### CHANGE OF THE WATER THROUGHT TIME IN THE WORLD

Miguel Melo, Nicolas Tatis, Cristobal Pineda Group 7ª Teacher: Lorena Cardenas

> Cumbres School Envigado 2016 INDEX

1. Question Problem \_\_\_\_\_\_

# \_4

| 2. Objectives                        |
|--------------------------------------|
| 5                                    |
| 2.1. General Objective               |
| _5                                   |
| 2.2. Specific Objective              |
| _5                                   |
| 3. Importance of water in the world6 |
| 3.1. Mesopotamia                     |
| _8                                   |
| 3.2. Guajira                         |
| _15                                  |
| 3.3. Egypt                           |
| _19                                  |
| 3.4. How we can protect water        |
| 22                                   |
| 4. Conclusions                       |
| _23                                  |
| 5. Cybergraphy and Bibliography      |
| _24                                  |

### INTRODUCTION

This proyect is about how civilizations hydrography were and are now at days whythere cities were near to water, learn more about possible solutions that may be given to mitigate this situation, and the importance of the water in the ancient and recently civilizations. This work is thinked about the people of places with less water, in this case we are going to talk about a place out of Colombia and in Colombia that today are suffering for a drop of water.

The places that we are going to talk is about Mesopotamia, Egypt and the dessesperate Guajira, places that people think that always in all history was a dried, thirsty and alocated places, but in ancient times were a empre of water.

Water as well as being a vital nutrient for living beings have created international disputes for this universal component, such as:

- Israel and Palestine
- Tigris and Euphrates
- Zambezi Basin
- Nile

Today more than ever these lessons from the past have to leave us an learning, not to repeat this serious error that we committed with water in the old world.

### 1.QUESTION PROBLEM

## WHY SOME POTENTIAL SOURCES OF WATER OF THE ANCIENT WORLD CHANGE THROUGHT TIME UNTIL TODAY?

### 2.OBJECTIVES

- 2.1. Specific Objective:
  - To review the social, cultural, physical and political elements among others that influenced the final condition of the absence of water
  - Learn lessons from the past and the present in which the human being has given undue treatment to the water resource
- 2.2. General Objective:
  - Make a historical count in different times, places and conditions of how water is the vital resource when missing, lacking life.

#### 3.IMPORTANCE OF THE WATER IN THE WORLD

The surface of our planet is constituted by three quarters of water, that is to say 71%. Of this percentage, 96% are oceans and seas, while the rest called "fresh water", because they have no salt concentrations, exist in the environment as water vapor, in rivers, lakes, poles, glaciers, In the humidity of the soil and in the aquifers, and even in living beings. As we observe, water is a liquid element found in many parts of the planet Earth in different forms (salty, sweet, etc.). In the particular case of the human being, water is important to be consumed (in which case it has to be potabilized) and so that the organism can continue to function properly. In this sense, we can say that water is responsible for all tissues to develop their functions and capabilities effectively. When a person suffers a state of dehydration or lack of water, these tissues begin to lose their capabilities and functions are minimized. But water is not only important for human consumption, but also has to do with Allow the existence of a complex number of living beings. Firstly, water is one of the most important foods in plants, so water that arrives through irrigation or rain is responsible for the growth of all types of plants and vegetation that exists in the planet. On the other hand, water is consumed by animals and serves also as a natural element of vital importance for their development. An essential element, and protagonist of the origin of life although some organisms need to consume it more than others, we all need water to survive, and in fact we know that without it life on Earth would never have begun. Being a medium in which the organic compounds can be mixed with each other, the water facilitated the generation of the first life forms of the planet, possibly protecting them from the solar radiation. From the first organisms, to the most complex plants and animals, water has played a fundamental role in the beginning of life. In humans it acts both as a solvent and as a mechanism that transports vitamins and essential nutrients from food to cells. In addition, our bodies also use this resource to eliminate toxins and regulate the temperature. In addition to being essential for the proper functioning of the human body, water promotes life in many other ways. Without it we could not cultivate, raise animals, wash our food and maintain good hygiene. Water has also been key in the evolution of civilization as it has served as a means of travel and a source of energy for factories. Since water can also exist as vapor, it can be stored in the atmosphere and returned as rain to any part of the planet. Take care of this resource that belongs to everyoneProtection of available water resources on the planet is therefore an action that all countries, governments and communities must seek to ensure that these natural water courses allow the subsistence not only of the human being but of any known life form .Due to global warming, currently in many parts of the world the demands of this vital liquid can not be satisfied.Water is so significant in our lives that it has been declared a fundamental right for human beings. It is our duty to use it properly and take care of it, to prevent this non-renewable resource from being continued. Water is an element of nature, an integral part of natural ecosystems, fundamental for the sustenance and reproduction of life on the planet as it is an indispensable factor for the development of the biological processes that make it possible. Water is the most abundant component in organic media, living beings contain on average 70% water. Water is the foundation of life: a crucial resource for humanity and for all other living things. We all need it, and not just to drink. Our rivers and lakes, our coast sea, oceans and underground waters, are valuable resources that need to be protected. Likewise, water contributes to the

