

**Crans Montana Forum, 19 Annual Session, Monaco, June 26 to 29, 2008**

**The fight against sea and land pollution: the necessity  
for concerted action**

*Bringing people at the core of the solution*

Pierre Portas

21/06/08

## A NEWWAY OF CONDUCTING ENVIRONMENTAL ACTION

The acceleration of ecological disturbances having a global impact requires preventative, coherent forward-looking action and workable solutions. Too often, decades could go by between the time scientists ring the alarm and the measures taken by governments and industry to mitigate environmental negative impacts on people, economy and development.

It is critical to address environmental problematic issues at an early stage to avoid being confronted with no option but to fight against the adverse effects of ecological disequilibrium, the costs of which is phenomenal. Thinking ahead is fundamental in a world shaped by an increased globalisation process, and faced with major climatic disturbances, biodiversity loss and the need to solve an urgent food security problem of global significance.

There is, therefore, a rationale for scientists, policy analysts, and training institutions to work together in the context of a non-partisan, independent and multidisciplinary approach. It will enable them to transfer their collective knowledge and concerns to political decision-makers, executives of enterprises and financial businesses and the public about current and emerging environmental trends or disturbances that may impact on the life of people.

But this would not be sufficient. Long-lasting results would require the active involvement of people. Pollution has a societal dimension. And the challenge is to design solutions that bring people at the core of the action.

## A CHAOTIC PRESENT

Pollution or contamination of the soil, water and air is widespread, has reached an alarming scale and is increasing. It is a global problem. A recent study (Cornell University, August 2007) finds that about 40% of deaths worldwide are caused by water, air and soil pollution.

Despite all efforts, the situation is worsening. We have entered into a vicious circle where pollution aggravates emerging global threat like climate change and the accelerating loss of biodiversity in a context of a tragic food-security crisis and economic and financial disturbances.

Pollution sees no barriers. It is often of transboundary nature confronting States to situations they cannot master alone. The land as well as the oceans are gravely affected by the introduction of contaminants, materials and particulates that cause harm to the environment. As an example, used oils, plastics and other rubbish, solid wastes, household wastes, wastewater, pesticides, mercury, PCBs, contaminated sediments, phosphate, nitrate, traces of hormones, drugs, military waste, pathogens end up in the sea. Some 80% of these waste originate from land-based sources and the other 20% from ships and other floating structures.

As it stands today, inadequate political commitment, insufficient financial resources, weak international cooperation, limited public awareness and lack of capacity have hampered a worldwide progress towards reducing the impact of pollution on human health, economic development, the quality of life and the environment. To this, one may add that the way we organise knowledge has become inadequate to confront environmental complexities.

## A FAINT LIGHT INTO THE FUTURE

Globally, we have identified a large array of solutions to deal with the problems. And we have scoped the complexity of ecological processes. Gradually, countries are working together better and designing plans, strategies and programs to reduce the deterioration of the environment.

Although the needs exceed current capacity and means, regional and inter-regional cooperation as well as public and private partnerships are providing a base for progress.

The scale of efforts to fight against sea and land pollution is related to the level of economic development and trade intensity as well as to the degree of public awareness and education. Those countries or regions most developed in terms of industrial, institutional, educational and social infrastructure would be better equipped to fight against pollution.

On a worldwide scale, only a limited number of countries and regions can see a faint light into the future, provided they pursue and increase their efforts. For the rest, the journey is paved with immense and unsurmountable environmental problems for which they see little hope of solving them in the near future.

Industry and business have a critical role to play in the development of processes and design of products that reduce environmental footprint throughout their entire life-cycle. It concerns the reduction of environmental impacts of the chemicals used in processes, products or their components, reduction of energy consumption, reduction of product packaging and their reuse, encouraging sound refurbishment, repair, recycling or recovery of used or end-of-life products and materials and the use of more environmentally friendly materials in products or their components. It calls for putting in place highly effective cleaning devices and energy efficient systems.

However, because of the magnitude of the effects of waste pollution worldwide, a more ambitious and comprehensive approach would be desirable to integrate a social vision as the core of the action.

A transdisciplinary approach would be an asset in addressing issues of global significance. In regard to waste pollution issues, two important goals could be considered because they are central to people's existence;. These are:

- Enhancing energy efficiency and resource productivity (moving from waste to resources).
- Improving the management of waste as a contribution to reducing the emission of greenhouse gases and to protecting biodiversity.

This would enlarge the search for solutions that would bring more clarity into the selection of social priorities that would drive policy and the design of technical and economic instruments, tools or activities.

## DOING IT DIFFERENTLY

We are losing battles because we do not listen to scientists when they ring the alarm or because we find ourselves captives of short term gains and lack of political foresight. We are also losing because millions of people are surviving in poverty and cannot protect themselves from toxic waste, harmful chemicals or pathogens. Because population in opulent societies continue to suffer from the effects of pollution in a significant way.

