Contributors to this issue include: Fiona Gibbs and David Wakefield. Edited by Vincent Bunce. Thank you to Bren Hellier and Intermediate Technology for their assistance with articles in this issue.
£6.5 million for Montserrat

The tiny Caribbean island of Montserrat continues to suffer from volcanic eruptions. The British Government has just announced a further £6.5 million in emergency aid for the island, where 4,000 Montserratians remain. This brings the total aid package to £41.5 million since August 1995. So far, 7,000 inhabitants have left the island.

White Paper on development

The first White Paper focusing on development for 22 years will set out the new Government’s development strategy. It will commit the British Government to helping the poorest people work their way out of debt. Action will be taken in the areas of debt, trade, the World Bank and IMF, human rights and aid. Clare Short, Secretary of State for International Development, has said that the main purpose of her new Department was to eliminate abject poverty from the world. ‘My seat in Cabinet is a statement of intent that the Government will put world development at the heart of its work’ she said.

War on Poverty

Clare Short has called for a fresh assault on world poverty to mark the millennium. Britain will focus on working with developing countries, rather than simply supplying them with aid. Future British efforts will concentrate on human development in the most poverty-stricken nations. This will start with a redoubling of efforts in Africa with increased commitments to primary education clean water and basic healthcare.

Development aid figures

According to figures released by the Organisation for Economic Cooperation and Development (OECD), the UK was, in 1996, the world’s sixth largest aid donor as measured by the total amount of money provided to developing countries as development assistance. The figures also show that as a percentage of GNP, the UK’s total contribution fell to 0.27% in 1996.
UNESCO

In the Queen’s Speech, at the opening of the new Parliament after the May 1997 election, it was announced that Britain will be rejoining the United Nations Educational, Scientific and Cultural Organisation (UNESCO).

A healthier future for Ghana

Britain is to provide £25 million to help fund a public health programme in Ghana. Together with the Ghanaian Ministry of Health and six other agencies, the British Government will provide money and expertise to improve the quality of health services. The aim is to provide essential health care for everybody in Ghana – especially the poor, women and those living in rural areas.
As it celebrates **50 years of independence** this Autumn, India, with a population of 960 million people, is the world’s **largest democracy**, and the **second most populous country** after China.

Its landscapes vary from the **fertile rice-growing areas of the Ganges delta** in the east, to the dusty, arid plains of Rajasthan’s Thar desert in the west. The north of the country is dominated by the great **Himalayan Mountains**.

As far as development is concerned, India has made **great progress in the last 50 years**, with massive increases in food production, life expectancy and literacy. In the 1990s, **economic reforms and massive foreign investment** have led to steady industrial expansion and economic growth. This seems likely to lead to the creation of one of the world’s major consumer societies.

<table>
<thead>
<tr>
<th>People</th>
<th>India</th>
<th>UK</th>
</tr>
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<tbody>
<tr>
<td>Population (million)</td>
<td>929</td>
<td>58.1</td>
</tr>
<tr>
<td>Life Expectancy (years)</td>
<td>61.1</td>
<td>76.8</td>
</tr>
<tr>
<td>Infant Mortality (per 1,000 births)</td>
<td>73</td>
<td>6</td>
</tr>
<tr>
<td>Literacy (%)</td>
<td>52</td>
<td>99</td>
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**Economic and Social**

<table>
<thead>
<tr>
<th></th>
<th>India</th>
<th>UK</th>
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<tbody>
<tr>
<td>GNP (US $ per capita)</td>
<td>340</td>
<td>18,700</td>
</tr>
<tr>
<td>TVs (per 1000 people)</td>
<td>61</td>
<td>612</td>
</tr>
<tr>
<td>Radios (per 1000 people)</td>
<td>81</td>
<td>1,433</td>
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</table>

