

Anil Agarwal

An Environmentalist Par Excellence

Dawn of the New Year has brought the tragic news of the death of Anil Agarwal, the noted environmentalist, who founded the Centre for Science and Environment at Delhi. I first met him at a Seminar on Environmental Aspects of Geology held at Tiruvananthapuram in 1984 to mark the silver jubilee of the Geological Society of India. I was greatly impressed by his commitment to the cause of protecting the environment and his concern for the well-being of the rural poor. Since then I have been in close touch with him on aspects such as rainwater harvesting and wise utilization of our water resources. Few months ago reading an appreciative review of his edited book 'Making Water Everybody's Business', he wrote – "I am really delighted that you have helped us to bring attention to the potential of water harvesting to the important scientific community in the country." When our Society recently organized a Seminar at Hyderabad in October 2001, an invitation was extended to him to attend and give us the benefit of his advice. He, however, did not come and we all missed the one opportunity of meeting him and felicitating him on his pioneering efforts at



Anil Agarwal
(1947-2002)

popularising rainwater harvesting and making it a mass movement. I never thought his end was so near and the news of his passing away suddenly on 2nd January, 2002 at Dehra Dun at the young age of 54 years was indeed very shocking. The country today is poorer for the loss of a brave and heroic champion of the cause of many environmental issues and more particularly rainwater harvesting and conservation of water resources. The voice that used to warn us month after month through the pages of the journal 'Down to Earth' has been silenced. His most notable achievement, however, remains in the shape of the internationally famous Centre for Science and Environment (CSE) which he set up at Delhi in 1980. This centre in the last twenty odd years, has grown in stature and is now ranked as an internationally known and respected non-governmental organization fighting for the preservation of India's environment.

Anil Agarwal was a product of IIT, Kanpur, holding a B.Tech degree in Mechanical Engineering. He started his career, however, as a journalist reporting on developments in science

for the *Indian Express*, *Hindustan Times* and the *New Scientist*, London. These journalistic exercises led him on to organize a platform of his own to focus attention on the deteriorating environment and its effect on the health of the poverty stricken people of India.

Environmental Degradation

He declared 'India has seen a rapid decline in the quality of all its natural resources ranging from land and forest, to water, air and biodiversity. Today it is one of the dirtiest, most polluted and environmentally degraded countries in the world.' He characterized India's urban environment as 'a ghastly cocktail of prosperity, poverty and pollution' and accused successive Governments at the Centre and States for their total neglect of social issues like poverty, illiteracy and sickness. He had little faith in government doing the right thing and advocated the creation of a number of non-governmental organizations (NGOs) to take care of environmental issues.

Revival of NGO movement that we have seen in recent years is largely the result of his pioneering efforts. Agarwal led a crusade against politicians and bureaucrats for their non-participatory, corrupt and incompetent form of governance characterised by inefficiency. He was the first to recognize the importance of the work of persons like Anna Hazare, Sunderlal Bahuguna and Rajendra Singh of *Tarun Bharat Sangh*. The organisations they have built have yet to weld themselves into a powerful and well coordinated nationwide movement. The loss of Anil Agarwal is a serious set back for the healthy growth of these young organisations.

Indifferent Attitude of Officialdom

Agarwal was highly critical of the attitude of officialdom comfortably installed in air conditioned rooms, at safe distances from ordinary mortals struggling in the streets and getting baked in the hot sun. The callous and indifferent attitude of bureaucracy enraged him so much that he burst out – 'People who die during heat waves are invariably the poor who do not have coolers and air conditioners to take respite from the heat. The cries of their families do not quite seem to propel our scientific establishment to understand the reasons behind the heat wave.' He felt that this indifferent mental attitude of officialdom was more damaging than all the other problems seriously affecting the country. He felt that the bureaucracy was tending to confuse everyone and passing the buck to everyone else. The biggest strength of India, he emphasized, was its democracy which gave its citizens enormous rights and opportunities to protest. He advocated creation of a participatory democratic system to replace the current exclusive dependence on a highly centralised electoral democracy and an ineffective bureaucracy.

Championing the cause of Women in Rural India

He was particularly depressed at watching the condition of women in rural India whose youth is spent in the daily drudgery of fetching fuel and water from long distances. Governments appeared least concerned about making these basic needs available. What is the use of flaunting nuclear power before these people who are even now obliged to spend the entire day walking over long distances carrying back-breaking head loads of either fuel or pots filled with water?

The greatest service which Agarwal has rendered is the publication of reports styled as the 'Citizens Report on the State of India's Environment'. Five reports have been issued, each excelling in quality over the previous one in the remarkable coverage of different aspects of India's deteriorating environment.