The fight against pollution entails a wide range of inter-related action of social, institutional, economic, trade, financial and political nature. And we witness today our inability to conduct such action in a concerted way because we do not possess the adequate collective tools to do it.

We need to organise our knowledge, our institutions and our way of life in a manner that would enable us to prevent and reduce the pollution and the quantity of waste we generate. We need to change our perspective.

We cannot satisfy ourselves in accepting that the increase in diseases and malnourishment may be considered a « natural » factor slowing down population growth or a collateral damage of prosperity. Pollution brings with it a moral and equity dimension. We need to build a world that would give more space to quality, that would gradually move away from its financier-driven mood and engage into the drastic changes required to meet the environmental challenges.

## LOOKING AHEAD

We need to change the way we look at things. We have to reduce the quantity of waste we generate as a priority, and the waste that we would still produce could become, in many cases, resourceful. It means that we need to design today the foundation for making that option possible on a global scale. For instance, it would make sense to embark on a prospective thinking regarding the design of regional recycling schemes to deal with fast growing waste streams like electronic waste or investigate how waste could become a resource through improved energy efficiency and resource productivity.

We would still need to go into a higher level of prospective to confront our current way of acquiring knowledge compared to tomorrow's needs. Political leaders have the opportunity to launch ambitious projects that would provide breathing space for hope and enthusiasm. It would require a new deal in international cooperation and a profound transformation of the relationship between politics, economy and society.

The civil society has organised itself as companion and critics of governmental policies or industry behavior. It is looking for an alternative to market-driven thinking and globalised economies. This posture has had an important impact on policies and negotiations. It has, however, its limits in the sense that it fights against a dominant system that brings inequity and injustice but remains weak in proposing a workable and coherent alternative.

New way of protecting the environment would be desirable that fosters a sharing of know-how and experience capable of initiating, accelerating, accompanying, facilitating or supporting changes in national and global policies. The fight against pollution should become a societal objective; how the society in her wholeness can decide to prevent or limit the cause(s) of such pollution and mitigate its effects. This would imply new institutional arrangements to enable the diverse public and private actors to address the issue jointly and decide on measures that would enhance the society's ability to release the intellectual, financial and institutional resources required to solve the problems and prevent further occurrence of avoidable harms.

## BUILDING AN ADEQUATE RESPONSE

Global environmental issues are becoming more and more complex and are evolving rapidly; they are interweaving profoundly and permanently with social situations and economic processes. This requires new ways of looking at the appropriate response and how to organise such response for the common good.

The required changes in lifestyle, in production and consumption patterns need to be well prepared to avoid that, in turn, such changes generate undesirable effects on human health and the environment. Long-term policy conducive to such shift should be elaborated today to bring its benefits in the future. A sound scientific base and an enlarged awareness of the multitude of factors that intervene in environmental disturbances are necessary to guide policy.

There is a need to move from reactive policy to pro-active thinking through a better understanding of the interlinkages between current affairs and emerging trend to avoid losing time in the design of an appropriate response.

The shift to « low-carbon societies », for instance, will have a multitude of effects on the way people live, produce and consume. Such dramatic evolution should be accompanied by an enhanced capacity for producing and disseminating non-partisan information about what would be the main challenges and benefits, the bottlenecks, gaps or potential undesirable effects. A n

information that is built from trans- or multidisciplinary sources.

Adaptation and mitigation measures are one part of the solution. It is imperative, in addition, to think ahead and prepare for the ground for tomorrow. For this, dedicated and enthusiastic people working together, outside the intergovernmental process, would be an asset to accompany such process and to be able, through pro-active action, to preempt and prepare the ground for future policies.

It would represent an opportunity for scientists and researchers to share their concern and knowledge with government officials, parliamentarians, industry and business leaders, representatives of international organisations and the civil society. Through an early enough scientific exposure to the possible consequences of major global ecological disturbances on people and the environment, Governments, people and economic forces would be in a better position to respond swiftly and adequately to such threats.

It would also stimulate the collection of experience and know-how, broaden awareness and would energize the spirit of enterprise that is needed to face up to vital phenomena that may impact on social and economic development negatively or that could be at the root of undermining food security or representing a threat to human health.

An important domain of action would be to accompany the transition from waste to resources in a manner that would enable the concerned public and private actors to progress in that direction while improving the protection of the environment and human health. It would require the development of interactive dialogue favoring prospective thinking, strategic overview and the building of capacities for managing the complexity of the interactions between science, governance, regulations and market forces.

In other words, it is time to organise our knowledge in such a way as to make us capable of articulating ideas and concepts that make people the centre of attention while taking into account the scientific, economic and environmental complexity.