

# The New Security, the Environment and the Mediterranean: Links and Challenges

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## Resumo

Este trabalho foca um tema que, apesar de não ser novo, mantém a actualidade. Analisa as implicações que a desregulação em termos ambientais tem tido numa conjuntura de Segurança, que deixou de ser de índole iminente militar sobretudo depois da Guerra Fria. O autor faz um breve historial dos esforços desenvolvidos por organizações internacionais no sentido de tentar travar abusos por parte das potências mais industrializadas, decorrentes de uma lógica essencialmente economicista, num ambiente que se degrada dia após dia. O trabalho aponta com mais detalhe o que se passa nas regiões que bordejam o Mediterrâneo chamando a atenção para as assimetrias existentes entre as duas margens e para as consequências que a ausência de medidas de fundo pode acarretar em termos de Segurança.

## Abstract

*The article analysis the implications of the absence of regulations concerning environmental issues, on the domain of security issues no longer strictly considered in military terms. The author demonstrates the recent efforts developed by international organisations, in order to promote environmental concerns and stop the abuses committed by the more industrialised powers strictly moved by economical motives.*

*The article focus in detail, the existent asymmetries between the two rims and the consequences of the absence of long term environmental measures in terms of security, in the neighbouring Mediterranean regions.*

“Oil pollution was not modern man’s only gift to the sea. As we kept a lookout scarcely a day passed without some form of plastic container, beer can, bottle or more perishable materials such as packing-cases, cork and other rubbish, drifting close by Ra 2’s side.” So wrote the explorer Thor Heyerdal when he sailed across the Atlantic in 1970 in a boat of reeds, lamenting the ravages of industrialisation upon the environment and pointing to its fragility in relation to the manifold manifestations of modern society. Yet these and other concerns over the serious environmental consequences of continued industrial developments on global ecosystems remained largely ignored. It took another twenty years before apprehension for the environment emerged in a sustained manner in international political debate.

The environment is constantly changing – but nature is able to keep a balance. It is when human activities interfere with the environment that the natural balance is threatened. Economic activity has had a major impact on the environment, especially in the last fifty years. It is largely responsible for widespread degradation where fragile natural habitats, such as the Polar Regions, coral reefs and desert margins are particularly vulnerable.

The accumulation of pollutants has reached alarming levels in most areas of the globe and problems such as acid rain, the global warming of the atmosphere and, higher up, the depletion of the ozone layer – at present still over polar regions – can only be solved by international action. Entire ecosystems are in jeopardy from habitat destruction, pollution, deforestation, over-harvesting and the introduction of non-native species, threatening the Earth’s biodiversity and already leading to the disappearance of microorganisms, plant and animal species.

Globalisation has added to the challenge by contributing, with new outlooks and practices, to the erosion of knowledge about biodiversity among local communities and peoples in developing areas, where biological resources are most plentiful. Biodiversity is essential for the world community – for food, medicines and environmental equilibrium and governments are nowadays cooperating more than they used to do over environmental issues, but more effective and efficient approaches of a political nature will be needed in the future if serious damage to the global ecosystems is to be averted.

Consideration of the environment as a security issue has gained ground because every development that affects human life, continued patterns of lifestyle or the livelihood of the nation is considered under the umbrella of national security. Non-military challenges to societal stability have been acknowledged to represent a great source of alarm for the prosperity of the international community as the more direct but less immediate clash of military forces. Potential “green conflicts as non-traditional or “soft” security perspectives

are defined, have emerged in a prominent dimension on the new security agenda of international politics since they might engender instabilities for countries or for a region. It is worth noting in an historical perspective that one of the first instances of the importance of ensuring that human welfare was not endangered by human activities was provided in Britain in the acts implemented to ensure clean air – the earliest records of these statutes go back to the Thirteenth Century and subsequently were reiterated during the reign of Elizabeth I. This body of legislative framework was eventually responsible for ending the onetime dense smog that was for several centuries and till the early 1960's a feature of London. Yet when the Industrial Revolution began in Europe in the late Eighteenth Century little thought was given to the long-term implications of pollution from new industrial practices to the environment in general and to the ravages that human settlements communications and activities could have on natural habitats. Conservation of living species was not priority, with for example the near-extinction of the bison in North America, when confronted by the requirements of large-scale cattle ranches. An earnest acknowledgment for the environment only gained a significant importance in the post-1945 era, in the wake of the destructive potential of industrial activities revealed from scientific research and from accidents.

In recent years the most salient element has been the prospect of climate change and the related incidence of global warming arising from the widespread emission of greenhouse gases in the atmosphere that originate from natural processes but that have been significantly exacerbated from human activities – primarily carbon dioxide from industrial processes relying on fossil fuel combustion but also methane ozone manufactured as a purifying agent but whose higher concentration and chemical reaction in the high atmosphere adds to the global warming effect nitrous oxide and finally the only gases that are solely the result of human artefacts, chlorofluorocarbons or industrially-developed chemical compounds dating back to 1930 used to improve living standards. The situation of the greenhouse effect at present only marginal could provoke adverse consequences for eco-system if it assumes more severe proportions. The occurrence of global warming is increasingly accepted among scientists due to evidence ranging from mean temperatures to the melting of polar ice caps. An increase flow of cold water from the Arctic could lead to a change of the Gulf Stream which warms the British Isles and Western Europe, equating their climate to that of Northern Canada or Siberia.