stability of the functioning of the environment and of the beings and organisms that inhabit it, is therefore an indispensable element for the subsistence of the animal and vegetal life of the planet. That is to say, that "water is a basic commodity for living beings and a natural element essential in the configuration of environmental systems". In this respect, this vital liquid constitutes more than 80% of the body of most organisms and is involved in most of the metabolic processes that are performed in living beings. In conclusion "The water is the element and the beginning of all the things" Thales of Miletus

#### 3.1. MESOPOTAMIA

#### WATER IN MESOPOTAMIA

In Mesopotamia the Sumerians (first habitants of Mesopotamia) were the first humans to know that water is the first foundation of life for that important reason were populated in Mesopotamia, the "Country of the Two Rivers", cradle of modern civilization.

When oil is generally considered to be one, another source of potential conflict is often overlooked: water, the main source of life in the arid desert areas of the Middle East. Water, which favored the development of the world's earliest civilizations on the fertile plains between Euphrates and Tigris, sometimes governments had to redirect rivers through floods, but the rivers gave this region fertile land even if they were in the middle of a desert. It is scarce commodity, and the struggle to secure enough of it is sharpened by day in water flowing. From the mountains to the sea. Indifferent to national borders, local conflicts and the religious, ethnic and ideological reasons that encourage people who populate the banks of their banks. Rivers that are born in one country quench thirst in another, and as such they play, by definition, an important role in relations between countries whose borders cross so easily. In recent decades there have been

several periods in which local development projects related to the Euphrates and Tigris rivers have put the neighboring states of Turkey, Syria and Iraq on a war footing. The <u>agriculture</u> was the main activity <u>economic</u> of <u>Mesopotamia</u> old. Due to the natural unfavorable conditions for esta practice in a large part of esta territory, the men used the <u>channels</u> to obtain good harvests. Due to these facilities were able to achieve very high yields. In the absence of excavations in rural areas, knowledge of ancient Mesopotamian agriculture is mainly based on ancient texts, including numerous acts of field sales practice, exploitation contracts or loans to farmers, as well as the abundant documentation found in the administrative buildings of the palaces and temples of the cities of Mesopotamia.

The two main rivers of Mesopotamia, to which the region is named, are the Euphrates and Tigris. The former has a quieter course than the latter, and is richer in sediments. Therefore, it is more conducive to agriculture. Both rivers drain to high solid load of sediments, which causes clogging of their channels, which rise somewhat from the plain. This means that their floods, which occur in the spring. Under the effect of snow melting, are often violent (especially in the Tigris basin), and in any case insufficient for the development of an agricultural area. Therefore, it was necessary to develop artificial irrigation techniques in the area where rainfed agriculture was impossible. The low plain of Mesopotamia is very flat, floods can spread far away and find it difficult, sometimes rivers to recover the bad, Causing a bad change. The humans stay in that area because their agriculture was good and the name of the region of Mesopotamia was Fertile Crescent, also if the agriculture was good.

WHY TODAY IS NOT WATER IN MIDDLE EAST, SPECIFICCALLY IN IRAQ? The oil is not now the principal agent in Middle East or Iraq, is the water, each day more difficult to find this precios liquid.

