

Introduction of *AguaPARS*

Atmospheric Water Generators

1. What is AguaPARS?

AguaPARS is the atmospheric water generator.

2. What is an atmospheric water generator?

AguaPARS atmospheric water generators are devices that can extract moisture from the ambient air through the phenomenon of condensation, and turn it into high-quality drinking water.

3. What is condensation?

Condensation is the process in which water vapor turns into a liquid. This process reverses evaporation, where liquid water turns into vapor. Condensation occurs in one of two ways: either the air cools to the dew point or it becomes so saturated with water vapor, that it cannot hold any more water.



4. How do AguaPARS generators use condensation technology to produce water?

AguaPARS atmospheric generators use air cooling until they reach the dew point to create water.

5. Does this mean that there is no need to connect it to the water network to get water from the AguaPARS generator?

AguaPARS generators are not connected to the water network. They extract moisture directly from the air and turn it into high-quality drinking water in a single process.



6. Where can I place my AguaPARS generator?

Since AguaPARS generators do not need to be connected to water pipes, your choice of location is flexible. We suggest that you set up the device in a well-ventilated area. We do not recommend placing the home or office devices in a closed room without windows. These generators can also be placed outside of the house, provided they are protected from the rain.

7. What is the difference between AguaPARS generators and water purification systems such as reverse osmosis?

For all water purification systems, such as reverse osmosis or any water softeners, a water source must first be available. And then, these systems are high consumers of energy and high volumes of water are discarded during the process. Furthermore, water is not 100% clean as chlorine and a certain level of nitrates and other pollutants always remain in the water.

8. What do AquaPARS water generators need to work?

AquaPARS generators need a minimum temperature of 15°C and a minimum humidity level of 25% to produce water. In ideal conditions, at a temperature of about 30°C and a humidity level of 80%, the efficiency of these generators reaches its maximum. In fact, the closer we are to ideal conditions, the faster and greater the amount of water production.

9. How many categories are AquaPARS generators divided into?

AquaPARS generators are divided into two categories, the first category is home and office generators that are used for filling cups and containers and have dispensers. The second category of industrial generators generates large volumes of water and is used to fill water tanks and substitute water input in a home.



10. What is the daily production capacity of AguaPARS generators?

The maximum water production capacity of AguaPARS household generators with dispensers spans from 10 liters to 500 liters per day, as for AguaPARS industrial generators, from 100 to 1000 liters per day.

11. If needed, how can we supply capacities higher than 1000 liters per day?

You can easily connect several industrial generators and use them to fill water sources.

**12. Why is a water generator above 1000 liters not available on the AguaPARS catalog?**

Because it becomes more difficult to transport and install generators above 1000 liters per day and due to their high dimensions, they would require a special space. At the same time, by dividing the high capacities into several smaller generators, it is easier to transport and install them, and it is easier to place them in the site plan.

13. What is the electricity consumption of AguaPARS generators?

The heat-exchanging technology of AguaPARS generators is designed and manufactured with a focus on low consumption. For example, a generator with the capacity to produce 10 liters of high-quality drinking water per day, consumes a maximum of 150 watts per hour of electricity (only during the process of water generation).

14. How much will each liter of drinking water from AguaPARS generators cost?

With the current price of electricity in Spain in 2024 and considering the average kilowatt of 15 cents, each liter of water will cost about 2 to 3 cents...!!

15. How do AguaPARS generators work?

It can be explained simply:

First, the ambient air is sucked into the generator by a strong absorption system, passing through two filters that ensure that the incoming air is completely clean: First, a HEPA filter absorbs all suspended particles and dust up to 2.5 microns, and then an active carbon filter to remove any odor from the air.