A transformation of existing weather patterns would have significant repercussions or disruption on agricultural resources, economic activities and human health with a greater incidence of diseases. The contemporary concern for the environment in international

politics does not represent a sudden altruistic or religious – like conversion by the international community to a belief in the sanctity of natural habitats. It represents in part a belated recognition of repeated warnings that action must be taken to slow future change with an acceptance that nature has been grossly abused in part it is a response to domestic political pressure from concerned groups. There is a recognition that a turning point has been reached; however a radical shift in behaviour is needed to address the environment and the increasing scarcity of what were once regarded as free goods of bountiful nature – fresh water, productive land, clean air, mineral and fuel resources – as these fundamental commodities are likely to emerge as sources of instability or even cause of human conflict.

With the end of the Cold War security has ceased to be envisaged exclusively as a function of military factors; rather it is seen as depending on events that may impact on the stability or quality of life of national communities. Pollution levels, climate change, scarcity or competition for shared resources – water, food or energy floods resulting from regional deforestation, rapid demographic growth, the destruction of natural habitats by industrial processes for economic development have assumed a greater significance at a high-political level, since manifestations of instability for the international community, may stem not from a surplus of military preponderance but from a scarcity of economic attributes and may lead to forced displacements of populations or aggressive actions on their account.

The environment has become accepted as a constituent part of Twenty-first century international politics. It is no longer seen as a secondary dimension of human affairs that may be ignored but has been identified as a priority of political discourse that cannot be postponed to a more convenient time. Environmental difficulties assume plural forms and respect no borders; they represent the most transnational form of instability for societies and as a result of global interdependence, environmental concerns have acquired prominence in definitions of security.

Moreover health scares in the food sector across the European Union from European unease over hormones in imported beef to the decade-long BSE crisis, hazardous animal feeds and the emergence of genetically modified crops and foods – have further sustained the anxiety over the issue of the environment in international affairs. This appraisal recognizes for international politics the validity of the “Butterfly effect” model that underpins Chaos Theory as a constituent part of a new paradigm to address the complexity of interactions on the international stage – where the outcomes of distant or secondary episodes cannot be neglected for their eventual impact on the interconnected character of the global arena.

The acceptance that environmental considerations have to be built into development strategies at the earliest possible stage to prevent economic deterioration was emphasised by

the United Nations Conference on the environment in Rio de Janeiro in 1992. Its core argument referred to the Environment and Development and stressed the need to ensure the development of the poorest countries as a corollary of the best guarantee of safeguarding the environment.

The premise that underscored the renewed awareness towards the environment was that one dimension could not be separated from the other. Poverty and under-development are causes and consequences of a degradation of the environment across the globe - with issues ranging from demographic growth, increasing pressures on scarce resources and deforestation for energy - while industrial processes that neglect or destroy the local environment and natural habitat add to inequalities. The global equation of supply and demand has already moved the environment towards a higher plane of consciousness.

This recognition in the post-1945 world of the abuse of the environment is not new and the link between the environment and political discourses increasingly emerged during the late 1960s and early 1970s. Groups of activists emerged to publicise the harm that was being done to the Earth by unbridled industrialization and to press for a reduction of the waste of modern societies. Some within these groups went as far as rejecting industrial society altogether arguing instead for return to more primitive land-base existences. One of the first post-war instances, when alarm bells rang over the environment occurred in 1953 towards the Chisso chemical company in Japan that resorted as a matter of course to dump its waste into the sea at Minimata Bay. Its industrial practices had very serious effects on the health and livelihood of local fishermen as the waste contained highly toxic mercury compounds.

Growing reservations for the state of the planet and its living habitats mainly followed the rapid rates of economic and industrial growth achieved in the post-war years in the United States from the 1950s to the early 1960s. Contrary to earlier expectations, at wars end the US economy did not go into a post-war collapse with the large-scale national demobilisation. In fact the US reconversion to a peacetime economy did not bring ruin nor did employment drop, but rather set the nation on the road to unprecedented prosperity so that fifteen years after the end of the war the economic and social contrasts could not have been greater. By the early 1960s, US national economic evaluations contended that the country had gone almost as far in terms of economic growth, discovery, production, prosperity and social and geographic upheavals as in the entire 169 years that preceded 1945.

Equally in Western Europe the post-war years were characterized by the so-called "economic miracle", when parts of the region rapidly regained a growing degree of industrial prosperity and economic affluence following the destruction of the war. Greenpeace

emerged around this period of fast-paced growth but with a focus that initially looked to the earlier political activism of the late 1940s and 1950s against military forces. It was a US-Canadian protest group against nuclear tests in the Aleutian Islands near Alaska and whose slogan was: “We want a peace and we want to make it a green one”. Movements in favour of the environment later assumed a more established base in political dialogue with the rise of Green Parties – that focused on the hazards that industrial or military-oriented activities presented for human life – during the 1970s and especially in the 1980s, when public opinions and later also governments in Western Europe and North America, began to take the environment more seriously as more emerged about the extent of the damage done to its various parts including to living species with some, like the blue whale or the tiger, already nearing extinction.