**Employment (%)**

<table>
<thead>
<tr>
<th></th>
<th>India</th>
<th>UK</th>
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</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>64</td>
<td>2</td>
</tr>
<tr>
<td>Industry</td>
<td>16</td>
<td>29</td>
</tr>
<tr>
<td>Services</td>
<td>20</td>
<td>69</td>
</tr>
</tbody>
</table>
India is the world’s:

- seventh largest country (area similar to Western Europe)
- largest tea producer and sixth largest producer of iron ore
- third largest pool of technical and scientific labour
Independence

This year marks the 50th anniversary of India gaining its independence from British rule. As early as the 1500s India was an important trading partner for many European countries, and in 1600 the East India Company was formed by the British Government to oversee the spice trade with the East Indies in Southeast Asia. The company was eventually forced out of the islands by Dutch colonists, and so began to develop links with India. Acting for the British Government the East India Company soon became involved in politics, and with the use of Company troops it controlled most of India by 1820. However the company failed to develop India’s industry and agriculture, resulting in poverty, landlessness and hunger. In 1857, Indian troops in the British army revolted in the ‘Indian Mutiny’, and the British Government took control of the country.

By 1900, the Indian people were increasingly dissatisfied with British rule and they formed their own independence movement. In the 20s and 30s, lead by Mahatma Gandhi, protests against the British Government grew as the people demanded swaraj (self rule). Finally in 1947, after the Second World War, Britain withdrew and the area was divided into two independent states, the Indian Union and Pakistan.

Computer Industry

India’s computing industry has grown rapidly over the last 15 years, with Bangalore in Southern India becoming the ‘electronics capital’ of the country. Many multinational companies have established bases in India. These provide 24-hour a day online software support at a fraction of the cost of paying shift workers in Europe or the USA. Companies which are currently using India for ‘offshore’ support include Abbey National, North West Water, Reuters and Avis Europe.

In addition, there are over 700 software companies in India, employing more than 140,000 people. Computer hardware and electronic components are also manufactured in India.

These firms earn 80 - 90% of their income from exports, but India’s internal computer based services remain underdeveloped.

India is attractive for foreign computer companies like IBM, Microsoft, Texas Instruments and Compaq because overall costs are about 50% of those in the west: wages especially are lower than in the USA and Europe, making it cheaper for companies to employ experienced and talented people. However, because reliable electricity supplies and communications networks are often not available locally, hi-tech companies have to provide these facilities themselves, increasing their costs.
The Ganges

The Ganges River is 2506 km (1557 miles) long. It runs from the Himalayas in the North of India and across the Gangetic Plain, before combining with the Brahmaputra and flowing into the Bay of Bengal in Bangladesh. The Ganges is a perennial river which often floods in the wet season, but despite this, the land near the river is amongst the most densely populated in the world, thanks to its rich alluvial deposits.

For the many Hindus the Ganges is a sacred river, which according to legend once flowed through heaven itself. About one million people a year go on pilgrimage to the holy city of Varanasi on the banks of the Ganges, where they bathe to cleanse them of their sins. They throw sacrifices of flowers, coins and grain into the water. Some worshippers also make trips to cremate their dead relatives, so that their ashes can be scattered on to the river.

Film Industry

Unknown to many people, India actually has the largest film producing industry in the world, with over 700 new films being made every year. About half these films are made in Bombay (now known as Mumbai), making it one of the world’s leading film production cities, and gaining it the nickname ‘Bollywood’.

Calcutta and Madras are also film making centres, but are not as important as Bombay.

Indian films cover a wide variety of subjects, but adventure and romances are always popular, as are movies which contain social comment. Much of India’s popular music comes from film soundtracks. The Indian people love going to the movies and there are hundreds of cinemas in the major cities. In more rural areas a travelling cinema will visit regularly, with films being shown on sheets which are hung up in the open air. Over 10 million cinema tickets are sold every day in India, more than anywhere else in the world, and the heroes of the silver screen often go on to become important public figures, such as Amitabh Bachchan who became a politician.
Each year about 5 million people die from inadequate water supplies and sanitation.