A Gifted Journalist

The remarkable success which Agarwal achieved was because of his journalistic skill. He could build unforgettable word pictures of the drudgery undergone by rural folk which had the effect of haunting the minds of readers. The publications issued by the Centre for Science and Environment and the fortnightly journal, *Down to Earth*, are a judicious mixture of good science and journalism of a high order. His targets of investigation were deforestation, air and water pollution, rainwater harvesting, and implications of international agreements for protection of environment. Newspapers in India have no time or space for conducting an in-depth study of these problems. '**Down to Earth**' which he started in 1992 devoted itself solely to a consideration of all these problems relating to India's worsening environment. A certain measure of success is visible from all the efforts put in by Anil Agarwal despite the indifferent attitude of governments. He has been able to persuade no less a person than the President of India to try out the measures recommended by him for harvesting rainwater.

Mismanagement in Utilisation of Groundwater

World's biggest water reservoir has been provided by Nature. Storage of water underground protects it from loss through evapotranspiration and pollution. Harvesting rainwater where it falls and transferring it underground suggests itself as the wisest course to adopt for conservation of water resources. Groundwater, the water of the last resort, continues to be heavily exploited without any sort of control. Unscientific, indiscriminate exploitation of groundwater is taking place all over India and if not checked in time will lead to agricultural disaster.

Groundwater and surface water are closely related. They mingle and recharge each other. We are yet to realize how important and precious is this resource especially for the rural people. Anil Agarwal emphasized that water is not the personal property of either governments or individual land-owners but a collective resource which has to be controlled by fitting meters to each well and enforce pumping limits. This eminently practical suggestion has not convinced the authorities with the result that the resource is being recklessly exploited.

Israel's Example

Israel's major contribution to farming arid lands has been the development of drip irrigation, feeding the right amount of water to each plant through suitably sized holes in plastic hoses with minimal waste. Computerised automation has made it possible for further refinement and farmers using them have more than doubled their output in recent years with the same amount of water. Computers run the irrigation system through cables and radio. The computer gets information from the fields, decides what pumps to use and what valves to close and open. Consumption of water has been greatly reduced by adopting these progressive techniques. Israel has also pioneered in the use of recycled urban waste water for agriculture. In India there is no control exercised in making use of groundwater and information on recharge and sustainable yield is lacking, with the result that exercising control on withdrawals has become extremely difficult.

Anil Agarwal emphasized these points over and over again. He warned that millions of Indians are going to die an unknown death because of shortage of water or a profusion of polluted water but his warnings have fallen on deaf ears.

Environment – a Major Concern for Humanity

Environment is now acknowledged as a major concern for humanity. Agarwal was one of the

few intellectuals in the country who had realized the importance of the preservation of environment. The series of problems which mankind is facing – waste management, pollution, decreasing water resources and global climatic change, need immediate attention. He emphasized the importance of palaeoclimatic research in addressing the problems of human society in the present century.

'Water is everybody's business', 'Trap water where it falls', 'Prevent every drop of water from running away from your land' were some of the slogans framed by Agarwal to focus attention of farmers on rainwater harvesting. He was the first to recognize the good work turned out by persons like Sunderlal Bahuguna in Uttaranchal, Anna Hazare in Maharashtra and Rajendra Singh of *Tarun Bharat Sangh* in Rajasthan.

He pleaded for organising debates at national and international level on how the world's water resources should be managed.

Atmospheric Pollution

Atmospheric pollution in a city like Delhi had become so bad that the Supreme Court had to intervene in banning diesel operated vehicles and to set up an Environmental Pollution Authority to monitor steps taken by the government to control pollution. Vehicular pollution in our cities is turning them into gas chambers. Delhi is ranked by WHO as the fourth most polluted city in the world. Government instead of implementing measures to curb vehicular emissions went on to plead the case of transport operators thus showing a complete lack of concern for protecting the health of a large section of the population who are daily facing serious health problems on account of pollution. There is no set up to monitor urban air quality.

Anil Agarwal initiated a campaign in Delhi against the dieselisation of vehicles since evidence was growing that diesel emissions have a strong cancer-causing potential. He lamented that there was not one in government to stop this killer trend and in his journalistic style he targeted Delhi as a city 'choking on the vomit of its vehicles'.

As an environmental activist and writer and a victim of the fell disease of cancer, he was forthright in his condemnation of the attitude of governments and industrialists who failed to take steps to prevent atmospheric pollution. His anger was understandable as he himself suffered from an extremely rare type of cancer which affected his brain and eyes, the first signs of which appeared in 1994. He went to USA to get best medical attention and underwent bone marrow transplant, 'one of the most invasive medical procedures developed by modern science.' This gave him a brief respite but ultimately he appeared to have succumbed to the disease fully convinced that his cancer was deeply related to environmental pollution.

In a contribution to '*Down to Earth*' entitled '*My Story Today, Your Story Tomorrow*' he gave a candid account of his sufferings and posed the question: 'Is it, therefore, not imperative for a society to find a way that balances its urge for economic growth and material comforts with the requirements of its natural and human health? Isn't this something that we owe to ourselves and to our children?'

The life and death of Anil Agarwal bring a rare poignancy to the ongoing debates on environmental issues and sustainable growth that are bound to dominate the 21st millennium. On his successors in CSE falls the responsibility of continuing the good work carried out by Anil Agarwal. His strident voice of reason should continue to reverberate and goad us into action

B.P. RADHAKRISHNA