The 1972 United Nations Conference on the Environment in Stockholm marked the initial recognition of the importance of the environment at an international level. Importantly, during the Cold War environmental considerations were mainly influenced by nuclear weapons with a concern to avert the potentially devastating and long lasting effects that nuclear radiation would have on the environment, with a destruction of the global eco-system and the emergence of a so-called “Nuclear winter”.

“Our Common Future”, the 1983 report of the UN-sponsored “World Commission on Environment and Development” extended this international acknowledgment. It stressed sustainable economic development and pointed to the importance of the environment for global stability and prosperity. The core of the study highlighted a series of considerations that could emerge as a challenge for the future for the planet, highlighting the growth in world population, the finite character of food and energy resources, global warming and the unequal patterns of consumption between rich and poor countries. However, despite a relevant recognition towards the environment from the late seventies and early eighties, with issues of population growth in less developed countries and the unequal distribution of global economic resources, the overall dimension did not receive a sustained acknowledgment in high political debates or was confined to the domain of highly scientific communities and experts.

While, occasionally, serious accidents occurred and attracted publicity for their direct impact on human wellbeing and the environment, nevertheless these occurrences did not detract from the sustained performance of specific industrial activities designed to satisfy the rising demands of consumer-orientated societies, in spite of the evident potential risks they continued to harbour. One of these failures was a leak from a chemical plant; near Seveso in northern Italy in 1976, spraying around two tons of highly toxic dioxin gas over

the surrounding area that caused devastating consequences to the fauna and flora and ill effects for the local populations.

This behaviour prevailed even when the consequences of accidents proved to be quite serious, as at the Windscale nuclear power plant in the United Kingdom - renamed Sellafield in the wake of Britain's worst ever nuclear accident in 1957 and where problems have continued - or assumed critical proportions as at the Three Mile Island nuclear power plant at Harrisburg in the USA in 1979 - when the sudden temperature rise of the radioactive fuel risked a meltdown of the reactor. These severe industrial incidents, that also included the explosion of a chemical plant at Bhopal in India 1984, failed to generate enough momentum to raise the environment to a high-political international consideration.

Repeated instances of environmental degradation in various parts of the globe, including the large-scale marine pollution from oil tankers, spurred pro-environmental groups to attempt to change national political positions with various approaches, from the nuclear issue with a mobilization of public opinions in various Western democracies against its industrial and military dimensions symbolized by the high profile "Nuclear Power, No Thanks" campaign slogan of the seventies and eighties - to campaigns for conservation of wildlife with the ban on the fur and ivory trades.

Yet for all their efforts, during the Cold War, Green Movements across Western Europe never fully managed to seize the high ground of political discourse. Their arguments were met with responses ranging from polite sympathy to outright indifference. In effect ill Western Europe up to the mid-1980s arguments in favour of the environment were seen, at best, as a possible distraction in providing a common front by the Western Alliance to the Soviet threat or, in a more sinister light, as a covert attempt to undermine the Western resolve in the security sphere, given the strong opposition they embodied to the nuclear component of the NATO strategy.

The low political prioritisation of environmental concern allowed France, for example, to sustain its nuclear power programme from the 1960s - and especially following the first oil crisis of 1973 - to provide for its electricity demand, when energy conservation prompted the international community towards a search for alternatives sources. Similarly, across the Warsaw Pact region from East Germany to the Soviet Union, environmental concerns were also disregarded in favour of national economic targets of higher output and performance. Thus the natural resources of countryside forests, rivers and clean air were all sacrificed to the imperative needs of planning and growth.

A dramatic global reappraisal of the importance of the environment however occurred following the April 1986 fire at the Chernobyl nuclear power station in the Ukraine.

Chernobyl represents an undisputed milestone in the global politics of the environment. It was highly influential in the international change of outlook towards the environment, jolting the world community into recognizing that this was a dimension that did not respect either boundaries or ideologies.

The impact caused by the explosion of one of the nuclear reactors at the Ukrainian plant went beyond the loss of lives and regional pollution and contamination. It meant that virtually the whole of Europe suffered the unprecedented effects of nuclear pollution from a catastrophic distant industrial failure, as the fire at the Ukrainian plant also contaminated a great part of Europe with radioactive fall-out, resulting from the cloud of dust and ashes, swept into the atmosphere. While the immediate consequence in the European Community was that restrictions were imposed on agriculture – with a temporary ban on the sale of animal foodstuffs in many countries as levels of radioactivity were above normal in grazing livestock and reindeers and on some produce – a greater environmental awareness emerged across the world community by the late 1980s.