The flow of the Tigris and Euphrates rivers, which supply most of Iraq's water, is slowly declining, and the volume of rainfall is half normal, and in some areas these rivers have ceased to be a safe source for drinking water. Throughout the country, the reduction of the flow of rivers has serious consequences in the operation of the water treatment plants and hydroelectric. It also affects underground aquifers, in which the salinity of water increases. Often, this water is unfit for human consumption and can not even be used in agriculture. Growth and displacement of the population are also factors that make their weight felt in services. In many places, the problem is compounded by the lack of qualified engineers and staff needed to maintain and repair water supply and sanitation facilities. The drought that plagued northern Iraq in 2006-2010 severely affected many farming communities. During the last ten years, the average rainfall has been much lower than in previous decades. In the north, water systems fed by springs and aquifers have been depleted and their flow is often not enough to meet demand. Although, in 2009 and 2010, rainfall has been more abundant in many localities, low water levels continue to affect agricultural production. For this reason, Iraq needs to import larger quantities of rice and wheat. Because of the lower availability of good quality water, it is of importance to give a properly manage existing resources. Because some large suburban residential areas have been developed without proper infrastructure and do not use the services of wastewater treatment plants, they are discharged into rivers and lakes without being treated. Many neighborhoods are degraded by the presence of ditches and lagoons of contaminated and smelly water. According to recent United Nations estimates, approximately 83% of wastewater is discharged into rivers and streams. The operation of water treatment and distribution facilities is disrupted by frequent power outages. Currently, Iraq produces about 6,000 MW of electricity per day (with hydroelectric plants) while demand is estimated at 10,000 MW. Health centers, water supply and sanitation facilities and other infrastructure in many parts of the country continue to rely on backup generators to meet their electricity needs. Water distribution systems that are old or are not properly maintained are further deteriorated by illegal connections and low quality plumbing installed in homes. According to the United Nations, almost half of Iragis residing in rural areas lack potable water. The Iraqi Government estimates that 24 percent of the population one in four Iraqis lacks access to safe drinking water.

#### But, what is happening?

Drought, due to a trend driven by global warming, attacks on jihadist dams and marshes, and excessive water abstraction from wells have lowered the level of the bodies of water in the region have caused an incredible decrease in water flow, this also influence the destabilization of the area.

Drougth: This is the first study on the effects of the current drought in the systems of karez (underground aqueducts). Which for centuries have supplied thousands of Iraqis with potable water and for irrigation of farmland. The karez are able to continue to supply water even in dry periods, UNESCO said, whose study confirms that since the start of drought in 2005, 70 percent of the karez in operation have

dried up. Abuse of groundwater by wells equipped with modern pumping mechanisms has been one of the important causes of this phenomenon. In August 2009, only 116 of the 683 karez systems in northern Iraq continued to supply water to their users, UNESCO added. In addition, while prior to the drought the major threats to the karez were political instability, neglect and lack of maintenance, now the problem is that very few people know how to maintain or repair these old aqueducts, which contributes to the impact on the population is evident, according to the study, which finds that in populations affected by drought, the population has declined by almost 70 percent since 2005. UNESCO highlights the case of Jafaron, A town where 44 of its 52 karez dried up in 2008, which they do not want to happen in other places in this country.

Water abstraction: The pumping of groundwater for human use, is one of the main responsible for this decrease of water in Iraq, is related to drought, since the extractions increase notably in periods of low rainfall, during and after. In Iraq, around a thousand new wells were drilled in response to the 2007 drought. In addition, lack of coordination and improvisation has affected the percentage of water loss, which was especially important following the 2007 drought since then, demand for fresh water has continued to increase, but the region does not coordinate water management. The amount of water lost would be enough to meet the needs of between one million and tens of millions of people every year. What ultimately confirms this latest study is that the problem of water in the Middle East not only does not improve, but is increasingly serious. The demand for a constantly growing population, the effects of war and the consequences of climate change are increasing the chances that in the coming decades some of the countries that still have their needs covered will face situations of worrying shortage Regarding water resources, the Middle East now has the least amount of fresh water per habitant in the world, and the future forecast is not good. Scientists predict that climate change will lead to more extreme droughts, which could moiste reserves by as much as 10% by 2050, while demand for water will rise by about 60% over the same period. Water is obviously not only consumption is also a political problem, and the origin of many conflicts in the region. In Iraq, it is stressed that, despite the amount of water potentially available in the country, the production capacity of Water continues to be seriously damaged after successive embargoes and three wars in twenty years the destruction of dikes and water treatment plants have slowed the development of major pipeline and interconnection projects of the Euphrates and Tigris.

