News

One good decision at the Earth Summit: to improve sanitation

Despite disappointments for environmentalists, the Johannesburg Summit on Sustainable Development (26 August–4 September) did achieve one encouraging result for health. A clause in the internationally agreed conclusions calls for the "halving of the proportion of people without access to basic sanitation" by 2015.

Johannesburg set few definite targets, and most that were set aren't new — they simply repeat a small proportion of the impressive targets agreed by the 189 member states of the UN at the Millennium Summit in September 2000. But Johannesburg's clause on sanitation is a genuine addition, and so deserves some attention.

Richard Helmer, Director of WHO's Department of Protection of the Human Environment, told the *Bulletin*: "It was very important. In the Millennium Development Goals (MDGs) sanitation was explicitly excluded. We only had water supply; sanitation was only mentioned obliquely under habitat — that 100 million urban dwellers were to get better conditions, and things like that. The US didn't like it. They said it made an unnecessary commitment that we could not keep."

But now there *is* a commitment to improved sanitation, in a clause added to the MDG, which says: "to halve, by the year 2015, the proportion of people who are unable to reach or to afford safe drinking-water".

And there is one further benefit: progress towards reaching the targets is not to be left to chance, but will be monitored by Mark Malloch Brown, head of the UN Development Programme, who was also appointed "scorekeeper" for the follow-up to the MDGs.

Malloch Brown told Geoffrey Lean, environment correspondent for *The Independent* newspaper in the UK, that he aimed to ensure that Johannesburg is not followed by a period of inaction as previous summits have been. Malloch Brown is due to report to the UN General Assembly in October on the efforts of 15 countries to attain the MDGs, and will now expand his work to monitor the progress of every country in the developing world every year. "This is going to be a revolution in implementing decisions" Malloch Brown told the *The Independent*.

Johannesburg Summit Secretary-General Nitin Desai informed delegates that the water and sanitation goals were backed up by announcements of concrete projects and partnerships — with the US announcing an investment of US$ 970 million in water projects over the next three years, and the European Union announcing its commitment to partnerships to meet the new goals, primarily in Africa and Central Asia. The UN has received 21 other partnership initiatives in this area with at least US$ 20 million in extra resources, Desai said.

However a question mark may be raised over whether much of this will be new money, says Helmer. Issues are also raised by the involvement of the World Trade Organization, whose General Agreement on Trade in Services has opened the door for international private water companies to move in on water and sanitation in areas like Manila and Johannesburg itself, with controversial results. "American or European enterprises going out into the Third World to run the water for another city — that doesn't sound right somehow," said Helmer. "They should privatize it locally on the spot."

According to Helmer, the responsibility for improvements to water supply and sanitation will really rest with the national governments and municipal authorities of affected areas. "They really have to make the investments and push the agenda themselves," Helmer told the *Bulletin*. "The external aid for investments in water supply and sanitation is always marginal — only 5%. Not much more."

There have been extraordinary mismanagements and failings in this sector in developing countries, but there is pressure for improvement "because the water is getting shorter" said Helmer. "With the lack of sanitation, the watercourses in the cities and downstream get terribly polluted and are less fit for other uses ... We have many rivers with such high concentrations of organics and bacteria that they can't even be used for irrigation."

Nevertheless the world has seen a decrease in mortality from poor sanitation. "The situation has improved in some places, and with rapid oral rehydration therapy (ORT) you can avoid mortality from diarrhoea and cholera. But ORT doesn't prevent the next case. The prevalence of all the waterborne diseases is not going down," Helmer said. ■

Robert Walgate, *Bulletin*

Music, dancing — and a national policy — are challenging violence in Brazil

For Brazil, perhaps it's the obvious solution: violence has become endemic, but many people find music and dancing more compelling than hostility.

Every hour, 13 Brazilians are murdered. Maria Helena Prado de Mello Jorge, an epidemiologist from the University of São Paulo says that in recent years violence, especially against young people, has reduced the life expectancy of men by four years in the state of São Paulo.

For Antonio Carlos Alkimin of the Brazilian Institute of Geography and Statistics, violence has wiped out progress made in other areas. A dramatic fall of 30% in infant mortality in Brazil between 1990 and 2000 has not been reflected in any decrease in overall mortality — which actually increased between 1992 and 1999.