The widespread international criticism of the Soviet Union's secrecy and its slow reaction to the Chernobyl disaster – the accident was admitted only after abnormally high radiation levels were detected first in Sweden and then in the rest of Western Europe also spurred Moscow towards greater openness in discussions of environmental issues and to acknowledge the necessity to focus on issues of common concern. Moscow's initial attempts in concealing and in minimising the effects of the incident and the fact news of Chernobyl came first from the West rather than from the Soviet Union made President Gorbachev's talk of "glasnost", or transparency in political actions, ring hollow though, as it emerged later, Moscow's reticence towards openness hinged on the fact that the Soviet government was concerned to avoid mass panic. Gorbachev himself later admitted in relation to Chernobyl that "this event shook us immensely" and that "it was in fact a turning point" in terms of the development of greater openness.

By the late 1980s, with the realization that the time was running out for the environment, the international outlook experienced notable modification in perception. In a spirit of openness that also extended to the environment in September 1988 Soviet Foreign Minister Eduard Schevarnadze declared to the General Assembly of the United Nations in New York that "the growing physical destruction of our planet is the verdict against the existing divisions of the world" and that "the traditional view of national and universal security based primarily on military means of defence is now totally obsolete and must be urgently revised".

A greater acknowledgement of the risks that neglecting the environment entailed also extended to Western Europe where in Britain attitudes towards the environment gained



greater substance at an official level. Prime Minister Thatcher, mirroring the Soviet concern in a speech to the Royal Society, warned of the increasing dangers for the environment from the pace of scientific and technological advances and demographic growth, declaring that "with all these enormous changes concentrated into such a short period of time we have unwittingly begun a massive experiment with the system of this planet itself".

The political momentum towards the environment was maintained across Western Europe from the early 1990s following the end of the division of Europe. The entire expanse of the former Warsaw Pact was revealed as an environmental disaster zone as evidence of early five decades of abject neglect of the environment were uncovered in the Eastern half of the Continent. The fall of communist governments in Eastern Europe and the Soviet Union exposed a series of serious ecological problems. In Germany's regained eastern provinces 70 per cent of energy requirements were met by burning brown coal, which produced noxious fumes, including sulphur dioxide pollution. Industrial effluents heavily polluted the Black Sea; acid rain had caused vast areas of forest to die and deforestation was a major a problem. Much of the available water was unfit for drinking with estimates that over 60 per cent of the region's rivers were heavily polluted by mining wastes, nitrates, manure and oil; an over-intensive use of fertilisers had damaged the soil; many vegetables grown in polluted areas contained metal deposits and there were severe health problems for populations in some areas of Central Europe.

The pronounced character of popular awareness and engagement at community and local levels in favour of the environment meant that the German Green movement reached a position of power joining, as coalition partner to the ruling Social Democratic Party, the Federal Government following the general elections of September 1998 and since then have consistently argued for a complete termination of the country's nuclear power. This new attitude towards the environment also influenced French politics, less responsive to environmental concerns, but where Green Party candidates succeeded in attracting a percentage of the electorate at various electoral consultations.

Since part of the Mediterranean region belongs to Europe environmental considerations have also been directed towards the Mediterranean, reflecting recognition of the plurality of origins of transnational dimensions of instability on Europe peripheries. However a Mediterranean appraisal was accepted as a priority requiring a concerted political dynamism from all littoral states even before the end of the Cold War, in light of the unique geography of this region and its corresponding high rates of exploitation.

The Mediterranean in fact for many years has become a sea under siege from each of its peripheral states that carelessly exploits its coastlines and the local marine environment for the

greatest advantage of the national economy. The Mediterranean has been defined as one of the Regional Seas by the United Nations, together with the Baltic, the Caribbean and the North Sea. The Mediterranean, however, is unlike any other seas; it is effectively an enclosed mass of water with minimal tides and little opportunity of regeneration. It only reaches significant depth in some sector with over 5,000 meters near Greece, in the area of south of the Peloponnesian region.

It takes between 80 and 100 years for the Mediterranean to renew its waters. Because of its high rates of evaporation and slow rate of water renewal the Mediterranean is particularly vulnerable to pollution, the pollutants tending to accumulate without degrading and this is precisely the leading threat that the Mediterranean faces all along its coastlines. Furthermore around 500 rivers from all parts of the region including the Ebro, the Po and the Rhone - each one being the waterway of a highly industrial area of Europe discharge large quantity of polluted effluents into the sea.

The highly developed character of interactions in countries in the Mediterranean area - where the greatest concentration of urban and industrial centres has occurred along the littoral - and an over - reliance on the sea for economic purposes have been instrumental in maintaining the alarm for the future survival of the sea and for the prosperity of the region. This concern stems from studies going back to the early 1970s when it was estimated that anyone who swam in the Mediterranean in the summer had a one-in-seven chance of getting a disease from viruses given the untreated sewage in the sea, in addition to a joint report of the World Bank and the European Investment Bank in 1990 that further stressed this serious, reality. The report emphasized that nearly 80 per cent of the total fish capacity of the Mediterranean has been destroyed by pollution and over-exploitation and the Mediterranean basin is now a net importer of fish. The problem of marine pollution has remained particularly severe in the tourist areas of the Adriatic region, where the combination of sewage and chemicals affect oxygen supply in the water and cause the formation of thick algae that affect the sea life.

