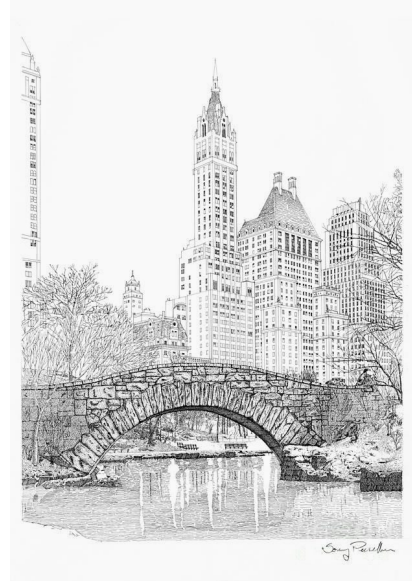


Pilgrims of St Francis



Chapter theme 2020:



'Sister Water'

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"...we must rediscover the world of emotions that traditionally, in all cultures, has presented water as an element of life, of beauty and magic.

We must fall in love again with our rivers, fall in love again with our rivers and their banks. Rediscover the world of emotions contained while sailing, swimming or just watching, watching what happens, how it sounds, how it talks, how it sings... our river."

(Pedro Arrojo^{LU})

1. Introduction.

This theme is a proposal from the Companions of St. Francis in Germany, showing their concern for water, and they wrote:

"Without water there is no life. Water is a precious resource, for nature and the environment", "it is an indispensable good for human beings" (European Water Charter, Strasbourg 1968); "Everything has come out of water! Everything is preserved by water! ..." (Johann Wolfgang von Goethe), Water: H₂O; water drops, springs, rivers, lakes, sea, steam, clouds, rain; snow, ice, hail, glaciers, puddles, sweat, tears; water is a habitat for animals, plants, bacteria,...; we are 70% water; water is our livelihood; the glaciers melt, the land sinks into the sea; while elsewhere, deserts grow (thirst, drought, humidity, floods, tsunamis, avalanches...); nature is more powerful than us. How do we deal with it? Are we prepared for disasters caused by water? Water pollution, water purification, water privatisation, wastewater, waterworks, artificial snow; water is part of our daily life: What if we only had 2 litres/day/person? Water is life, a source of life. a symbol of purity. How do we treat the precious gifts of this earth? How can we treat these assets of life with more respect and care?"

In order to try to answer all these questions posed to us from Germany, we have made this selection of texts - as we are not specialists in the subject we can only consult and choose texts from experts - with the desire that they help us reflect on a resource that must be preserved and cared for without any excuses whatsoever. We're in it for the life of us.

To start immersing ourselves in reflecting on water there is nothing better than the words of Leonardo Boff, co-author of the Earth Charter^[2] and great defender of nature:

"No issue is more important today than that of water. The survival of the entire chain of life and, consequently, our own future, depends on it. It can be a reason for war as well as for social solidarity and cooperation between peoples. Specialists and humanist groups have already suggested a global social pact around that which is vital for all: water. A minimum consensus should be created around water between all, peoples and governments, with a view to a common good, ours and the life systems.

Regardless of the discussions surrounding the subject of water, we can make a sure and indisputable statement: water is a good natural, vital, irreplaceable and universal need. No living being, human or not, can live without water. On 21 July 2010, the UN adopted this resolution: safe drinking water and basic sanitation are an essential human right.

Let us quickly consider the basic facts about water on planet Earth: water has existed for 500 million years; 97.5% of the waters of the seas and oceans are salty. Only 2.5% is freshwater. But 2/3 of this fresh water is found in the polar ice caps and glaciers and on the mountain tops (68.9%); almost all the rest (29.9%) is groundwater. There is 0.9% left in the marshes and only 0.3% left in the rivers and lakes. Of this 0.3%, 70% is used for irrigation in agriculture, 20% in industry and only 10% of this 0.3% is left for human use and for watering animals.

