The Need for Effective Water Stewardship

Suzanne Ismail

Around the world, increasing attention is being paid to the future of our water supplies. The United Nations Environment Programme (UNEP) predicts that in the next few decades acute long-term water shortages will increase significantly. According to UNEP, by 2025 as many as 2.8 billion people will live in areas that are 'water stressed' or 'water scarce'.[1]

Although the countries of the 'South' will be disproportionately affected, a number of countries traditionally considered 'water secure' are likely to encounter shortages too. Some analysts have predicted that in the future water could become as important a geopolitical resource as oil is today. If this happens, a dramatic rethink about the way we use water will be required.

Although there will be a clear role for individuals and governments, the corporate sector has a major influence on water resources and use. If the worst predictions are to be avoided, businesses will have to make major changes to the way they operate.

Increasing demand

Although some of the predicted water shortages are likely to be caused by climate change, a large part of the problem is the simple fact that with humanity's increasing demand for freshwater we are using up this invaluable resource faster than the environment can replenish it. The Aral Sea and Lake Chad have shrunk to fractions of their original size as a result of unsustainable water withdrawal for large-scale commercial agriculture. The social, environmental and long-term economic consequences have been catastrophic.

Agriculture is the world's most thirsty activity, accounting for approximately 70% of global freshwater withdrawal. Industrial processes such as manufacturing and electricity generation account for around 20%, whilst domestic use accounts for the smallest share, about 10%.

So whilst many of us think of water conservation in terms of what we can do around the home, most of the water we use is used indirectly, through the consumption of goods whose production has involved water. This 'virtual water' content can often be surprisingly large. For example, on average it takes approximately 15,500 litres to produce a kilogram of beef and 10 litres for a single sheet of A4 paper.

The 'virtual water' content of industrial goods is likely to be even more significant - although figures are more difficult to come by and probably vary significantly according to the production processes used.

Not only are we consuming water at an ever-increasing rate. We are also polluting our resources seemingly faster than ever before, further reducing the proportion of the world's freshwater available to safely support human, plant and animal life.

Communities around the world have suffered as phosphates from agricultural fertilisers, industrial discharges, mining waste and domestic detergents have entered rivers and lakes, leading to high levels of toxic pollutants in the water and eutrophication which kills fish and other organisms. This is becoming a particular problem in rapidly industrialising countries such as China and India, many of which are also predicted to face the most acute future shortages.

Equitable allocation

As supplies of clean freshwater decline, the question of equitable allocation becomes even more important. Water is like few other resources in that it both is vital for human existence and has no known substitutes. At the same time, water is a valuable economic resource. Some commentators

fear that instead of being seen as a common resource to which every person is entitled, water is increasingly becoming a commodity to be bought and traded like any other.

Like any other valuable commodity, increased scarcity is likely to lead to higher prices and a concentration of supplies in the hands of the rich at the expense of the poor and marginalised. To some extent this is already happening, and there are a number of cases where corporate interests have been seen to prevail over the needs of communities.

This is perhaps most obvious in developing countries where the privatisation of domestic water supplies has increased prices beyond the means of the poorest people. However, as the example of Coca Cola's bottling plant in Kerala, India, shows, there are also an increasing number of cases where heavy industrial demand has left insufficient water supplies for local communities. In situations of increased water scarcity, such problems are very likely to intensify.

Share of responsibility

Society increasingly demands that companies - particularly those from water thirsty industries such as agribusinesses, energy production, chemicals and food processing - take their share of responsibility for water scarcity problems and manage their water use efficiently and for the benefit of the local environment and people. Not only is this an imperative from an ethical point of view, it makes good business sense.

Recognising this, ECCR has started to research how one of the most water intensive industries – food processing - is approaching the issue of water management. Although we are at the beginning of our work on this issue, it is already clear that there is a great deal of difference in the approaches taken by various companies in this sector.

We will report our progress in future editions of the *Bulletin*, but in the meantime members who would like more information on this project can contact Suzanne Ismail: suzannei@quaker.org.uk or 020 7663 1055.

Suzanne Ismail is ECCR's Researcher.

Notes

1. According to UNEP, an area experiences water stress when annual water supplies drop below 1,700 cu m per person. When annual water supplies drop below 1,000 cu m per person the population faces water scarcity.