Moreover the Mediterranean represents one of the world's leading maritime sea-lanes for international exchanges within its region and beyond, by oil-carrying super tankers, cargo ships, and fishing fleets and an area of transit of naval forces of several countries. Dumping of effluents by ships cleaning their engines in international waters, though forbidden, adds to pollution levels of the sea and impacts on the marine life of coastal states. Despite several initiatives by various littoral states to discuss pollution issues during the last two decades, the resolution of environmental problems in the region is hampered by a lack of political consensus, given that the root cause of anxieties often directly affect national prerogatives of economic activity or industrialization.

The concentration of industrial and human activities bordering the sea on the Northern shores and the rapid rates of demographic growth on southern shores have led to an over-reliance and exploitation on the marine environment of the Mediterranean. The urbanization of coastline currently poses the greatest threat for the Mediterranean. Evidence of the relentless nature of this trend throughout History emerges from the fact that while in the Sixteenth century only three cities in the entire Mediterranean region reached over 100,000 inhabitants, nowadays there are more than 100 urban centres with over 100,000 people. This regional demographic progression points to estimates by 2025 of around 350 million people will be living in countries in the Mediterranean region and in some of these countries mostly on the coastlines.

The overwhelming growth of the tourist industry over the last 40 years has provided the most prominent impetus for the rapid development of the Mediterranean. Over 100 million visitors from around the globe annually head for Mediterranean destinations, adding to the strains of the region in terms of coastal pollution and this total is expected to rise progressively in the next decades. Tourism has been welcomed as a source of foreign revenues for national economies; though the phenomenon and the growth mass tourism have not been limited to the European part of the Mediterranean. Concentrations of hotels, residential accommodations and large-scale tourist resorts with beaches and marinas, have emerged on either shores where there were once only unspoilt coastlines or small fishing villages, often transforming the landscapes of the Mediterranean region beyond recognition.

The dynamic character of the tourism industry has been the product of the emergence of mass travel through the upsurge in charter flights and package holidays; these have ensured a democratisation of travel by lowering travel costs and making regions of the globe more accessible. They have transformed the onetime pursuit of distant travel of a minority within society into the enjoyment of the majority. However this development has caused an adverse impact on local environments in terms of rising levels of coastal pollution, destruction of natural habitats and of living organisms. Furthermore, in some countries tourist-related developments have added pressure on scarce local resources - notably water - or also provoked a distortion of economic activity, directing most investments towards the tourist sector, with the result that, as in Morocco, poverty and low living standards contrast with areas displaying levels of affluence and comfort that are far removed from the everyday living standards enjoyed by the vast majority of populations.

Tourism as an economic activity raises a fundamental consideration in the context of the environment in international politics that extends beyond the parameters of the issue to the plurality of a nation's economic decisions. This relates to the inherent political choice

between a careful management of the environment for international considerations and its exploitation for national self-interests. In other words, policies or decisions that concern the environment always embody a strong political character for they impact upon the sovereignty of states. As a consequence international debates on environmental politics usually reflect a lack of consensus. They confront industrialized countries with less developed ones over the relative importance of this dimension and the merits of the exploitation of natural resources under their respective jurisdiction.

The political aspect of the environment surfaces sharply since for most states the weight of national priorities will usually overshadows critical foreign arguments or predictions of potential disasters or long-term doom. Some states are not prepared to sacrifice their attainment of higher levels of industrial development or have no intention to fail to equate the economic development of industrialised countries for imperatives of global well-being. Equally, cultural or humanitarian evaluations in respect of the environment find little response in their policy-making. Moreover industrialized countries, that nowadays press for restraint in economic developments in favour of the environment, are perceived by less industrial states actually to have been and to continue to be the leading agents in its contemporary degradation. These countries have already exploited or destroyed vast areas of the environment for their own national benefit of higher growth without any of the considerations for moderation that they are now advocating.

This contrasting vision of the environment emerged at the 1992 UN-sponsored Rio Summit, convened to focus attention on global environmental deterioration. Similar sentiments were also expressed at the subsequent Kyoto Climate Change Summit in 1997 when strongest reticence to enact long-term policies in deference to the environment came from the USA. The proposed 20 per cent reduction of carbon dioxide emissions from all states to 1990 levels by 2010 to prevent a higher incidence of global warming and climate change was resisted by the USA. For Washington the measures for lower pollution ceilings would impact adversely on economic activities and living standards by imposing higher costs on industries and consumers in an automotive-based economy and contribute to a lowering of US Gross National Product.