There are about 1.36 billion cubic kilometres of water on the planet. If we were to take all the water from the oceans, lakes, rivers, aquifers and polar caps and distribute it equally over the earth's surface, the earth would be submerged under a layer of water three kilometres deep.

Water renewal is in the order of 43 thousand cubic km per year, while total consumption is estimated at 6 thousand cubic km per year. Therefore there is no lack of water.

The problem is that it is unevenly distributed: 60% in only 9 countries, while 80 other countries face shortages. Just under a billion people consume 86% of the existing water, while for 1.4 billion it is insufficient (by 2020 it will be three billion) and for two billion it is untreated, which generates 85% of diseases according to the WHO. It is assumed that by 2032 about 5 billion people will be affected by water shortages.

Brazil is the natural powerhouse of water, with 12% of all the planet's fresh water, amounting to 5.4 trillion cubic meters. But it is unevenly distributed: 72% in the Amazon region, 16% in the Central-West, 8% in the South and Southeast and 4% in the Northeast. Despite the abundance, we do not know how to use water, since 37% of treated water is wasted, and that would supply all of France, Belgium, Switzerland and northern Italy. There is therefore an urgent need for a new cultural pattern in relation to this essential asset.

A leading water specialist working in UN agencies on the issue, Canadian Maude Barlow, states in her book Water: A Blue Deal (2009): "The global population tripled in the 20th century but water consumption increased sevenfold. In 2050, when we will have 3 billion more people, we will need 80% more water for human use alone; and we don't know where it will come from. That scenario is dramatic, for it clearly puts the survival of the human species in jeopardy."^[3]

2. Water, an urgency that cannot be postponed.

As life's future is in water, water conservation is "an urgent issue that cannot be postponed", one of the great causes facing humanity. This is nowhere better stated than that written by Joel González Vega, social-environmental activist from Limache, Chile, in Agenda Latinoamericana Mundial 2019 "Las grandes causas en lo pequeño (*The big causes in the small*)", on page 25:

"During the last few summers, the residents of the upper sectors of Olmue, a peaceful town in central Chile, have had to live with the lack of drinking water or with its distribution through water trucks. This, far from being an exception to the rule, has become an increasingly frequent situation, especially in countries where their government has shown preference to a development model based on the over-exploitation of finite natural assets, without considering the impact of climate change. Water, beyond being an extractable "resource" for productive processes, is a strategic asset, unavoidable when projecting survival on the Planet. Today, one in ten people in the world does not have access to clean water, and according to World Economic Forum projections, it is estimated that by 2030 there will be a 40% higher demand that cannot be met. Every day some 1,400 children die from diseases caused by lack of sanitation, and some 770 million people are without water, living mostly in poverty, slums or rural areas. Today, freshwater is the main source of supply to satisfy our multiple needs, but is only 2.5% of the total water available on the planet, most of which to a great extent is frozen in the poles and glaciers, or circulating in underground channels, rivers or lakes. From a common sense perspective, it is out of the question that access to water for the population is mediated by its availability for the productive enclaves of extractive industries, mega-mining, energy production and agro-industry. However, what we can see is that the legislations of many developing countries that make sacred macroeconomic figures, putting them above environmental justice and social equity. They have reversed their priorities, promoting legal frameworks that give ample guarantees to large companies without considering the urgencies of future needs that cannot be postponed TODAY. The realities are diverse and, without pretending to be alarmist, all of them, in the context of the need to protect water as an indispensable good, are charged with drama: from communities that travel kilometres to find an aquifer and return with a couple of jars, to those that must be supplied with water through water trucks that do not guarantee its safety and potability; neighbours whose relationship with water is through a commercial link in which payments makes evident the privatised character that, in many countries of the world, governs its administration; or towns that have seen the right to life violated by those companies that dispute the use of water, seeing it basically as a resource to make their projects profitable, but yet are far from the problem, squandering assets in the fantasies of the privileged in times of scarcity. When the UN resolves to recognise that access to water is an inalienable human right, it makes it clear that there can be no business or political expediency, no legislation or rules that prioritise the market as the regulatory filter for access to a need without which life on the planet is not viable. In that resolution, the UN calls on "States and international organisations to provide financial resources, the building up of skills and the transfer of technologies through international assistance and cooperation"; however, this statement may have different nuances, depending on the politics of governments, the strength of their institutions and the vulnerability of their public policies, in the face of the pressures attached to "free trade agreements", which are mostly the safe-conduct for multi-national firms which continue with intensive encroachment practices.

