

Water: an essential resource essay



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Water is an essential element for life. Many people must confront daily the situation of an inadequate supply of safe water and the very serious resulting consequences. The intention of this paper is to present some of the human, social, economic, ethical and religious factors surrounding the issue of water. The Holy See offers these reflections on some of the key issues in the agenda of the 3rd World Water Forum (Kyoto, 16th-23rd March 2003), in order to contribute its voice to the call for action to correct the dramatic situation concerning water.

The human being is the centre of the concern expressed in this paper and the focus of its considerations. The management of water and sanitation must address the needs of all, and particularly of persons living in poverty. Inadequate access to safe drinking water affects the well being of over one billion persons and more than twice that number have no adequate sanitation. This all too often is the cause of disease, unnecessary suffering, conflicts, poverty and even death. This situation is characterized by countless unacceptable injustices. I.

A FAR-REACHING QUESTION Water plays a central and critical role in all aspects of life – in the national environment, in our economies, in food security, in production, in politics. Water has indeed a special significance for the great religions. The inadequacy in the supply and access to water has only recently taken centre stage in global reflection as a serious and threatening phenomenon. Communities and individuals can exist even for substantial periods without many essential goods. The human being, however, can survive only a few days without clean, safe drinking water.

Many people living in poverty, particularly in the developing countries, daily face enormous hardship because water supplies are neither sufficient nor safe. Women bear a disproportionate hardship. For water users living in poverty this is rapidly becoming an issue crucial for life and, in the broad sense of the concept, a right to life issue. Water is a major factor in each of the three pillars of sustainable development – economic, social and environmental. In this framework, it is understood that water must meet the needs of the present population and those of future generations of all societies. This is not solely in the economic realm but in the sphere of integral human development.

Water policy, to be sustainable, must promote the good of every person and of the whole person. Water has a central place in the practices and beliefs of many religions of the world. This significance manifests itself differently in various religions and beliefs. Yet two particular qualities of water underlie its central place in religions: water is a primary building block of life, a creative force; water cleanses by washing away impurities, purifying objects for ritual use as well as making a person clean, externally and spiritually, ready to come into the presence of the focus of worship. II.

THE WATER ISSUE: SOME ETHICAL CONSIDERATIONS The principle water difficulty today is not one of absolute scarcity, but rather of distribution¹ and resources. Access and deprivation underlie most water decisions. Hence linkages between water policy and ethics increasingly emerge throughout the world. Respect for life and the dignity of the human person must be the ultimate guiding norm for all development policy, including environmental policy². While never overlooking the need to protect our eco-systems, it is <https://assignbuster.com/water-an-essential-resource-essay/>

the critical or basic needs of humanity that must be operative in an appropriate prioritisation of water access. Powerful international interests, public and private, must adapt their agendas to serve human needs rather than dominate them.

The human person must be the central point of convergence of all issues pertaining to development, the environment and water. The centrality of the human person must thus be foremost in any consideration of the issues of water. The first priority of every country and the international community for sustainable water policy should be to provide access to safe water to those who are deprived of such access at present. The earth and all that it contains are for the use of every human being and all peoples.

3 This principle of the universal destination of the goods of creation confirms that people and countries, including future generations, have the right to fundamental access to those goods which are necessary for their development. Water is such a common good of humankind. This is the basis for cooperation toward a water policy that gives priority to persons living in poverty and those living in areas endowed with fewer resources⁴. The few, with the means to control, cannot destroy or exhaust this resource, which is destined for the use of all. People must become the “ active subjects” of safe water policies.

It is their creativity and capacity for innovation that makes people the driving force toward finding new solutions. It is the human being who has the ability to perceive the needs of others and satisfy them. Water management should be based on a participatory approach, involving users, planners and policy

makers at all levels. Both men and women should be involved and have equal voice in managing water resources and sharing of the benefits that come from sustainable water use. In a globalized world the water concerns of the poor become the concerns of all in a prospective of solidarity.