Severe risks of environmental degradation have also been acknowledged for the Mediterranean, with the implementation of specific measures in parts of the region, ranging from the monitoring of marine pollution levels and limits on economic development to the conservation of coastal areas, natural habitats and species. Yet despite various initiatives during the last two decades by states in the region of the Mediterranean, a lack of political consensus has often hampered the resolution of problems, given that the root causes often

directly affect the national prerogatives of industrialization. A regional dialogue on the environment in the Mediterranean is often a casualty of tensions for misunderstandings or divergences of political vision between the parties over the priorities ascribed to specific national activities; the nature of specific industrial policies or levels of consumption often provide differing grounds of concern *vis-a-vis* the environment with the consequence that region-wide political initiatives on this subject do not always command substantial support. For states on the Southern shores, misgivings also extend to the sustained reliance on nuclear materials for an industrial context by European states, and to the presence of nuclear-powered vessels and carrying nuclear weapons across the Mediterranean that could affect the entire area in the event of an accident. This nuclear issue remains a contentious one and, for Western Europe, it is linked to other issues affecting European security beyond the Mediterranean region.

In the Mediterranean region there is however one environmental dimension over which there is less disagreement for its significance and that has already emerged in other parts of the international stage as source of controversy: this is the geopolitical dimension of water resources. The most plentiful of commodities in Europe and including also in parts of Mediterranean Europe, water is, nevertheless, one of the scarcest resources in other parts of the Mediterranean region and in its proximity. This contrast assumes even more significance in light of the dynamics of demography across the two shores. Water represents the central feature of the Mediterranean region – in fact the region's name originates from the identification in Ancient times of the sea the area at the centre of known lands. Nowadays, as in the past the sea not only remains a link for interchanges and communications but also further represents the most dynamic interface between environmental and political considerations for the Mediterranean region.

Water resources have an important dimension across the region stretching from North Africa to the Middle East and the Arab World where, cumulatively, high rates of demographic growth and a high rate of urbanisation further accentuate the disparity between abundance and relative scarcity across the two shores. Water has been identified as a cause of international dissention because of its shared and uneven distribution across regions, especially when the consequences of specific actions are seen to affect the available flow elsewhere in the region. Moreover in this geographical perimeter political interactions at times provide a background of tensions. This reality has led to the sobering observation that “long after oil runs out, water is likely to cause wars, cement peace, and make and break empires and alliances in the region, as it has for thousands of years”. For all countries in this region the opportunity cost is very high, water has gained a high value from the fact that

water consumption uses the majority of total available resources. The persistent water deficit for population on the southern shores of the Mediterranean periphery is also in essence the result of a threefold combination of factors: poor distribution, inappropriate allocations and wastage.

In the regional context of demand for water consumption, agriculture continues to absorb the greater proportion of available water resources. The rural sector in most countries requires substantial quantities of water to ensure the cultivation of commodities for the domestic economy given of high rates of evaporation across the region. This approach causes urban areas to experience water shortages or daily rations, when the alternative could be a policy that enhance urban consumption. Consequently water-planning policies represent a political and environmental decision as the outcome may imply a steady and expensive reliance on imports of foreign commodities for national food requirements.

The objective underlying a water-intensive approach to agriculture is often to reduce external dependency of basic foodstuffs for internal security reasons and to attain a basic level of self-reliance. The aim of this policy therefore may be of a political or social nature from national security to the support an agricultural community – or the objective could be to seek to reduce urban migration from rural areas. This use of water was an approach that probably reached its most successful level in Saudi Arabia that until recently ranked as one of the world's leading exporter of grain – an accomplishment made more notable by the harshness of the country's geography and climate but this strategy that was achieved at a substantial cost in terms of the intensive exploitation of its underground water table, leading in recent years to the adoption of a more balanced use of water resources and to a limited imports of grain. An earnest consideration for domestic agricultural output has equally been the rationale underpinning Egypt's focus for several decades on the waters of the Nile as a priority of strategic importance in the formulation of the country's domestic and foreign policy. Any outcome that influences or interferes with the flow is equated to a *casus belli* in Cairo.

At present three areas in the Mediterranean region stand out in respect to the most conflictual character of dynamics on the water issue. Existing relations have been described as volatile in the context of water between Israel and its neighbours especially since 1967 in the Jordan valley; in Africa the Nile waters are a bone of contention between Egypt, Sudan and Ethiopia and water is also disputed in the Tigris-Euphrates region – encompassing Turkey, Iraq and Syria. In all these regions the politics of water exploitation for agriculture, the heaviest consumer of water, for urban population needs or even for hydroelectric purposes – may generate conflicts, as some states may seek to use existing surface or

underground water resources in ways that may affect total available water to other parties in a region or may be perceived as disproportionate. The reality of water scarcity across various regions has meant that water resources have been identified as a challenge to the stability of the Mediterranean. For over a decade there have been arguments that the next conflict in the Middle East will not be motivated by political factors of military supremacy or territorial control but over the availability and control of adequate water supplies for national populations. Already Boutros Boutros-Ghali in 1987, at the time Egypt's Minister of Foreign Affairs, declared "the next war in our region will be over the waters of the Nile, not over politics".