In my country, Chile, around 417,000 people suffer directly from the lack of water, in a State that boasts of its macro-economic figures and its position on the international stage as a developing country, but which has decided to maintain, through its governing elites, a model of water management and administration that gives privileges to the market and private property over a vital and indispensable element for needed for subsistence".

3. Is water a human right or a business?

The problem of bottled water and water management

To reflect on the question of whether water is a human right or a business, we return to another piece from Leonardo Boff's text already cited above:

"The great debate today is posed in these terms: is water a source of life or a source of profit? Is water a natural, vital, common and irreplaceable good or an economic good to be treated as a water resource and traded on the market? Both dimensions are not excluded in the argument, but we must relate them correctly. Basically, water belongs to the right to life, as the great water specialist Ricardo Petrella insists (O Manifesto da Agua, Vozes 2002). In this sense, water for drinking, for use in food, for personal hygiene and to quench the thirst of animals should be free of charge.

*But, on the other hand, because it is scarce and demands a complex structure of collection, conservation, treatment and distribution, there is, undeniably, an economic dimension. This, however, must not prevail over the other; on the contrary, it must make water accessible to all people. Even the high economic costs must be covered by the public authorities. There is no room here to discuss the causes of the current drought. I recommend the book by scientist Antonio D. Nobre (iNPE), published in January: *The Climate Future of the Amazon*, where he discusses the main causes.*

World Zero Hunger, as foreseen by the UN Millennium Goals, must include Zero Thirst, as no food can exist and be consumed without water.

Water is life, a generator of life and one of the most powerful symbols of the nature of the Ultimate Reality. Without it we would not live."⁴¹

And then we have the big problem of marketing bottled water. A very lucrative business. In 1970, about 1 billion litres of bottled water were sold worldwide. In 2004, it was already 154 billion. By 2017, they exceeded 250 billion litres of bottled water.

One of the big problems associated with the consumption of bottled water is the enormous waste of plastic from the containers. According to data from 2018, the bottled water business circulates more than 170 billion euros. A reality that needs to be reversed.

"We have to be aware of the enormity of the problem. If we classify European countries according to their consumption of bottled water, we can see that Italy is in the lead with 188.5 litres of water per year, followed by Germany, Hungary, Belgium, France and in sixth place Spain with 121 litres.

Countries such as Germany, Spain, Italy and the United States have access to clean drinking water and still prefer bottled water. It should be noted that bottled water costs 125 times more than tap water.

Given the situation of availability of cheaper tap water, one might ask why we drink bottled water?

The advertising from the big companies of bottled water, make us believe that their water tastes better and is healthier, but it is not true. There have been blind water tastings where different people were given a taste of bottled water and tap water, and they claimed that the drinking water tasted much better than the bottled water.

Remember too, that in Spain, drinking water is the most controlled food product, so it is just about impossible for it to be harmful to our health.

The big problem with bottled water is the environmental impact of plastic bottles. To make a single plastic bottle the following ingredients are needed: 100 ml of oil, 80 grams of coal, 42 litres of natural gas and 2 litres of extra water.

Also, the CO2 emissions in the production process of these plastic bottles are very high, so, if we wanted to compensate for them, it would be necessary to plant an area of trees as large as the United Kingdom.