If you look at the earth from space, water appears to be in plentiful supply – it covers 70 per cent of the planet’s surface. However water in the oceans and seas is salty and cannot be used in agriculture, for industry or by people until it has been treated.

Only about three per cent of the world’s water is fresh and most of that is locked up in the polar ice caps. The remainder is spread out very unevenly across the earth’s surface. The Great Lakes of North America alone hold 18 per cent of the world’s freshwater. Water use is also spread unevenly – the average person in the USA uses over 300 litres of water per day compared with less than 6 litres per day in Madagascar. In the UK, the figure is 150 litres per person per day.

Using water

Water is essential for producing food, and is also used in many industries. More important than these uses however, it sustains human and animal life. Without water a person can only survive for a few days. Our bodies are largely made up of water - 90% when measured by volume, and 66% when measured by weight.

Apart from drinking, water is also used for:

- food preparation and cooking
- personal hygiene and washing clothes
- waste disposal
- agriculture
- industrial production
- power generation
- transportation
- recreation.
Safe water

The quality of water used by people is vitally important as contaminated water combined with inadequate sanitation (e.g. poor drainage and sewage removal) contribute to a range of diseases. In an attempt to combat this the United Nations designated 1981-90 the International Drinking Water Supply and Sanitation Decade. During this period approximately 535 million people gained access to safe water supplies, and 325 million people received adequate sanitation facilities. For some countries the impact was dramatic. In Burkina Faso the percentage of the population having access to clean water rose from 30 to 68 per cent. Despite successes such as this, one in five of the world’s population are still without a satisfactory water supply and almost half lack adequate sanitation.

% of the population with access to safe water and sanitation

<table>
<thead>
<tr>
<th>Country</th>
<th>Safe water</th>
<th>Sanitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>97</td>
<td>34</td>
</tr>
<tr>
<td>Brazil</td>
<td>87</td>
<td>83</td>
</tr>
<tr>
<td>Chile</td>
<td>85</td>
<td>83</td>
</tr>
<tr>
<td>China</td>
<td>67</td>
<td>24</td>
</tr>
<tr>
<td>India</td>
<td>81</td>
<td>29</td>
</tr>
<tr>
<td>Kenya</td>
<td>53</td>
<td>77</td>
</tr>
<tr>
<td>Mexico</td>
<td>83</td>
<td>50</td>
</tr>
<tr>
<td>Namibia</td>
<td>57</td>
<td>34</td>
</tr>
</tbody>
</table>
Water and disease

Having access to a clean, safe water supply is important but equally vital is access to adequate sanitation and hygiene promotion. The World Health Organisation estimate that 80 per cent of all sickness and disease is the result of inadequate water and sanitation. Over two million children under five die from diarrhoea every year, yet it can be easily prevented and treated. Many people in developing countries know that the best way to avoid diarrhoea is by boiling water before use, yet in many areas of the developing world a lack of firewood means water is rarely boiled.

The Dangers of Dirty Water

**Diarrhoea:** spread by drinking or washing hands, food or utensils in contaminated water and by not washing hands after going to the toilet. People who become ill with diarrhoea often lack the access to clean drinking water that would help them recover. Half the deaths caused by diarrhoea are of children under five years old.

**Malaria:** spread by a type of mosquito which breeds in stagnant water. When bitten by an infected mosquito, fever and nausea often follow. In severe cases, organ failure is followed by death. Malaria results in more than a million deaths each year.

**Hookworm:** spread when eggs in the faeces of an infected person hatch and enter the bare feet of an uninfected person, passing eventually into the gut. Adult hookworms can cause severe bleeding and anaemia.

**Bilharzia and guinea worm:** both are water-based diseases. Contact with infected water allows larva and parasites to enter humans through the skin or mouth. Diarrhoea, dysentery and liver and spleen damage may occur.