Water equally provides a litigious ground in the Middle East rivalry post-1948. The Syrian and Jordan intentions in 1967 to alter the course of the Jordan river, as part of a sustained Arab refusal to accept the existence of the state of Israel, was one of the causes that prompted Israel to resort to military force. With the post-1967 extension of its borders water has become an increasingly contentious subject for Israel, as it benefits from water resources from disputed parts of the region. In fact by seizing the Golan Heights from Syria, Israel extended its control over new underground reservoirs, including also water streams that flow into the Sea of Galilee, Israel's largest freshwater reservoir. Since 1967 part of the water table that serves to supply Israel's population also serves Jordan, the Gaza strip - where the shortfall is particularly severe - and the occupied areas of the West Bank where, following the Oslo Accords, the Palestinian Authority is gradually gaining a degree of autonomy.

The strategic significance of Golan region to Israel's security is thus enhanced by the water potential of area and an eventual return of the plateau to Syria - under consideration as part of a comprehensive Peace Settlement - would not only remove the security buffer that at present it affords the state of Israel but moreover would increase the strategic value of water for the nation by reducing Israel's control over its total water resources. From the 1970s but especially from the 1980s Israel has faced an upsurge in water demand, resulting from an official stance that welcomed Jewish immigration from the former Soviet Union and from Ethiopia. This Israeli policy contributed to a controversial extension of its settlement programme in the West Bank and heightened tensions with Palestinians communities on the issue of water as the harshness of the climate meant an increased reliance on underground water reservoirs, lowering the water table for neighbouring parties in the region. Thus in the overall Middle East peace process, the issue of water figures as part of discussions for the West Bank and Gaza, even though this dimension receives less publicity in negotiations compared with the more contentions tense aspects of relations in the region.



The conflictual feature of water also emerges further East in the context of the Tigris and Euphrates basin, where strained relations prevail among all riparian states: Turkey – where these two great rivers originate – Syria, Iraq and Iran on their joint estuary. Water resources are shared across the region with hydroelectric programmes and irrigation plans based on these rivers flows. Serious disagreements arose between Syria and Iraq in 1975 when Damascus sought to use the common Euphrates water to fill a reservoir, causing the flow for Iraq to be reduced by a quarter. The consequence was domestic unrest inside Iraq as less water reached its countryside areas. This occurrence provoked troop movements by Baghdad with the threat to bomb the offending dam unless Syria complied in restoring the flow of the Euphrates down to the Persian Gulf; only mediation by Saudi Arabia prevented the outbreak of armed conflict.

The Tigris and the Euphrates rivers represent for the governments of Ankara and Baghdad a pivotal asset in the development of their respective countries. Turkey has embarked on an accelerated industrial programme based on the headwaters of the Tigris and Euphrates rivers. A programme of investments in canals and dams has also been undertaken in Iraq by Saddam Hussein to control the rivers' flows to provide irrigation to various areas and to increase communications within the country. The irrigation and engineering schemes envisaged in Ankara through the harnessing of its indigenous water power present immense agricultural and hydroelectric benefits for Turkey, while Syria and Iraq are threatened by fertilisers, pesticides and salts that are transported downstream and relations with Ankara have been strained since Turkey completed the Ataturk dam on the Euphrates river in 1990.

In the Turkish authorities' vision of a modern state, the vast *Guneydogu Anadolu Projesi* or *GAP hydroelectric programme* begun in 1965 in the province of Anatolia in the east of the country – by far the largest of these project in the entire area of the two rivers with plans for over twenty-five dams to irrigate millions of hectares previously devoted to subsistence agriculture by small farmers – is designed to develop the country by increasing the nation's energy supply and grow more food, including for export, transforming the south-eastern part of Anatolia into the bread basket of Turkey.

This grandiose and ambitious investment is expected to affect dramatically the lives of around five and a half million inhabitants across a wide area and irrevocably destroy parts of the country's ancient cultural inheritance. One dam, the Ilisu dam, currently being built on the river Tigris by a consortium of multinationals and intended to increase Turkey's energy output will force the displacement of an estimated 25,000 Kurds out of their homes and flood the medieval town of Hasankeyf internationally recognized as a site of important archaeological remains and one of the epitomes of Kurdish culture. Detractors have argued



that the new dam will also deprive other riparian states downstream of vital seasonal floods on which ecosystems and agriculture depend, while its reservoir might pose new health hazards; it would heighten the risk of regional waterborne diseases, like malaria, or even more seriously become a toxic pond with a concentration of sewage and chemical wastes.

Nevertheless these considerations do not bear heavily on Turkey's overall programme, especially as the regions concerned have a majority Kurdish population against whom Ankara has resisted any claim for a separate homeland inside a part of Turkey and where its armed exponents, from the Kurdish Workers Party in support of that cause, have forced Ankara to be engaged in an internal military struggle for a prolonged period of time. The GAP enterprise has therefore also been perceived to provide a *de facto* means for the Turkish government to integrate the majority of Kurds into the core of the Turkish state and attenuate separatist influences in the region that have spread further afield, often with violence. Consequently requests for a reduction in the scale of the project by the international community for its human and environmental repercussions have been also received with indifference at an official level in Ankara.