If we focus on Spain, 50% of the plastic that is collected goes to landfills, and we must note that a bottle takes more than 1,000 years to degrade and rain washes toxic chemicals into the soil, so we are taking actions that are very harmful to the environment, as well as to our health. And then, although plastic waste incineration plants produce heat, steam and electricity, they also result in environmental pollution".^[5]

4. Conflicts over water.

The UN has been warning for decades that the effects of climate change are increasing: there are intense droughts and therefore large water restrictions in many regions of the world, so that scarcity and insecurity of supply could multiply the risk of conflict. Sub-Saharan Africa is experiencing a sharp decline in water availability and that will increase by the end of the century. And globally, the world's major waterways are threatened by drastic reductions in flow due to climate change and over-consumption. Recently, December 2019, we saw photos of the Victoria Falls (Zambezi River) with just one stream of water, caused by the very low river flow.

"... scientists are cautious about blaming climate change directly. There have always been seasonal variations in flows.

Harald Kling, a hydrologist from the Poyry engineering company, an expert on the Zambezi River, reminds us that climate science deals with long periods of time, not particular years. "That's why it's difficult sometimes to blame climate change, because droughts have always happened," he says. "If the droughts become more frequent, then we can say it may be due to climate change."^[6]

In an already dramatic scenario where more than 1.2 billion people on the planet today do not have access to clean water, more than 4,000 children under the age of five die every day because of this situation.

In addition, the prevailing economic model produces chilling victims and figures. The production of 1 litre of bioethanol (transport fuel) requires about 5000 litres of water. A tomato from Morocco, which will later be exported, needs 13 litres of water to grow.

While the production of a glass of orange juice requires 170 litres of water, and a cotton T-shirt needs 20,000 litres.

At the same time, each Swiss inhabitant uses 160 litres of water per day (cooking, hygiene, etc.). This figure reaches 4,000 litres per day if we calculate the water used in the production of food, commonly used products and clothing imported into the country. In this perspective, violent conflicts over this vital resource will not only continue to increase but are already a reality, as is explained in this following text:

"In the last decade, according to the 2018 United Nations report on access to water in the world, there were 263 confrontations over this resource on the planet. Three times more than between 2000 and 2009.

The figure, moreover, can only continue to rise if current water demand is maintained, 1% higher each year, which by 2050 will put 52% of humanity in a water-scarce scenario.

Then, sharing a watershed or the course of a river on a border that passes between two countries will take on another meaning. According to the world report of the Global International Waters Assessment, until 2006 there were 263 transboundary water basins; that is, 60% of the world's water is between two countries.

What will happen when a decision is made upstream to build a dam for power generation thus disrupting the supply for the people of another country downstream?

According to research last year by the European Commission's Joint Research Centre (JRC), led by Fabio Farnosi, the political tensions of the future will follow the courses of rivers that cross or divide borders, such as the Nile, which passes through ten countries; the Ganges, between India and Bangladesh; and the Colorado, which is shared by the United States and Mexico.

These are also areas where population and temperature are expected to rise dramatically and where there will be less and less rain.

But the abundance of water, as in the case of South America, does not exclude its countries from the possibility of conflict. Since 2006, Professor Carmen Maganda's research on transboundary aquifers in this part of the continent has warned of the need for treaties of cooperation between the countries of the region to manage this resource which, even after its declaration as a Human Right in 2010, still has its economic price put on it.

"Water, so essential to life, is also a form of control. A tool to control a population because of its need," explains María Botero, a member of the Territorio research group at La Sabana University.

This already happened in Bolivia. Between January and April 2000, a conflict was fought that is still remembered as the Water War, when in the face of the increase of up to 300% in the rates in the city of Cochabamba, the citizens decided to stop paying for water and collected rainwater instead.

The Aguas del Tunari consortium tried to ban this type of supply in Congress and the response was an open battle between civilians, led by then-Congressman Evo Morales, among others, and state forces.

These, protected by the state of siege, fired tear gas at the protesters for three months and, in the end, a bullet hit the neck of 16-year-old Victor Hugo Daza.