The basic causes of violence are arguable, but the narcotics trade, an abundance of weapons in the slums, and lack of hope among young people facing unemployment in the big cities are believed to be major causes. Wania Pasinato Izumino of the Centre for the Study of Violence of the University of São Paulo says that "large segments of the population have been impoverished by disordered economic growth and an unequal distribution of wealth". According to the Coordinator of the Centre, Nancy Cárdia, improved access to rights such as health, education,

Marcelo Sayão/O Globo Agency

Rio children are learning violence early.

leisure and cultural activities for the poor in the big cities could be a strong antidote to violence.

Meanwhile communities are beginning to do things for themselves. In 1993 in Vigário Geral, a favela (slum) of Rio de Janeiro, 21 people were murdered in a single night. Soon after the slaughter, Afroreggae, a small group of musicians, went to Vigário Geral, where they found an emotionally shaken community with no hope for the future. "We began a festival movement, trying to rescue the community's self-esteem. We set up dance and percussion workshops and we won credibility in the community. Today, we organize cultural and health activities for more than 450 adolescents," affirms Ierê Ferreira, a coordinator of the project.

The band now has 11 musicians, most of whom live in the Vigário Geral area. Another project in the same favela called "Troupe da Saude" (the health troupe) uses theatre, music and circus. Composed of adolescents, its members go around the streets and on the trains, and in a cheerful and relaxed way, using appropriate language, pass on information about drugs, adolescent pregnancy, sexually transmitted infections and HIV/AIDS.

Rodrigo Belchior was born in a favela in the south of Rio de Janeiro. From an early age, he was aware that children were dying in the favela from the "diseases of poverty". When he was 13 years old, he had to start working to help support the family, and struggled to balance this with his studies. "During all these years, the slum has changed very little. Now we have water and public illumination, but we don't have basic sanitation. And it is not always peaceful", he said.

Now, at 26, Rodrigo is a musician, and coordinating the "Villalobinhos" named after Villa-Lobos, the famous Brazilian conductor and composer. Rodrigo's project offers musical training for 25 young people from favelas for three years, with daily classes on music history and playing instruments such as violin, clarinet, flute and cello.

"Every day we face the drug traffickers" said Rodrigo. "Their action is a type of veiled seduction, offering lucrative work to the adolescents. On the other hand, we seduce them with art. And in the end the one who wins the battle is the one who has the more seductive power. The kids have a choice: the drug trafficking or the music?" Rodrigo says.

Itamar Silva is another determined resident working for improvements for his favela, Santa Marta. Coordinator of the Group Eco, he is negotiating with the local government on a project to urbanize the favela by improving the houses, streets and infrastructure for a total cost of US$ 6 million. The group's social projects include a community newspaper, informatics and art courses, and workshops for ecological understanding. Silva believes that these activities have reduced the level of violence in the favela.

Implanted in a slum of Salvador in Bahia, another project, called Pracatum, teaches Brazilian popular music to 178 youths. According to its director, Caius Brandão, several of their students have performed at shows in Japan, Europe and Mexico.

And then there's perhaps the most surprising antidote to violence: ballet. After returning to Rio from Cuba where she worked for the National Ballet, the Brazilian ballerina Thereza Aguilar decided to copy a successful Cuban project which helped reintegrate orphans into society through art. "After a difficult beginning, today we offer classes of classic ballet for 298 girls and six boys, belonging to eight communities. Among these, nine have Down syndrome and five are deaf" says Thereza. Now, the project exports young talent from the favelas of Rio to ballet companies in Berlin and Cuba. Thereza remembers the hard times, and talks about the happiness it gives her to go into the favelas and hear classical ballet music playing in simple huts.

The Brazilian Ministry of Health is also turning its attention to violence. Recently it presented a new national policy for the reduction of morbidity and mortality caused by violence and accidents. The policy aims to promote safe and healthy behaviour and environments and to improve surveillance. It also aims at systematizing, enlarging and consolidating pre-hospital services. Many of the injured arrive in the emergency wards of the hospitals with wounds caused by high calibre weapons, leaving doctors with few strategies for treatment.