#### WARS OVER WATER CONTROL IN MIDDLE EAST

Some conflicts in Middle East is about the control of fluvial sources, that do not is only useful for domestic use, but in agriculture and industrie, like in:

•Palestine and Israel: A conflict between this two countries for the control of the fluvial zones in the region.

Palestine has natural water resources both in surface and underground. Surface waters flow in the form of permanent rivers and water reserves. The main resource of drinking water in Palestine is groundwater. In the early 1970s, Israel bombed without warning a Syrian dam under construction that diverted some of the water from a tributary of the Jordan River on the heights of the Golan, which was to limit its arrival in Israel. Then it also bombed a canal that Jordan built to take advantage of another tributary of the Jordan. The called "six days" war (Israel against all its Arab neighbors. Israel won) began when Syria wanted to divert the Hasbaya River, a tributary of the Jordan. In this way, it seized all the sources of supply in Palestine that generate a total of 80 million cubic meters of renewable water. In this war, Israel took over the heights of the Syrian Golan, where is the Tiberiades Lake and

half the banks of the Yarmouk Valley, whose river of the same name is the main tributary of the Jordan River. In total, the Jewish state controls 939 million cubic meters of water located in the occupied Arab territories. Lebanon began to modify the Hasbaní riverbed in March 2002, also a tributary of the Jordan, to transform its fields into irrigated land, having to paralyze it in the face of the threat of Israeli military intervention. The distribution that is made of it among the population, is quite uneven. In the Golan Heights, Israeli settlers make indiscriminate use, while imposing restrictions on non-Jewish inhabitants of the area, who are barred from digging wells for their own consumption. The Palestinian Authority has denounced that Israel diverts between 80-90 per cent of the water resources of the occupied Palestinian territories for their own use or for Jewish settlements in their territory. The Gaza aquifer continually increases its salinity and contamination as a result of untreated sewage, which occurs throughout the territory, through the massive use of fertilizers from intensive Israeli agriculture, which is endangering future supplies of water, including the domestic, this thirsty battle has not ceased, but authorities such as the ONU have decided to take action on the issue.

•Tigris and Euphrates: Control over the sources of Euphrates and the Tigris is an important source of conflict between Turkey and Syria, as well as with the Kurds who habit this area.

The wars that come will no longer be for gold or oil but for much resources more basic. Especially in the Middle East. In Syria, Turkey and Iraq, control over water and arabe land is gaining importance. The Islamic State (Daesh) realized long ago, and settled along the two great rivers of ancient Mesopotamia. Its top priority is to maintain control of more than 1,000 kilometers of the Euphrates, from Jarablus, on the Syrian Turkey border, to Ramadi, in central Iraq, as well as portions of the Tigris. The Syrian regime lost a long time ago, the basins of the Tigris, was only recovered after a campaign of five months with heavy losses in the side of the attackers. By taking the Tishreen dam on the Euphrates side of Rojava (Kurdish organization) it has taken an important step against dependence on fossil fuels and dangerous home refineries, lethal to aquatic life and pure water. The land of Rojava is very fertile, and produces more than enough to feed four million habitants, but the large crops of wheat that make up over ninety percent of agriculture depend to a large extent on chemical fertilizers. Rojava farmers will only be able to reap a third of the usual harvest.

#### 3.2. GUAJIRA

The first habitants in the state of La Guajira were those of the linguistic Family Arawak who arrived 10,000 years ago; and later those of the Chibcha which occupied the south, exactly in the Sierra Nevada. The family Caribbean probably settled 2000 years ago; and according to studies, as well as the Arawaks and Caribbs arrived in the territory of La Guajira plain and vacated other towns. The territories that now make up the departament of La Guajira were under full control of different Native American people of the Arawak, Caribbean and Chibcha language families. The first incursión in the territory by Europeans, was from 1499 by an expedition that began on May 18 of that same year, Juan de la Cosa where he also participated Alonso de Ojeda and Martin Fernandez de Enciso. Those mentioned previously, crossed the coast of the península of La Guajira and thought that it was an island, which they called Coquivacoa, The territories that today make up the departamento La Guajira were integrated to the colonial virreinos of Peru and New Granad, Santa Marta and Rio Hacha. Its main economic activity was the fishery of pearls; and the eventsthat marked its history were various rebellions of native people who resisted being dominated and the multiple palenques of fugitives that were scattered throughout the center and southner territory cause of drought. To attribute the drought that is experienced in much of the country to the phenomenom of the child or the effects of climate change, and to present the consequences for the water as a product of natural phenomena. Also La Guajira was a rich place of water but his colonizers, poblation, open sky, mining and isn't neccesary to remember that is a semiarid "anti precipitation" area that contributed to the lost of water in the city of La Guajira.