His death generated so much pressure on the government that it was forced to reverse the measures and expel the multinational. The victory, however, was felt as the first assault in a conflict of the future. A conflict which is beginning to be fought in countries like Nigeria, where communities are facing death with the same cry as the farmers of Cochabamba: "The water is ours, damn!"^[2]

These events were brought to the screen by the Spanish film director, Iciar Bollain, in the film 'También la lluvia (Also the rain)'^[3], which recounts the riots of September 24, 2000, during the Water War in Cochabamba, Bolivia when the Water Coordinator called on all social sectors to blockade the city in order to expel the multinational Aguas del Tunari (Suez^[4]).

5. Water and climate change.

In the previous section, we have cited climate change as the most important cause of the shortage of drinking water; a change directly related to the increase in the temperature of the planet. It is also a cause of population displacement and a focus for conflict over water control.

When the temperature increases, the evaporation of water masses also increases, so the humidity in the atmosphere increases. A priori, one might think that if there is a higher water content in the atmosphere, it will rain more. This could be the case during traditionally wet seasons, but it could also accentuate the shortage of rain in dry periods. These predictions are based on the fact that a higher temperature would provide the climate system with more energy and that meteorological processes would occur more quickly. Therefore, the first clear effect that can be expected is torrential rain, that is, it will rain but with greater intensity. But this does not mean that it will rain more, but that the number of rainy days in the year will decrease.

According to the experts, these predictions are in line, for example, with the latest trends in the hydrological cycle in Spain. In the last 25 years the high temperatures have caused a 20% decrease in the water that goes to the riverbeds. Therefore, these predictions and trends point to the effects of climate change in terms of several factors, including: a decrease in rainfall and an increase in evaporation. In other words, it rains and it will rain less, as we have seen (moreover, it will do so in a concentrated manner over time), and this water will not reach the available reserves in terms of recharging aquifers or contributing to rivers. Another important problem in the Spanish territory, will be the marked differences between different regions, especially between the coast and the interior and between the north and the south. This can be seen in AEMET's forecasts^[1] for southern areas, for example Andalusia, and for northern areas, such as Cantabria. The implication is that where there are currently water scarcity problems, the problem will be even greater than where there are currently higher annual rainfall records.

We are therefore talking about reductions of up to 40% of annual rainfall in the areas of the south of the Iberian Peninsula, while for areas of greater latitude the reduction would remain at a maximum limit of 20%.

Given the above, we have to think about a combination of these scenarios with a foreseeable increase in demands. What can we do? More than ever, it is essential to focus on the efficiency and sustainable management of this resource in response to the expected changes.

On current trends it is estimated that by 2030, 47% of the world's population will live in areas with major water problems. Therefore, better and more effective policies need to be developed to address scarcity, to try to allocate water where it is needed and to manage the potential problems that extreme situations may cause. A problem that must be tackled, from the point of view of public administration and from the daily life of each person. We must fight against these effects with a rational and efficient use of water. However, it should be noted that, although at the domestic level, there is much to be done to achieve a more efficient use of water, the impact is limited, water consumption at the domestic level is only 10% on average, of the global level, when the agricultural sector is the largest consumer of water, 65% and industry, the other 25%. Therefore, we must demand greater efforts from these sectors, and globally change consumer habits.

6. Water is a biblical and evangelical symbol. Sister Water.

In Biblical culture water has a double meaning: it is both a source of life and a means of purification. We could say that it is a versatile symbol: it originates life, with its freshness and cleanliness; but it is also an uncontrolled force that causes death and destruction. In the Scriptures, we can see that the waters of Creation upon which the Spirit of God hovered, made them a fruitful element for all life (Gen 1:2); but at the same time, in the universal flood, the torrential waters, in destruction, purified the face of the earth and gave rise to a new creation in Noah.

Water, and the need for it, was the experience of Israel in the desert: the people freed from the slavery of Egypt encountered another challenge: thirst, heat, sand and the lack of everything. The people were tempted to doubt the presence of God and were challenged to ask: "is God with us", they ask for more and more proof. There were no trials, but there were signs that point to God: a witness, Moses, who strikes the rock, and from it flows water that quenches the thirst.