According to the Vice-president of the Brazilian Association for Emergency Medicine, Max Leventhal, the situation is dramatic. "We are living through an exponential spiral of urban violence. The weapons have increased in firepower

Violent numbers in Brazil

- Homicides are now the first cause of death from other than natural causes (36% of such deaths), followed by traffic accidents (26%). In the 1980s, it was the other way round: traffic accidents were the first cause (33%), followed by homicides (17%).
- Men account for 84% of deaths from other than natural causes.
- For every 15 men of 20–29 years old who die by shooting, there is only one woman who dies in this way.
- The homicide rate among youths rose from 30% of deaths in 1990 to 49% in 2000.
- 75% of the deaths caused by accidents and violence occur in urban areas.
- According to the Ministry of Health, about 8% of the expenses for public hospital stays — without taking into account emergency wards — are incurred by accidents and violence.

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and the wounded arrive lacerated in the emergency wards; the public hospitals do not always possess the appropriate training for such multiply traumatized victims."

According to Maria Helena Prado de Mello Jorge, epidemiologist at the University of São Paulo, the national policy has a comprehensive vision, including action in related areas such as justice and education. None of these areas, nor the health sector alone, could eliminate the high crime rate in the country. A multisectoral vision like that of the national project is indispensable. Others point out that the "national policy for the reduction of accidents and violence" is still in its initial phase of implementation. Only if it is fully implemented by the government will it have a significant impact on the reduction of the morbidity and mortality rates. ■

Claudia Jurberg, *Rio de Janeiro*

New non-profit organization will support research to combat neglected diseases

Of 1393 new pharmaceuticals marketed between 1975 and 1999, only 16 were for tropical diseases and tuberculosis. This finding from an exhaustive review of international, European and American medical databases was published in *The Lancet,* 2002, 359: 2188-94. There will be "no sustainable solution" for diseases that predominantly affect poor people in the South without an international pharmaceutical policy for all neglected diseases, say the authors. They have been working for the past three years on a Drugs for Neglected Diseases Working Group for the medical charity Médecins Sans Frontières (MSF), which aims to set up a new body to tackle this problem.

Piero Olliaro of the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR), who was one of the authors, told the *Bulletin*: "In the first place you have to distinguish between diseases where public–private partnerships have a chance of working, like malaria and tuberculosis, and diseases which are not prevalent enough, which aren't visible enough, which have no advocacy; and they don't stand a chance. That's where — we are saying — something new is needed. The public sector really has to take the lead for neglected diseases like sleeping sickness or Chagas disease."

However Olliaro admits there can still be public–private breakthroughs — as there was recently for visceral leishmaniasis (kala azar). TDR, the Indian Council for Medical Research and the German company Zentaris (previously ASTA Medica) supported research in India which earlier this year yielded oral miltefosine, a failed cancer drug which has now been shown to cure kala azar 98% of the time, with few side-effects.

"So even for the neglected diseases you will bump occasionally into something you can develop" said Olliaro; "but to do that systematically we're saying that the public sector must take the lead with significant amounts of money to discover those products, and then to make sure they are turned into effective and affordable drugs".

In partial response, MSF is catalysing the creation of a new entity — the Drugs for Neglected Diseases initiative, known as DNDi — to help do the research and create the needed products. The body will be a joint undertaking of MSF and several public research institutes in the North and the South. The actual drug development work is to be done by a wide range of public and private partners, including the pharmaceutical industry.

While DNDi primarily aims to build on public responsibility and public sector research capacity, industry remains important because of its massive catalogues of active compounds, compound development and testing schemes and scientists.

"We have met extensively with the pharmaceutical industry — we are looking for their close attention and support, through the cooperation of individual groups in the pharmaceutical industry" said Yves Champey, director of the feasibility study for DNDi. "Because what we will need, project by project, will be clearly not money, but access to industry expertise and special tools."

Champey told the *Bulletin* that the organization should be ready to go into operation by mid-2003. He and the DNDi team have been in close contact with TDR and WHO "from the very beginning", and they are now working to see how the two can be "active members" of the initiative.

Seed money for setting up DNDi will come from MSF, but the bulk of the actual R&D work will be financed project by project, with funding from governments, international organizations and large foundations. "And there will be one additional funding path: raising money from ordinary individuals, at $20, $50 a time, will be one of our big sources of money. I don't know what proportion. This will be one of our striking differences" Champey said.

Apart from the fund-raising techniques, DNDi's objectives may seem little different from those of existing organizations like TDR. "We do not pretend to be better, we will simply try to add to their efforts" said Champey.