This development moreover reveals the contradictory behaviour prevailing on environmental arguments in international politics; while Western governments express serious reservations over projects that fail to embody the concept of sustainable development for the environment, as is the case of the GAP for the Tigris and Euphrates region, Western companies with official backing from their respective governments have not been reticent in providing technical assistance and expertise for the realization of this enterprise. The Turkish engineering project has created a widespread disquiet for the stability of the entire region, as it will give Turkey primary control over the flow of water from the two rivers. This is an occurrence that until now has not been attempted by any state in the region and presents Ankara with a potentially crucial asset to influence regional dynamics - made more disturbing by its Western allegiance. This venture may assume a significant profile and may become the motive for regional conflicts. The predicament enhances arguments of the high value of water in political interactions, defining it as the "Blue Gold" and supplanting oil - the "Black Gold" - on the international stage.

Instabilities and tensions arising for scarce water resources are further compounded by demographic factors; they may be often providing an additional dimension in the politics of water at a global level. Increasing rate of population in diverse regions on the globe within the context of dwindling fresh water resources raise the prospect of competition for an armed conflict over shared water resources. Each year, worldwide, millions of people leave

the countryside to escape areas where water is scarce to pour into urban centres where water resources are also at a premium, placing additional stress on existing economic and social resources. Demographic considerations in the context of water also apply in a significant measure to the countries sharing the Tigris-Euphrates basin. All four countries face sustained rates of demographic growth and water therefore represents a prime commodity for their continued stability.

For the Southern Mediterranean, this demographic dimension is also of relevance. The urban coastal areas from Casablanca to Cairo have the highest concentrations of national populations and often rely, on inadequate infrastructures. The forced rural migrations to cities – caused by an extension of desertification and poor agricultural results or as in Algeria by political events – have contributed to more difficult living standards. Mediterranean-rim countries on the southern shores and countries in the Middle East are seen to experience a fall in annual per capita disposable water year-on-year and already exploitation of underground water leads to higher salinity in the remaining pool. On present trends, estimates for water from the Maghreb to the Middle East indicate that during the first decade of the new century it will be increasingly difficult for these regions to meet domestic requirements.

The population of the Mediterranean region is forecast to rise in the next decades with the majority to be found on the southern shores and water resources are expected to come under particular stress due to a projected growing regional clash between population and available economic resources. The valuable character of water as a commodity for parts of the Mediterranean is also the result of domestic policies. Regional attempts at rapid industrialization or a high use of fertilizers often lead to a further erosion of the available water potential. In this respect, a policy that would envisage pricing water would prove for governments and for regional national stability as dangerous as an abolition of subsidies on certain commodities. In the Mediterranean attempts to address the dimension of water and other environmental issues at a regional level have so far failed to yield any positive results precisely because of diverging political outlooks. This has left the international stage, and above all the European Union, with a problematic dimension in the ambit of stability and security.

The globalisation of international relations from politics to culture has completely dissolved the onetime Cold War divisions including in policy-making endeavours. This reality has meant that across the European Union a greater awareness has emerged in relation to transnational and peripheral dimensions of instability. Problems on the environment, like population growth, climate change and water scarcity are like snowballs

rolling down a steep slope. The challenge international society faces is to stop them before they become avalanches threatening the survival of the human race.

Yet on the environment only actions that are collective in scope will ensure that efforts are not wasted and that natural resources or habitats are not spoilt. The unitary character of the environment dictates this approach since repercussions of industrial activities or failures go beyond the confines of national states. Importantly the environment will only assume a consistent profile when all dimensions that cause anxiety in respective countries are acknowledged. High on this agenda, at the dawn of the Twenty-first century, no longer stands the challenge of the control of the Black Gold that made the modern age possible, but how to ensure the collective management of the Blue Gold. It is a challenge of planetary magnitude as nowadays already several regions of the globe endure severe shortages or inadequate supplies and clean water represents a luxury in the daily lives of over one billion people in urban and rural areas.

To think globally and to act locally should be the approach on environmental issues in international politics. This reality requires the development of a new radical policy to encompass the global character of interactions that goes beyond the prevailing concept of acquired rights over natural resources. This paradigm should uphold for international society a transnational outlook in environmental matters with a notion of limited territorial sovereignty over shared regional or global resources from rivers, forests, seas and the atmosphere and for a notion of a reasonable use of these common resources. Industrialized countries, that nowadays seek to push the environment onto a higher plane of international awareness on the global agenda, should initially set the example of a greater environmental respect in their national activities and then, with resource transfers and technological cooperation, address various aspects of this issue.

Economic development and progress in this century will be judged no longer on the basis of output, wealth creation or GDP per capita, but on actions that promote sustainable economic development and enhance the quality of life for people. Environmental changes currently stand as one of the variables on the equation for international security and stability. The challenge nowadays for policy-makers is to anticipate the shape of things to come at a time of unprecedented change and to provide a framework for action before events transform scenarios into political reality. No one can know the future but, often, enough is already known to allow the elaboration of plausible scenarios of events in the ambit of international politics and security on the basis of current trends and present understanding of global phenomena.