Rivers are also God-given sources to fertilise the ground; and the rains and dew contribute their fruitfulness as divine benevolence. Yahweh compares himself to the spring rains (Hos 6:3), to the dew that makes the flowers grow (Hos 14:6). The righteous one is like a tree planted at the edge of running water (Nm 24.6). The believer seeks God as the thirsty deer seeks the presence of water (Ps 42:2-3), in a dry and thirsty land that waits for water. Again, water is a sign of blessing.

The symbol of water is also often present in the Gospel of John: in the baptism of Jesus by John the Baptist, in the wedding at Cana, etc. The baptism of John the Baptist was a liberating experience. The water, as a symbol of the Father, washed away the sins. Therefore, when the Pharisees asked John the Baptist if he was the Messiah, John the Baptist answered: *"God has sent me to baptise with water. He who comes after me will baptise with the Holy Spirit.* Then, also, there is the water that Jesus gives us taking away our thirst forever, giving us health and eternal life. Jesus didn't mind going along with human rituals (water baptism), just as he didn't mind breaking the rules of the religion of his day.

The narrative of the encounter of Jesus and the Samaritan woman (Jn 4:5-42) is full of content and symbolism and sets out the approach of Jesus to the Samaritan woman and the effect it has on her. He reveals himself as the source of living water: *"If anyone thirsts, let him come to me and drink"* (Jn 7:37-38). Behind Jesus' words is the vision of water as a symbol of life and blessing from God. The Samaritan woman was thirsty and was fooled into thinking that the water from the well would satisfy her. When she comes into contact with Jesus and speaks to Him, her thirst is quenched. Jesus has given her a different water, and that water has become within her an inexhaustible source. With all this background it is easy to understand that water became the natural element of the first sacrament of Christian initiation (baptism).

*"Praised be You, my Lord, for **Sister Water**, who is very useful and humble and precious and chaste.* This is how St. Francis of Assisi expressed himself in his famous Canticle of the Creatures, with the depth, simplicity and beauty that characterised his work.

Francis of Assisi wrote "The Canticle of the Creatures" around 1226, when he had already begun his path of radical poverty. It is an expression of praise to God through creation, and can be said to be one of the first environmental documents. Pope Francis was inspired by this poem to write '**Laudato si'**, the encyclical on the environment and ecology. At one point in the encyclical, referring to St. Francis of Assisi, the Pope says,:

"I do not want to develop this encyclical without turning to a beautiful model that can motivate us. I took his name as a guide and inspiration at the time of my election as Bishop of Rome. I believe that Francis is the example par excellence of care for what is weak, giving us an integrated way of life, lived with joy and authenticity. He is the patron saint of all those who study and work on ecology, and loved also by many who are not Christians. He showed particular attention to God's creation and to the poorest and most abandoned. He loved and was loved for his joy, his generous dedication, his universal heart. He was a mystic and a pilgrim who lived with simplicity and in wonderful harmony with God, with others, with nature and with himself. It shows the extent to which concern for nature, justice for the poor, commitment to society and inner peace are inseparable".

So, with the inspiration of Francis, the Poverello of Assisi, and Francis, the Bishop of Rome, we have to nourish responsibility and hope. An austere, fair and supportive management of water will be a necessary condition for justice and peace, which, with the addition of education, changes in lifestyles and technical progress can improve things: the number of those who lack drinking water has been decreasing for several decades, direct water consumption in Spain has fallen in a few years, climate- adapted agriculture or the use of drip techniques allow a more efficient use of this resource essential to life. We hope that this is the path taken and not simply a mirage.

However, we must put our whole heart and mind to the task, because we must not forget the words of Jesus: *"I was thirsty and you gave me something to drink"* (Mt 25:35). It is also a question of solidarity.

7. Water Manifesto for the 21st Century.

There are many declarations in favour of the right to water, including the European Water Charter, and there are also many bodies and institutions active in the field of water at the global level. With regard to recognition as a right in legislation, there are countries that have ratified a clear and explicit reference to the right to water in their constitution, and others in which their legislation makes an indirect and generic reference to water as a human right. It is to be hoped that this right will be reflected in the legal regulations of all countries in the world and that it will have a practical application.