Carlos Morel, Director of TDR, told the *Bulletin*: "TDR, WHO and DNDi are working on a memorandum of understanding between us. MSF have been in drug access issues for a long time, but the DNDi is a different kind of venture. There'll be a DND Working Group meeting in Rio de Janeiro in December, and we hope by then any remaining issues will be resolved."

DNDi will be a separate organization from MSF - which will be only one of the six to eight founding organizations. MSF is a fieldwork and campaigning organization, often opposed to the special interests of the pharmaceutical industry, whereas DNDi needs to establish friendly relations with companies.

TDR believes the best approach is to squeeze the most out of each source, both public and private, says Rob Ridley, Coordinator for Product Research and Development at TDR. "Our experience is that if you have a very specific proposal that may do some good, that's professionally thought through, then very often companies are more than willing to participate. In fact most of TDR's successes have resulted from major input from industrial partners."

TDR is already working with industry on two scientifically related neglected diseases – leishmaniasis and trypanosomiasis, both caused by "kinetoplastid" organisms. "We received a fairly substantial sum from Aventis for work related to African trypanosomiasis (sleeping sickness); and we've had some seed funding from industry to push forward and try to identify products for kinetoplastids as a whole" said Ridley.

David Heymann, Executive Director for Communicable Diseases at WHO, adds "We need better tools for neglected diseases, but we shouldn't forget that we've also had some great donations of existing drugs. We need to use every tool we've got. To see an end to diseases that have been around for centuries is an opportunity we just can't miss." ■

Robert Walgate, *Bulletin*

Europe finds US$ 200 million to support African clinical trials

At long last the European and Developing Countries Clinical Trials Partnership (EDCTP) is set to begin its work next year, with a focus on Africa. The development of infrastructures for trials in Africa, especially through capacity-building and training; fourth, actually sponsoring new clinical trials, attracting external sources of co-financing, particularly with the European biopharmaceutical industry; and fifth, developing a European, rather than national, presence in international initiatives for research and development to combat HIV/AIDS, tuberculosis and malaria.

But despite three years of gestation — and a final positive meeting with the Director-General of WHO, Gro Harlem Brundtland, this June — the EDCTP is still not completely approved: the next hurdles will be acceptance by the European Parliament in October, and then by the final political governing body of the 14-state European Union, the Council of Ministers, plus one outside partner — Norway. Approval is scheduled for "early next year", and Commission staff are expecting no difficulties.

Marie-Paule Kieny, director of the WHO Initiative for Vaccine Research, says: "We've had several meetings with the EDCTP but programmes of this size at the EU usually take months to materialize!" Nevertheless the programme will be welcome. "There are clinical trial sites in Africa for testing for each of the three diseases, but they are scattered, the resources are not enough and the networking is poor" says Kieny. "And the EDCTP has impressive funding".

The EDCTP has in fact billed itself as a US$ 600 million programme, but only US$ 200 million of this will come from the Commission itself, and data on the source of the other US$ 400 million are somewhat hazy. US$ 200 million is to be added by member states, but there is no guarantee they will cough up — and, a Steering Committee with two representatives from each European Union country, there will also be a Working Group with fifteen Europeans and fifteen Africans, a Management Group with five Europeans and five Africans, and a Coordination Team consisting of one African and one European.

But, no doubt making the task of EU officials look even harder and more time-consuming, Esparza believes that yet more coordination is required: "The EDCTP can only succeed if they coordinate with other efforts. The last thing we want to see is Americans and Europeans and others fighting for sites in Africa .... But it's a good initiative and we are strongly supporting it."

What's really needed, according to WHO experts, is to develop and coordinate African trial sites. "What is a trial site? It is a population with the appropriate epidemiology of the disease you want to work on. You can't study leishmaniasis in Switzerland!" said Esparza. "Then you need the scientific infrastructure, political support, and community support in the region. Those four things will make a working trial site."

But, he said, you need to consider ethics, which entails community involvement. This is becoming essential. The concept of a "site" is "something that is evolving" says Esparza. "In the past a site was where foreign investigators could come to a country and do research to take their samples back home and publish a paper. That concept has gone. The sites we're talking about, and that EDCTP wants to develop, are ones with *ownership* in the country, as that's the only way to ensure continuity, and the appropriate investment of time and resources."