This solidarity is a firm and persevering determination to commit oneself to the common good, to the good of all and of each individual. It presupposes the effort for a more just social order⁶ and requires a preferential attention to the situation of the poor. The same duty of solidarity that rests on individuals exists also for nations: advanced nations have a very heavy obligation to help the developing people. ⁷ The principle of subsidiarity acknowledges that decisions and management responsibilities pertaining to water should take place at the lowest appropriate level. While the water issue is global in scope, it is at the local level where decisive action can best be taken.

The engagement of communities at the grassroots level is key to the success of water programs. III. WATER: A SOCIAL GOOD While vital to humanity, water has a strong social content. It is highly charged with symbolism and is one of the essentials of life. Among the important social characters of water is its role in human nourishment, health and sanitation as well as peace and conflict avoidance.

Water for Food and Rural Development Agriculture represents a key sector in the economies of developing countries and cannot be sustained without sufficient water. In most of these countries agricultural activities are a major source of livelihood and an essential dimension of local social cohesion and

culture. This activity is carried on by small farmers in rural areas, very often with huge constraints. However, it must be remembered that, in the end, the dominant use of water around the world will continue to be water for food security. People living in rural areas, many times in poverty, can be driven by necessity to exploit beyond sustainable limits the little land they have at their disposal⁸.

Special training aimed at teaching them how to harmonise the cultivation of land with respect for water and other environmental needs should be encouraged. Where possible, cooperative efforts of water management and use should be encouraged. Participation suffers when large portions of a population lack skills and knowledge to engage in the issue before them. It should not be overlooked, however, that often those lacking formal education possess traditional forms of knowledge that can be vital and decisive in addressing and solving the question of water.

The special knowledge of indigenous people should be esteemed. In the context of rural development, a shift is needed, however, in the emphasis from the traditional irrigation to other means that focus on the needs of the poor and their food insecurity. The challenges are to develop water-saving technologies and to structure incentives to encourage development. Lands that have been damaged by waterlogging and salinization must be reclaimed through drainage programs. New irrigation development needs to be carried out with proper environmental impact assessment. Policies must be encouraged that develop sustainable irrigation and harness the wider potential of rainfed farming, incorporating water management for gardens and foods from common property resources.

Safe Drinking Water, Health and Sanitation Three crucial concerns are present in the relationship between water and health: managing quantity constraints faced by water-poor countries and their impact on human activities; the maintenance of water quality in the face of growing demand; and the direct link between health and water as pertains to diseases. Management of water quantity can be carried out by revising the allocation of water to different users. Better maintenance and repair of existing water systems can often significantly increase the water supply. Water conservation methods such as rainwater harvesting, fog condensation and underground dams should be studied for use where appropriate along with stabilization ponds for wastewater and treatment technology for the use of wastewater for irrigation. Water shortages can be substantially overcome through further development and use of treated urban wastewater for use in agriculture. This has considerable potential and if carefully managed carries only very limited risks and associated difficulties.

The problem of maintaining and improving water quality is especially acute in the more urbanized areas, predominantly in developing countries. This is most often hampered by a failure to enforce pollution controls at the main point source and the inadequacy of sanitation systems and of garbage collection and disposal. Most of the diseases that contaminate water come from animal or human waste and are communicable. These diseases have health effects that are heavily concentrated in the developing world, and within that context particularly among poor urban populations. Wastewater is often the medium through which these can affect humans.

Whether it relates to quantity, quality or disease, the trend away from centralized government agencies and towards empowering local governments and local communities to manage water supplies must be emphasised. This necessitates building community capacities, especially in the area of personnel, and the allocation of resources to the local level. Peace and/or Conflict Growing pressure due to increasing demand for water can be a source of conflict. When water is scarce, competition for limited supplies has led nations to see water as a matter of national or regional security. History provides ample evidence of competition and disputes over shared fresh water resources.

Identifying potential trouble areas does little good if there are no effective and recognized mechanisms for mitigating tensions. Existing international water law may be unable to handle the strains of ongoing and future problems. But some mechanisms for reducing the risks of such conflicts do in fact exist. These need renewed international support and should be applied more effectively and at an earlier stage of potential conflicts.

At the international level, conflicts tend to focus on shared river basins and transboundary waters, especially when combined with circumstances of low water availability. Tensions arise with increasing frequency over projects to dam or divert water by countries in a powerful position upstream from their neighbouring countries. IV. WATER: AN ECONOMIC GOOD Water has always been acknowledged for its role in production and thus in the economy.