Riccardo Petrella is one of the emblematic figures of the 21st century's alter-globalisation and the writer of the **Water Manifesto for the 21st century**. A significant person because he holds a brave position against the commodification of the world, and defends the common good, against the privatisation of resources that are vital for people and in particular, water. In conclusion, here is an extract from his book.

"The six founding principles of the "Water Manifesto for the 21st Century", inspired by the vision

- *of another way of looking at the human condition (based on the right to life for every human being),*
- *of another way of "living together" of humanity (around the axis of responsibility, distribution and solidarity among human communities),*
- *of another economy (house rules) (based on the promotion of water as a global common good, like air, sun, earth, knowledge, a biological resource for the planet...)*
- *of another way of political government (and not "governance") (structured around global mechanisms and networks based on the principle of non-violence and the rejection of war)*

First principle

The availability of and access to water - to its uses - constitutes a human right (universal, indivisible and cannot be taken away), both individual and collective. Water is a real symbol of the "sacred" character that our societies attribute to life. The water is sacred.

Since water is life, water is part of the human right to life. The availability of and access to water for life is a human right - individual and collective - that is universal, indivisible and cannot be taken away.

The implementation of this right for all should be the first global political objective at the beginning of this 21st century: there will be no "good" society, no "efficient" economy, no globalisation "with a human face", no "solidarity" or "justice" in the world, as long as there are human beings who are thirsty and die due to the lack of drinking water or its poor quality. [...]

Second principle

Water belongs to the inhabitants of the Earth and to other living species. It is a common resource, a heritage of humanity. It is not a commodity, a commercial economic good. It's not "blue gold."

As an essential and irreplaceable "source of life", water is a vital commodity for all living species. In particular, the individual and collective health of human beings depends on it. Agriculture and industry, too. There is no collective wealth or "well-being" without access to water. Therefore, water belongs to the inhabitants of the Earth, it is available to everyone. No one, either individually or as a group (a municipality, a region, a State...), has the right to make it their private property, following a logic of exclusivity, non-distribution and rivalry. Water is a common good, a heritage of humanity. This means that it is part of the public heritage of each "nation", as an integral part of the common heritage of humanity. [...]

Third principle

The governance of water - of all waters (including mineral waters) - and of activities covering the entire water cycle (from abstraction to recycling/reuse), is the public responsibility of the State and, within it, of the communities/local authorities.

States must ensure coherent, transparent and effective governance, ownership, management and control of all activities relating to the various phases of the integral water cycle, in particular with regard to the protection and safeguarding of water and soil, within the framework of a global ecosystem approach, based on regional and inter-regional river basins and on the genuine participation and co-responsibility of local communities. Only a fair, uncorrupt state, responsible to its citizens and future generations, can ensure the best integration and coherence between the allocation and multiple use of the resource in its distribution with solidarity, and without violent conflicts or destructive exclusions.

Fourth principle

The financing of the costs associated with water governance (of water for life and water to ensure the existence of human communities), must be ensured by the community, by the State.

It is up to society to assume collectively, through general and specific taxation, the coverage of all costs relating to the collection, production, storage, distribution, use, conservation and recycling of water, with a view to providing and guaranteeing access to and use of water in the quantity and quality considered necessary and indispensable for individual life and for the security of collective existence. [...]

Fifth principle

Water is a matter of citizenship and democracy. All water policy involves a high degree of participation from citizens, at local, national, continental and global levels.

The citizen must be at the centre of decisions. Public, sustainable and supportive water governance is part of the ambit of participatory, representative and direct democracy. It goes beyond the competencies and skills of technicians, engineers or financiers. The citizen (and not just the astute "consumer") can play an important role in the ways in which water policy priorities are defined, implemented and results evaluated. This demand implies the inclusion, beyond water users, of all citizens in participatory frameworks based on sharing experiences and skills. [...]

