

## Lessons from Chernobyl

*by Bruce Duncan CSsR*

On the night of 25-26 April, 1986, one of the four nuclear reactors at Chernobyl in the north of Ukraine exploded. According to a conservative estimate, it released a hundred times more radiation than the atomic bombs on Hiroshima and Nagasaki. Shifting winds carried the radioactivity not just over Ukraine, Belarus and parts of Russia, but over much of Europe, especially Poland and Sweden, and even England and the United States.

For 10 days the reactor burnt. The greatest fear was that if the nuclear fuel reached 2900 degrees centigrade, it would burn through the concrete foundations into the water table below, causing an immensely greater explosion that would destroy the other three reactors and spread nuclear contamination far more widely over Europe.

Those first on the scene - technicians, firemen and soldiers - were exposed to deadly radiation in a frantic effort to try to put out the fire. The world owes them a great debt of gratitude. Many of them would have known of the threat to their lives. They helped limit what could have been a far greater tragedy.

The number of people who died from the accident at Chernobyl is surprisingly small, one recent study listing only 57 deaths as a direct result. But exposure to radiation is slow acting. A spokesman for the World Health Organisation estimated the likely number of excess deaths in the worst affected areas will rise to about 4000, with a further 5000 dying in less contaminated areas. Other groups contest these figures strongly, claiming a much higher death toll. There has certainly been a great increase in non-malignant disease and psychological distress.

The economic and social effects have also been extremely significant. Nearly 8000 square kms of arable land was knocked out of use, and 7000 square kms of forest. About 350,000 people in the worst affected areas had to be resettled, and 70 entire villages had to be abandoned and buried. Nevertheless, 5.5 million people still live in less contaminated areas. The economic costs of the disaster for Ukraine alone are estimated at US\$200 billion by 2015, more than five times its 2001 national income. The government of Ukraine pays US\$1billion a year in compensation and pensions to people affected by Chernobyl.

The disaster demonstrated to the rest of the world some frightful effects of nuclear contamination. Chernobyl is one of the truly ghastly 'signs of the times'. As Pope John Paul II said: 'How can one prevent disasters that destroy the environment and threaten all forms of life?'

### *Some moral principles to guide efforts to reduce global warming*

The Chernobyl incident has become more significant currently because of the new debate about nuclear energy as a way of reducing global warming. There is a concerted campaign to expand our mining and sales of uranium, and perhaps even to build nuclear energy plants in Australia.

There is now no doubt that global warming is looming as an extremely serious threat to our human wellbeing. This is not science fiction unfortunately. Unless global warming can be greatly reduced, we are told sea levels will rise, weather patterns will become more extreme, and temperatures will rise sharply, disrupting world food supplies, precipitating

political disorder or conflict over scarce resources, and perhaps even causing population collapse in various parts of the world. The prospects are alarming in the extreme.

How can we resolve these various problems competing for our attention? As believers, we recognise that this beautiful planet we live on is an astonishing gift from the Creator, to be revered always, to sustain not just our lives and wellbeing, but that of all peoples across the generations. Hence we have a sacred duty to care for the planet, and a responsibility to strive that the goods of the earth are used to meet the needs of all. Traditionally we have talked of this duty of care as one of stewardship.

In light of the looming environmental crisis, I would like to highlight some key moral principles to guide our decision-making at this time.

The first is that of the **common good**. This insists that the earth exists to benefit all people, not just some fortunate individuals or peoples. But it is not self-evident how to bring about this common good. We must use our gifts of intelligence and initiative to develop practical means to ensure that everybody has enough resources to live a decent life. The common good is not meant as an abstract concept, but as the way we arrange our world to produce the best outcome for every person, not just for a majority.

The second principle is that of **solidarity**, meaning a firm commitment on our part to sustaining the common good, with all the organisational effort and social structures needed. Solidarity also means that we be prepared to make sacrifices if need be so that others can live more humane lives.

The global warming crisis has been overwhelmingly caused by the industrialised nations, but by a bitter irony the poorest countries will likely pay an inordinate price. Even a modest rise in sea levels will flood some island states and displace many millions of people, like those living in the deltas of Egypt and Bangladesh. Solidarity demands striving for justice and social equity in helping others to survive the adverse effects of global warming.

A third principle is that of the so-called '**option for the poor**'. As believers, we understand that God has a special concern for the poor or disadvantaged, and expects us to share that concern. Religious groups have referred to this as an 'option for the poor'. It is a recent phrase for a traditional emphasis that has long been embodied in the charitable and social works in Australia and overseas.

A marvellous contemporary expression of this is the current effort to reduce hunger and poverty in the poorest countries through the UN Millennium Development Goals. People of all religions and of none can recognise in these Goals this unique moment in history, when together we can help lift millions of people out of the most degrading hunger and poverty. Religious groups have been at the forefront of those mobilising public opinion to support the Millennium Development Goals, though our federal government has barely begun to move with the needed urgency on these issues of aid and development. But global warming could undermine progress in eliminating global poverty, and the challenge will be to tackle both global poverty and the problems of greenhouse gases.

Finally, we must learn again to live with more **moderation and restraint** in our use of material resources. We simply cannot continue to be so profligate in our use of the fossil fuels causing global warming. We need to consider how coming generations will survive if our lifestyle gravely damages the climate. Unless we make major changes very quickly, future generations may well curse us for being so blind and selfish. They may well see our generation as having plundered the earth, with contempt for others and for later generations. Religious groups need again to find their traditional voice in urging restraint and responsibility in the use of material goods.

***Next week: The role of Churches and social conscience in grappling with the question: Is nuclear energy the answer?***

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*This is his address at the Ukrainian Catholic Cathedral, Melbourne, commemorating the 20th anniversary of the accident at Chernobyl. The function was attended by about 700 people, including heads of churches and representatives of various levels of government*