However, in recent years increased emphasis has been given to the economic value of water. The Economics of Water The economics of water is

one of the most important aspects of water resource management that needs to be balanced with cultural and social concerns. The concept of treating water as an economic good is valid but the practice of doing so can be challenging. The use of water for industry and energy are of great importance in terms of the amounts of water used, the cost of investments to provide the water and the economic significance of the resultant production.

Every water policy must address the underlying economic issues. The aim of treating water as an economic good should be to accord water its proper economic value and enable the water economy of the country to be integrated with the broader national economy. Policies relating to the economics of water should ensure optimum efficiency and the most beneficial use while meeting the required objects of social development and environmental sustainability. There are increasing instances, however, of the commercialisation of water and water services. The most delicate and sensitive point in the consideration of water as an economic good is to ensure that a balance is maintained between ensuring that water for basic human needs is available to the poor and that, where it is used for production or other beneficial use, it is properly and appropriately valued.

Water and Energy Hydroelectric power is an important source of clean energy. It provides approximately twenty percent of total electricity production worldwide and brings notable economic and environmental benefits. For poor mountainous regions it offers one of the few avenues for economic growth via electricity exports. However, too often in the past such projects have been accompanied by devastating environmental costs. Policy

discussion in this area has been dominated by big dams to the neglect of issues such as small-scale hydropower and water use for cooling in thermal power plants.

While most of this water re-enters the water system, the significant change in temperature and in some cases quality, has serious environmental and resource implications. Dams still remain today one of the most contentious development issues for the water sector. Private Sector Engagement and Privatisation Water by its very nature cannot be treated as a mere commodity among other commodities. Catholic social thought has always stressed that the defence and preservation of certain common goods, such as the natural and human environments, cannot be safeguarded simply by market forces, since they touch on fundamental human needs which escape market logic (cf. Centesimus Annus, 40).

Water has traditionally been a State responsibility in most countries and viewed as a public good. Governments worldwide, for diverse political and social considerations, may indeed often provide large subsidies to insulate water users from the true cost of water provision. Being at the service of its citizens, the State is the steward of the people's resources which it must administer with a view to the common good. At the same time, in the interest of achieving more efficient sustainable water services, private sector involvement in water management is growing. It has however proved to be extremely difficult to establish the right balance of public-private partnerships and serious errors have been committed. At times individual enterprises attained almost monopoly powers over public goods.

A prerequisite for effective privatisation is that it be set within a clear legislative framework which allows government to ensure that private interventions do in actual fact protect the public interest. The debate today is not whether the private sector will be involved but how and to what extent it will be present as the actual provider of water services. In any formation of private sector involvement with the state, there must exist a general parity among the parties allowing for informed decisions and sound agreements. A core concern in private sector involvement in the water sector is to ensure that efforts to achieve a water service that is efficient and reliable do not cause undue negative effects for the poor and low-income families. V.

WATER: AN ENVIRONMENTAL GOOD The debate surrounding water has historically been largely confined to socio-economic issues.

Today, in the context of sustainable management of water resources, the environmental aspect is coming to the forefront along with water's role in supporting ecosystem functioning and species. This approach to water resources has focussed on sustainable use and on ensuring water utilization that is environmentally sound. A specific proposal to protect aquatic ecosystems and fresh water living resources has been put forward over the years reflecting the extreme threats that exist for many wetlands, rivers and lake ecosystems, deltas and other areas. Systematic changes to policy approaches are now needed, moving away from a traditional supply-side technical focus to one in which environmental issues are seen as integral to water policies and practices. Policy goals and priorities have in some cases to be re-ordered with frequent use of Environmental Impact Assessments as determinants of decisions on water investments.

There is, however, a lack of adequate human resources in this sector. This calls for planning and investments in human resource development. Environmentally Sound Sanitation Conventional forms of centralised sanitation are coming under increasing criticism due to huge operating and maintenance costs but more importantly their high water consumption and the groundwater pollution that can result. Further these types of wastewater and sewage disposal systems usually deprive agriculture, and consequently food production, of valuable nutrients. An alternative approach towards ecologically and environmentally sound sanitation is offered by a concept referred to as “ ecological sanitation”.

