) for \$40 to another small farmer. . . The *carabao* was

already in full working condition, and under normal circumstances could have been sold for more than twice the amount received by the Sumagaysays. Moreover, with the *carabao*, Tiyo Oyo would still have been able to plough other farm parcels for \$1.2 a day instead of working as a pure manual labourer for the current wage rate of 74c a day... In that sense, parting with the *carabao* meant parting with their last capital investment in farming. Buying a new *carabao* today would be unthinkable with the current market value of a working *carabao* estimated at \$123-\$185.59

Sickness such as this, food running out or some other acute need for money forces families either to sell assets or fall into debt - selling or mortgaging crops not yet harvested, livestock, land, jewellery, pots, pans or their future labour. Interest rates are high and small farmers who have to borrow money for high-priced food before the harvest lose heavily, having to repay in cash after harvest when prices are low for the food they have grown. Sales of assets and debts incurred often act like ratchets, irreversible shifts downward into deeper poverty and dependence.

Meanwhile, the only seasonal problem of any seriousness for the urban elite or the visiting expert is travel during the rains. And that is easily solved - by not going. The rural poor may be hit simultaneously by malaria, diarrhoeas, skin infections, hard work, lack of food, and malnutrition, but urban-based professionals are not there to see it. When they do leave the towns they come later, hug the tarmac and see only the better off people along the road. The sick and hungry seasons go unseen.

In many environments there is scope for counter-seasonal measures, measures to ease off the pressures of the poverty-disease ratchet. Irrigation can increase yields and reduce risks; effective rural works programmes which provide employment build up reserves of cash to carry the family through the rains; ensuring cheap food supplies during the rains and guaranteeing floor prices for food crops just after harvest can ease the burden of debt repayments by small producers and leave them more food to store for the following lean season. Priority should also be given to the prevention and cure of those diseases which are most debilitating at times of peak agricultural labour and food shortage and to the stocking of rural clinics with drugs according to seasonal need.

Such counter-seasonal strategies are not a panacea. They do not tackle deeper causes of poverty. But given a breathing space, when they are most short of breath and strength, poor people might be able to take their first step out of this cycle of disease and poverty.

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From a poster published by Quaker Peace Service



## Drawers of water

The Kikuyu women of Kenya tend to be scornful about the physical prowess of women in other Kenyan tribes. 'Kikuyu are much stronger,' they say, 'look how much water they carry.'

For the vast majority of rural women in Africa, Asia and Latin America, the idea of a water tap in the home is sheer fantasy. The best they can ever hope for is a hand-pump from a nearby borehole or a tap from a catchment tank or dammed-up spring. And though this 'improved water supply' might be less polluted than the lake or river, for them the cleanliness of their water is much less important than the distance they must carry it. For wherever it is, they still have to fetch it; still raise to their heads, or backs, or shoulders those heavy earthenware jars, metal drums, brass pots.

Almost from the first day they walk, small girls go with their mothers and older sisters to the well or river. The tin balanced on their heads grows bigger as they grow older, starting out no larger than a fruit juice can and ending with the 20-litre pots of their mothers.

Carrying water is so much a part of their lives that it is scarcely something to grumble about. It is the distance over which they complain. In some parts of Africa women can spend up to eight hours a day collecting water. And as nearby streams and water holes dry up in the dry season so the distance they must walk lengthens.

In Upper Volta some women leave at dusk to escape the noonday sun. They sleep overnight at the well and return with the family's water at dawn. And if the journey back is uphill it can burn up to 90 per cent of the food they consume each day. This leaves little time and energy for other things. Child care

suffers, babies are starved in the womb, and the continual water-bearing can distort the pelvis of young girls making the recurrent cycles of pregnancy and childbirth even more dangerous.

Dangerous and tiring it may be, but a Kikuyu woman is proud of her strength and endurance. She carries her water on her back, balancing huge metal drum high on her shoulders and holding it in place with a leather thong looped around her forehead.

To carry a load in this way she must walk half stooped and bent over, eyes on the ground, one arm steadying the leather strap, the other consoling the baby slung tightly across her chest.

Nothing could suggest a beast of burden more strongly than this image. It does not even produce the superb deportment of the Kikuyus' 'inferior' sisters in tribes whose womenfolk carry their loads on their heads. That elegant gliding walk with all the locomotion in the buttocks, the straight back and long neck are symbols of African womanhood. And its rhythm and stateliness are hallmarks of their serene attitude to heavy physical labour which is their lot.

But the Kikuyu would laugh at the idea that grace and posture are things to consider. Water is needed for the family. It is a woman's task to fetch it. And if she can carry 25 or 30 kilos from the river at a time, she must be doing better than her sister whose neck muscles only permit her to carry ten.

*Maggie Black*