There are enormous social and economic benefits to be gained by providing safe water supplies and sanitation. The Venezuelan Government calculated that every dollar it invested in clean water paid for itself five times over in increased production.

% availability of safe water and sanitation

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<thead>
<tr>
<th></th>
<th>Developed world</th>
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<tbody>
<tr>
<td>% availability</td>
<td>100</td>
<td>69</td>
</tr>
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<td>93</td>
<td>56</td>
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Women and water

Two-thirds of the world’s households do not have access to a water supply in the home. In these areas water is usually collected from a standpipe in the village, a well, or a muddy river by women and children. Although the most a woman can easily carry is 15 litres (a litre of water weighs one kilogram), many women carry far more than this. Carrying such heavy weights can cause long-term damage, especially to the head, neck and spine.

The work involved in collecting and carrying water uses up to 50 per cent of a woman’s energy, and walks of three or four hours are common. If a supply of safe water was available in the village near their homes women could spend more time:

- looking after their families
- developing income-generating activities
- improving their education
- growing food for family use or for sale.

Improved management of water

The global demand for water will continue to rise into the foreseeable future as the world’s population continues to increase. We must therefore manage our water resources more effectively. This can be done by:

- improving the supply of water by developing new sources where possible, investing in dams and pipelines
- protecting existing sources from pollution
- controlling demand for water and developing less wasteful methods of using water.

How can this be achieved?

- reduce wastage – leaking pipes mean that a lot of water never reaches the people who need it
- better irrigation techniques – irrigation systems waste up to 70 per cent of the water used. Drip irrigation releases small amounts of water directly to the parts of the plant that need it, so most of the waste can be eliminated.
- use low flush toilets – reducing the amount of water used each time the lavatory is flushed
- build latrines and composting toilets which can turn human waste into clean, useful fertiliser – this is much cheaper than connecting toilets to a piped sewage system
- use bowls to wash vegetables and dishes instead of a running tap
- greater use of recycled or ‘grey water’ in the home. Instead of using pure water, bath and shower water could be saved and used to water plants.
- only use washing machines or dishwashers when they are fully loaded – or use machines with a half load button.
Case Study 1: Water supplies in Beijing

Even though China’s consumption of water remains low, at about 100 litres per person/per day (compared with 150 litres per person/per day in the UK) supply cannot keep up with demand. Whilst China’s urban water supply is growing by seven per cent annually, demand is rising by 10 per cent. In 1992, 300 of the country’s 479 cities experienced water shortages.

In the summer of 1981 Beijing suffered a water famine which made the city aware of the need to reduce water use as well as expand supplies. To help increase water supply, two new waterworks were opened. At the same time, regulations were introduced to ensure that industry recycled used water, that every household had a water meter, and that all new projects had water saving facilities installed. More than 200 water inspectors oversee these regulations.

Water saving techniques were also introduced, such as replacing old 17 litre tanks for flushing toilets with new 9 and 11 litre tanks, and installing washers on taps. These measures appear to have worked - in 1992 industry in Beijing recycled 82 per cent of the water it used, compared with 46 per cent in 1981.

Case Study 2: SWACH project in India

Many areas in the Indian state of Rajasthan are home to the guinea worm, a long white worm whose larva infect the body when people drink contaminated water. The resulting disease disables people for up to six weeks. The SWACH project (which means ‘clean’ in Hindi) is funded by development agencies such as UNICEF. It is an attempt to bring water, sanitation, and community health to this poor arid region.

Rajasthan has many step wells, (with spiral steps down to the bottom), inside of which families bathe, drink and wash. If an infected person with an open blister steps into the water to ease the itching caused by the guinea worm, the female worm can eject her larva into the water. Anyone drinking from this well may contract the disease.

The SWACH project aimed to break this cycle of infection in a number of ways:
- converting step wells into draw wells (which people cannot step inside)
- providing hand pumps as an alternative way of supplying drinking water
- teaching people to filter water before drinking it
- using locally developed techniques to extract the guinea worm before it breaks through the patient’s skin.