Currently in La Guajira there are many causes that do not allow the department to have good quality water suitable for human consumption. Among these we have:

La Guajira is one of the regions of Colombia most affected by droughts and shortages of drinking water, especially the Wayuu indigenous community, for these communities the access to drinking water is very complicated due to the climatic conditions that differentiate it from the rest of the country, if you look at the runoff of Colombia you can see that this varies circumstantially in almost the whole country according to the time of year. However, this variability is not completely accentuated in La Guajira because, regardless of the time of year, its behavior remains constant with low levels of runoff (red scale). In order to quantify the nature of this variable, the country's hydrological regime is characterized by an average runoff of 1,988 mm, while in Guajira, there is a range of between 100 and 600 mm per year, corresponding to the dry year and year In mid-2014 the Region was declared in emergency due to public calamity due to the inability to meet the needs of 523,000 people, 60% of the population for its part, the local government has tried to invest in sustainable projects, generators of new sources of storage, aqueducts and sources of water supply. He has also tried to make new wells and desalination plants with the money from the Department's royalties, a product of gas, coal and salt production. Royalties that for the last 20 years are close to 5 billion pesos, however corruption and mismanagement of monies have meant that these works do not advance and that at this time the region is in the precarious situation in which Is found. On the other hand the imposition of the mining exploitation of El Cerrejón, the water has been subjected to privatization processes. The Wayuu and Afro-descendant communities have suffered pollution from coal mining, and have also witnessed the processes of appropriation of waters for mining use. Thus, during the years of coal mining, in La Guajira there is a model that has not only to do with the way in which someone appropriates the natural good transformed into a resource in human activities of production, stripping it at the same time of the other values and uses that it has. Also how this appropriation is also selective and is directed to better quality (uncontaminated) waters, which inevitably leads to many more who are left without sufficient quantity and quality of the liquid for everyday activities. Surface water of the Ranchería river, which in large measure is a product of the coal dust that reaches the source of water by the exploitation and the transportation of the material in dump trucks, leads by connection of the sources to the contamination of the aguifers, which Increases the magnitude of the problem if one takes into account that more than 50% of the population is supplied by underground wells. Consequently, there is a shortage of water directly linked to the pollution resulting in an alarming decrease in fishing in recent years, as well as the impact of excavations on evaporation rates, causing serious alterations in the hydrological cycle. In addition, the Cerrejon to Ranchería River shed areas provide a high amount of fats, oils, fuels, coal and ammonium nitrate over the Ranchería River and other surface water sources. The Wayuu and Afro-descendant communities have suffered pollution from coal mining, and have also witnessed the processes of appropriation of waters for mining use. Thus, during the years of coal mining, in La Guajira there is a model that has not only to do with the way in which someone appropriates the natural good transformed into a resource in human activities of production, stripping it at the same time f the other values and uses that it has. Also how that appropriation is also selective and is directed to the waters of better. The water problem has contributed to the deterioration of people's health, the spread of infectious diseases and undernutrition of the population. This, in turn, has generated that the Department does not develop properly because the population is not in optimal

physical conditions to work, which generated more poverty and inequality. The Human Development Report 2007 identified that unsanitary water and inadequate basic sanitation are two of the major drivers of poverty and inequality. In fact, this is one of the main challenges facing Colombia in terms of the Millennium Development Goals, because even in many regions of the country citizens lack access to safe drinking water. For all of the above, the IGAC (Agustín Codazzi Geographical Institute) carried out a study where it was possible to announce that the department of La Guajira has the soils with lower humidity; Is the department with greater luminosity, with 2,900 hours of sun a year, that is why there is more evaporation than rainfall, reason for which the climate in almost all its extension is arid, but under the soil guajiro there are rivers of fresh water and with the delivery of the six wells in four municipalities showed that in La Guajira there is water and that infant mortality is not due to drought but by poor governments that handled trillions of pesos for two decades and did not meet basic needs unsatisfied. The Government decided to temporarily assume the management of health resources, education and drinking water of La Guajira, to give a transparent management to the money transferred by the Nation to that department. The National Government transfers to the department of La Guajira annually about \$ 785,000 million to finance the provision of water, health and education services. With this intervention, starting today, \$ 513 billion for education, \$ 56 billion for water and \$ 216 billion for health will be administered by elite teams from the Ministries Health, Education and Housing, who will work in the department along with local authorities to implement competitive procurement mechanisms, improve the quality of services and accelerate ongoing investments.