This takes the principle of environmental sanitation further in that their focus is keeping the environment clean and safe and preventing pollution. It includes wastewater treatment and disposal and disease prevention activities. It is an approach premised on recycling principles with a key objective of promoting a new philosophy of dealing with what has been regarded as waste. Disaster Mitigation and Risk Management A people centred pro-poor policy on water management must address the question of water related hazards such as floods, droughts, desertification, tropical storms, erosion and various kinds of pollution. Many so called natural disasters are in fact man made in their roots, due to inadequate attention to the environment and the consequences of human actions or indeed inaction. Once again, it is the poor who suffer most when they are exposed to such dangers.

But everyone’s security is at risk. More can be done in the areas of monitoring and forecasting of extreme events especially through more

efficient early warning system and technical cooperation between poor and more developed countries in devising planning strategies and setting up appropriate infrastructures. Climate variability and change are now recognized as being an essential dimension of such evaluation. Efforts of humanitarian assistance in response to disasters relating to water must identify the faults which gave rise to such occurrences and ensure that they do not recur.

Post disaster reconstruction is not a question of reconstructing the past, but of building for a safer and more ecologically sustainable future. VI. OTHER ISSUES IMPACTING WATER SUPPLY The water that exists today would be enough to meet human needs if it were equitably distributed throughout the world. 9 Since it is not, there arise situations of scarcity; some due to natural causes and others due to a range of human activities. Population World population has continued to grow throughout history. While the human demand for fresh water has risen steadily, since 1940 the global water withdrawals have risen even faster than the rate of population growth.

10 It is correct to deduce that more people need more water. However, to attribute to population growth a disproportional role misrepresents the true picture. The principal cause in increased demand is not in itself the mere growth of population but the disproportionate and unsustainable use of water for production and consumption by populations in developed countries. The ever growing concentration of a very high percentage of the world's population in large urban areas, especially in mega-cities, is going to propose new challenges for water and sanitation management, which will seriously impact the short-term and long-term local demand for water.

Politics Water is a political issue. There is little today that cannot be achieved technically.

What is needed is political effectiveness, political will and effective governance. The political arena is where decisions of water utilisation will take place. The solution to water problems requires the interaction of many spheres and sectors. This interaction must take account of the objectives of safe drinking water, sanitation and food security for all. Politics must ensure proper interaction, through setting correct priorities and the equitable allocation of resources, as well as through fostering interaction between institutions and the engagement and support of local communities, who are the most directly affected.

Political will and effective follow through is required for successful action in the water sector. The long-term viability of a country's water supply infrastructure depends on leadership and vision of political leaders, at national and local levels and their capacity to get things done. New legislation and institutional changes will be needed in many countries to form the framework within which the politics of water supply can be realised. A larger portion of the national budget may need to be directed to the water sector. Political leaders are crucial in generating genuine political support and vision in order to provide the motivation for such changes.

Often the institutional structure of the water sector at government level and the water portfolio is moved about between different ministries and many times is the result of political uncertainty and a lack of political responsibility. The international political arena must be given its proper role in seeking and

formulating global strategies to address water issues. The issue of water cuts across so many areas relating to sustainable development and poses considerable challenges to politics at the international level. Action-orientated responses to the challenges is what the people of the world await. A Right to Water A major achievement of recent history has been the ability to elaborate, within the framework of the United Nations, a network of international instruments formally identifying and proclaiming a broad spectrum of universally recognized human rights. Although access to water is a precondition to many of these rights, “ clean drinking water” is explicitly mentioned only in the Convention on the Rights of the Child.

11 It is however to be found in some regional human rights documents and national Constitutions. Sufficient and safe drinking water is a precondition for the realization of other human rights. It is argued that water was so fundamental a resource that, just as a right to air was not identified, water was not explicitly mentioned at the time the fundamental human rights documents were drawn up but was understood as a given which the drafters implicitly included. Furthermore, several of the explicit rights protected by conventions and agreements, such as rights to food, clothing, housing and medical care and necessary social services, 12 cannot be attained or guaranteed without also guaranteeing access to clean water. There is a growing movement to formally adopt a human right to water.