As a result of such measures the number of cases of guinea worm in SWACH’s area of work has dropped substantially.
Intermediate Technology (IT) is an international development organisation which works with small-scale producers in Africa, Asia and South America. IT helps people to develop and use skills and technologies which can give them more control over their lives and which contribute to locally-based sustainable development.

The organisation was founded in 1966 by Dr E F Schumacher, author of ‘Small is Beautiful’ who believed that you should

‘find out what people are doing, and then help them to do it better’.

IT’s development work is based on this principle. Intermediate Technology now has an income of over £7 million per year, and employs some 280 people internationally. IT’s main focus countries are: Peru, Kenya, Sudan, Zimbabwe, Bangladesh and Sri Lanka. It is also active in India and Nepal. Many of the world’s poorest people earn their living from small-scale enterprise in areas such as farming, food processing and blacksmithing. IT’s intervention enables people to combine existing skills and knowledge of appropriate technology with scientific and technological knowledge from the wider world without compromising local culture and the environment.

Intermediate Technology is involved in a vast range of appropriate technology based projects. They include:

- producing food to eat and to provide an income
- developing new building materials and providing shelter
- preserving and processing crops for sale
- providing affordable and environmentally-friendly energy supplies
- small-scale manufacturing, from textiles to consumer goods and machinery
- small-scale mining
- developing simple methods of transporting goods
- soil and water conservation measures e.g. infiltration pits
- pest control measures e.g. intercropping
- the introduction of seed fairs to maintain crop variety.

Through its projects, IT has shown that appropriate technologies and small-scale initiatives based in local communities can play a major role in helping poor and vulnerable people to improve their standard of living.
Where each pound comes from

DFID Grant 22p
Multilateral Agencies 15p
Other DFID (project grants) 14p
Individuals 36p
Other (includes trusts, companies NGOs etc) 13p

Where each pound goes

Food Production 12p
Agro-Processing 9p
Building Materials & Mining 9p
Energy 13p
Management Admin 10p
Transport 4p
Policy & Disaster Mitigation 15p
Public Information 12p
Manufacturing 5p
Fundraising 11p
Improving food security in Zimbabwe

The people living in the Chivi district in southern Zimbabwe have for many years suffered food shortages as a result of frequent drought conditions. In 1991, Intermediate Technology started a project which set out to improve food security. Local farmers provide the driving force and ideas for the project, which is strongly supported by the community.

Project activities have included:

- water conservation measures e.g. infiltration pits
- soil conservation activities e.g. ridges and furrows
- pest control measures e.g. intercropping

About 90% of the community support the project, which has led to substantial improvements in food supply in this part of Zimbabwe. The project has also attracted interest from farmers living elsewhere. Many have visited Chivi and then returned to their own villages to try the new techniques.

“We don’t impose development on poor people, we look to improve their existing knowledge. We help them to help themselves out of their cycle of poverty by introducing appropriate technologies they can use, access and sustain.”

Maina Keengwe - Country Director, IT Kenya
Ten lucky school students... from all over the UK have won a two-week visit to Brazil in a competition organised by the Brazilian Embassy. The trip will include several days on board ‘Escola da Natureza’ a school research ship in the Amazon as well as visits to Manaus, Brasilia and São Paulo.

**Ansford Community School** in Castle Cary, Somerset has won an award for the best school exchange programme among schools and colleges in the UK. The award, sponsored by Royal Mail and The Guardian was offered for the first time in 1997. The school, which has been operating a link with Mufulira Secondary School in Northern Zambia since 1991 receives a trophy and a cash prize of £3000.

**If your school has an interesting school exchange,** is doing any interesting work on a developing country or development issues, or you have any news item which we could feature in Global Eye, please write to us at: Global Eye, 31-35 Kirby Street, LONDON EC1N 8TE.