#### 3.3. EGYPT

After the gradual withdrawal of the glaciations the pastures were increased and the diverse indigenous populations were concentrated being pushed by the desertification process of the Sahara. There were diverse indigenous cultures identifiable by their different utensils, ceramics and funeral rites. The Neolithic period that began in Canaan around 9000 a. C., arrived at Egypt about the year 5000 a. C. The floods of the river Nile as a consequence of the rains in its sources and the torrential of clay from Ethiopia gave rise to rich and fertile lands. It agrees that towards the 4000-3500 a. There existed a unification of the territory through the previous local communities, the nomos: Lower Egypt, whose main cities were Buto and Sais, and Upper Egypt, with capital in Hieracompolis, adopting like main divinity to Horus. Conquered the delta of the Nile, towards 3000 a. C. The ancient Egyptians called their country kemet, "the black land," to differentiate it from the desert or deshret, "the red earth," and they themselves were called remet en kemet, "inhabitants of the black land." This was arable land. Every year the Nile deposited during the annual flood and until their waters reached the silt that would make the earth fruitful. Without the Nile, Egypt would have been a desert, inhabited only by nomadic communities. It could never have developed there, the millennial civilization that we know today. In Ancient Egypt life was developed along the Nile, as unifying element of the whole territory. At the end of the Predynastic Period (2920 BC), Narmer, king of Upper Egypt and last of this period, conquered the Lower Egypt River Delta, and unified the country. Thus begins the Dynasties that over the centuries would happen in this territory. When the construction of the Nile Dam in Aswan began in 1960, in the southern tip of Egypt, the Egyptians were sure that they were about to dominate the longest river in the world. "Before the prey, the lives of the people "Said Abdullah Ati, a 42-year-old wheat and clover farmer from the northern agricultural province of Kafr Al-Sheikh, recounting his father's story of the time before the prey. However, more than 50 years after the instigating

socialist president, Gamal Abdel Nasser, took advantage of Egypt's febrile nationalism to build the dam and establish domination of the country on the Nile River, the arid north African country faces Threats to its almost unique source of fresh water. With rapid population growth, limited agricultural land and recent challenges to its majority participation in Nile waters by upstream states, the United Nations now says that Egypt may have a shortage of Water by 2025. "In a sense, Egypt's average is deprived of water," says Hani Raslan, an expert on water policy at the Cairo-affiliated Al Ahram Center for Policy and Strategic Studies. "The average per capita consumption of water in Egypt is 700 cubic meters (per year), while around the world it is about 1,000 cubic meters," he says. Find new sources of water. But they will soon be less than 500 cubic meters. "It is not that the Egyptians are necessarily thirsty. Domestic freshwater consumption in local house holds accounts for less than 20 percent of the nearly 64 billion cubic meters of water Egypt consumes each year. Year, 55.5 billion of which come from the Nile. The issue is in the urgent need of Egypt to feed its growing population by expanding and irrigating the country's agricultural land - only 6 percent of its total area - With the same or even with a lower amount of water. According to the Ministry of Water Resources and Irrigation, Egypt will need 20 percent more water by 2020. Its population, according to government projections, is likely to grow from 80 million today to 98.7 million in 2025. "Egypt is changing, and it has a lot to do with population growth," explains Richard Tutwiler, director of The American University Desert Development Center in Cairo, a research center designed to serve communities in the desert of Egypt. "Everything is watered here, but the water resources have not increased." Today, Egypt's irrigation network is almost entirely based on the Nasser Dam, called the Aswan High Dam, which regulates more than 18,000 miles of canals and sub-channels that enter the country's farms adjacent to the river. The system, no matter how noble of its intentions, is highly inefficient, according to irrigation experts. Irrigation by crop area through canals, for example, means as much as 3 million cubic meters of Nile water are lost each year by evaporation under the hot desert sun of Egypt. In addition, farmers located in Channel headers have better access to an abundant supply of quality water than those from the tailings, "says Ahmed Al Hennawy, a professor of irrigation and soil science at Kafr Al-Sheikh University. Take the water from the canal without any planning, "says AI Hennawy. This forces farmers in their village at the end of a canal to use runoff from sewage and even water from nearby farming villages to water their "Many Egyptians do not realize that we have a lot of water problems," says Sherif Hosny, executive director of a for-profit company called Schaduf. Company helps low-income families to use hydroponic crops, a process of growing plants without soil, to establish small gardens on many of the rooftops of Cairo. It is a method of irrigation, says Hosny, who uses 20% less water than the current canal system. "You see that the Nile flows," he explains. "And they think that all is well." The Nile was the only source of fresh water that once was a blessing to the rulers of Egypt, allowing the pharaohs and later governments to forge a centralized system of administration and infrastructure anchored in the river and its adjacent communities. But now, to ease the overcrowding, near the river, the Egyptian Government is encouraging its huge population to move away from the Nile and go into the desert - which accounts for 95 percent of its surface area. About half of Egypt's 80 million people live in the fertile Nile Delta, north of Cairo.