The dignity of the human person mandates its acknowledgement, along with the sound and logical argumentation found in the concept of implicit inclusion. Water is an essential commodity for life. Without water life is

threatened, with the result being death. The right to water is thus an inalienable right.

The challenge remains as to how such a right to water would be realized and enforced at the local, national and international levels. Just as, for example, the acknowledgement of the right to food has not eliminated hunger, the promotion of the right to water is a first step and needs careful implementation thought to arrive to the desired goal of access to safe drinking water for all. A right to adequate and safe drinking water should be interpreted in a manner fully consistent with human dignity and not in a narrow way, by mere reference to volumetric quantities and technologies or by viewing water primarily as an economic good. Poverty is the most important factor related to the sustainable provision of basic water and sanitation services.

The unavailability of basic services is a primary measure of poverty and poverty is the primary obstacle in the effective provision of basic services. Water scarcity has more dramatic effects for the poor than for the wealthy. The cost of even minimal basic water services is so high that the poor may never be able to afford them. Sustainable water policies will not be attained in areas which are impoverished in many other aspects. Poor services are a symptom of something fundamental. Authorities are unable to provide the institutional framework and the infrastructures to regulate the sector.

Development at the institutional level is needed whereby the priority of water is clearly identified. The authority and responsibility to enable services to operate efficiently must be provided. This will require structures for

environmental and economic regulation. The water services in many developing countries are however still plainly inadequate in providing safe water supplies.

This situation is so dramatic that it will not be overcome without increased development assistance and focused private investment from abroad. Funds released through debt relief could well be utilized in improving water services. Country partnerships can provide a method of institutional building and reform whereby a long-term link can be formed between the water sector of a developed country and that of a developing country. International poverty reduction strategies should focus explicitly on the water needs of the poorest populations. National and local financial support for the water sector must also increase.

Where subsidies are necessary, and they will be necessary, they should carefully target poor and families living in poverty rather than being applied generally. Following consultation at the community level, policies on water and related public health and environmental sectors need to be revised and where lacking established. After such policy change there is need to create or revise the body of laws impacting water that will effectively obtain and allocate the necessary supply of it. Poverty is about people and their ability to realize their God-given potential.

The poor show extraordinary creativity in seeking means of survival in the absence of adequate services. This creativity is a resource which should not be overlooked in working together to build up sustainable communities and avoid the creation of dependence. Conclusion Water is an essential element

for life. Right throughout human history water has been looked on as something intertwined with humankind. Human beings live alongside water and are nourished by water. It is a source of beauty, wonder and relaxation and refreshment.

Our very contact with nature has a deep restorative power. It is no accident that people chose places associated with water for the holidays, in order to renew and regenerate themselves. Water has an aesthetic value. In the Judeo-Christian Holy Book, God is presented as the source of living water beside which the just man can find life. Because the Bible was written in a part of the world where water is scarce, it is not surprising that water features significantly in the lives of the people. Due to the scarceness of water in the lands of the Scripture, rainfall and an abundance of water was seen as a sign of God's favour and goodness.

Water is a primary building block of life. Without water there is no life, yet water, despite its creative role, can destroy. The Bible opens precisely with the image of the divine spirit hovering over the water at the creation of the universe. In the accounts of creation contained in the first two chapters of the Bible, it is from the midst of the waters that dry land is made to appear, while living reptiles and rich life forms are made to swarm the waters.

It is also water that moistens the earth for other forms of life to appear. The separation of the elements permits them to interact in a positive sense, recognizing the intrinsic value of each. Disorder and confusion among the elements provokes a return to the primeval chaos. Humankind is thus called to live in harmony with creation and to respect its integrity. Conservation of

water is good because it provides for future generations that fundamental good which nourishes and allows us to protect such a source of power beauty and many other nice things. None of the issues presented here is done in isolation.

Only in a true holistic approach can the human being confront the challenges set forward in addressing the issue of water. The Holy See's contribution is presented with the conviction of the central role of the human being in caring for the environment and its constitutive elements. Only when humankind respects the integrity of creation, in conformity to God's providential plan, will we reach a true appreciation of the significance of water in creation and for humankind.