Sixth principle

Building "coexistence" and peace from water, a common resource. The future globalisation of our societies and of humanity calls for a global ethic and a political architecture, the rejection of water wars.

In recent years, calls for global cooperation, global coordination of activities and programmes, the creation of a world water authority, the development of a new world water-culture, a global water ethic - have multiplied. Everywhere - institutions, Nobel Prize groups, foundations, NGOs... - together with and/or independently, of the International Water Decades promoted by the UN, (the first one from 1981 to 1990 and the second one from 2005 to 2015,) have tried to make the international community make the qualitative political leap necessary for "a transformed roadmap". Results to date are mixed. It is time to establish, at the initiative of the UN, a world water authority at the point of meeting of the fight against poverty and the fight against global warming. This world authority (or another organisation) will be responsible for regulating the use of water throughout the world (rights and duties of peoples, of States) and for promoting cooperation and solidarity between peoples.
[...]

Conclusion

Nothing is inevitable in the "crisis" of water. The future is not over. The challenge of the right to life for all is global and global. To cope with it, "reforms" do not constitute a true response. The solutions must be brave, structural, in the realm of the "crisis" roots. Solutions exist and are possible, it is more than a hope. They guarantee the freedom of the future, for everyone. The "Water Manifesto for the 21st Century" is an instrument at the service of the freedom of the future. Without access to water, freedom simply does not exist. For the "Water Manifesto", the future and life belong to all human beings, here and anywhere, now and tomorrow. »

Epilogue and Footnotes

We hope that, in this document, we have collected sufficient appropriate texts to answer the questions raised by our German colleagues in their approach to this subject. We also hope that the texts will provoke an enriching reflection on water as an essential element for life.

"No one, no company, public or private, should have access to water resources unless they can guarantee the sustainability of these resources in the future. And governments have a role in ensuring fairness, justice and sustainability, and that must be a priority in everything we do. » (Maude Barlow)^[12]

Pedro Sanz, CDSF Spain, Valladolid, 15 December 2019

[1] Pedro Arrojo Agudo is a Spanish PhD in Physics, professor in the Department of Economic Analysis at the University of Zaragoza, whose research is focused on water economics.

[2] The Earth Charter is a declaration of fundamental ethical principles for building a just, sustainable, and peaceful global society in the 21st century.

[3] Boff, Leonardo, El agua en el mundo y su escasez en Brasil, 11/02/2015.
Available at: <http://www.servicioskoinonia.org/boff/articulo.php?num=689>

[4] Boff, Leonardo, El agua en el mundo y su escasez en Brasil, 11/02/2015.
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[5] Ambientum, The big problem of bottled water (29/10/2018).
Available at: <https://www.ambientum.com/ambientum/agua/agua-embotellada.asp>

[6] Reuters, Victoria Falls, reduced to a trickle (9/12/2019). Available at: https://elpais.com/internacional/2019/12/09/mundo_global/1575878945_555598.html?utm_source=Facebooksm=FB_CM#Echobox=1575884860

[7] Flórez Arias, Juan Manuel, In these countries there are already wars over water,
Available at: <https://www.elcolombiano.com/internacional/las-guerras-por-el-agua-ya-se-libran-en-el-mundo-MG10614118>

[8] To learn more about this film, please visit: <https://www.filmaffinity.com/es/film240485.html>

[9] Suez, is a multinational company of French origin, dedicated to the provision of running water services, in several countries around the world.

[10] Spanish State Agency of Meteorology.

[11] Petrella, Ricardo, Water Manifesto for the 21st Century (2008). Available at:
https://www.zaragoza.es/contenidos/medioambiente/cajaAzul/palabras/Petrella_ES.pdf

[12] Barlow, Maude, interviewed by Erika Gonzalez, Peoples magazine (21/01/2016).
Available at: <http://www.revistapueblos.org/blog/2016/01/21/maude-barlow-defendemos-que-el-agua-no-es-de-nadie-pertenece-al-planeta-a-otras-especies-a-las-generaciones-futuras-y-es-un-bien-publico/>