### 3.4. HOW WE CAN PROTECT THE WATER

Now that we know the serious problems that we are confronting around the world he have to take action today, so that tomorrow we have a better world to future generations. We are going to give you some advices for protect the water:

- Use the buckets to wash the car instead of the hose.
- Make short showers.
- Recycle the water in the pool to water the plants
- Raise awareness to the people you know of the importance of water for life.
- Close the shims while brushing teeth, instead of letting the water run.
- Do not leave leaking tap.

And if you follow these warnings, you are saving more than 100 gallons of water that favors wildlife and gives the opportunity to people of limited resources to drink at least a glass of water, then when you do any of these tasks remember to save water.

#### 4.CONCLUSIONS

Water, has been one of the most important resources in the history of humanity, so it is considered a source of life. In despite of all the benefits it provides to the environment and to each living being, it is the resource of which one has the least awareness of care and which is most abused in a carefree and disinterested way. If we continue with the inadequate management of this vital resource, in the not too distant future we can see the partial or total lack of it. As the number of people increases over the decades, an increase in needs can also be seen; Of space, food and opportunities. This will represent a global size drawback, the shortcomings will become greater and it will become impossible to be fair and equitable. We are rational beings but before moments of need our most impermissible instincts come to light, for this reason it is indispensable to be aware now; Now that we are still in time to change the course of our history. It can be tedious and it has even become box phrases the innumerable advertisements, billboards, commercials and others that seek to raise awareness in each one of us about how important it is that we care and above all protect this water resource.

### 5.CYBERGRAPHY AND BIBLIOGRAPHY

- https://en.wikipedia.org/wiki/Agriculture\_in\_Mesopotamia
- http://vientosur.info/spip.php?article10371
- Mesopotamia The invention city Gwendolyn Leick
- https://en.wikipedia.org/wiki/History\_of\_Egypt#Goberment\_of\_Mehmet\_AI.C

### 3.AD

- Life in ancient Egypt Miriam Stead
- http://www.lainformacion.com/world/the-egypt-is-evaporating

dangerous\_XyygpxTojfmYVHD574aXF1/

- http://www.teorema.com.mx/agua/depletion-of-water-in-iraq/
- http://www.rebelion.org/news.php?id=104996
- https://www.icrc.org/spa/resources/documents/update/iraq-update-

### 110510.htm

• http://www.huffingtonpost.es/pablo-prieto/the-war-of-daesh-for-

### la\_b\_9701114.html

 https://actualidad.rt.com/actualidad/view/132468-conflicts-climate-changeirag\_cirip

## iraq-siria

- https://www.importance.org/water.php
- http://www.semana.com/nacion/articulo/quien-se-robo-el-agua-de-la-

### guajira/398006-3

- https://agronegocios.unidades.edu.co/2015/02/04/el-agua-en-la-guajira/
- http://www.lainformacion.com/mundo/el-agua-de-egipto-se-evapora-

peligrosamente\_XyygpxTojfmYVHD574aXF1/