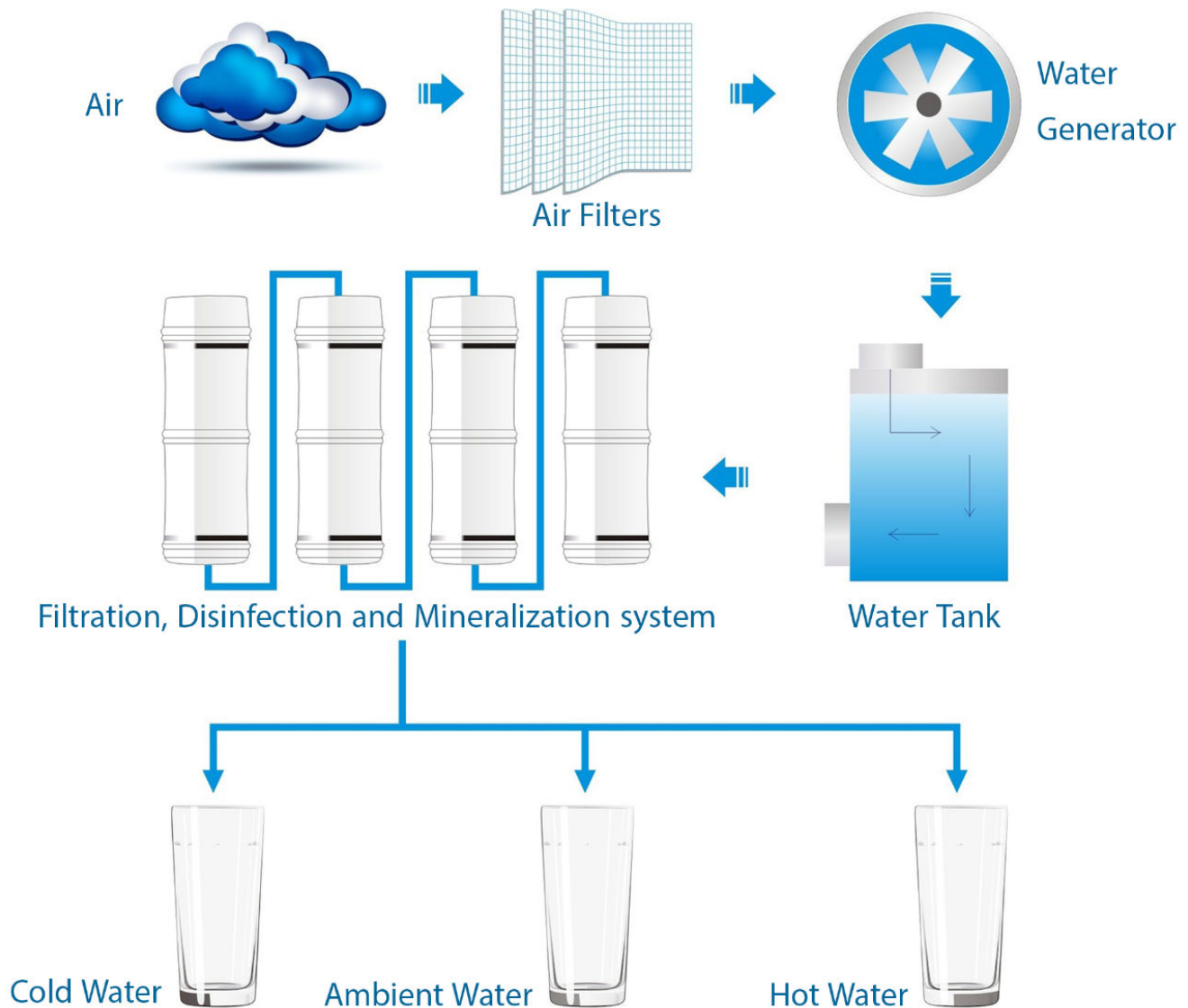
After that, the air enters the AguaPARS heat exchanger system. The main feature of this heat exchanger is that the air moves quickly into the system in a very short period, thus ensuring the highest efficiency and the lowest energy consumption for extracting water from the air. Dry air also comes out from the other side of the generator.

Then the water created by the heat exchanger is stored in an internal tank and is continuously circulated. The proximity of a UV lamp in this tank prevents the formation and growth of all microbes, bacteria, and microorganisms, and therefore, the produced water always remains clean and fresh.

Before leaving the water tank for consumption, the water passes through three filters: the first is a physical filter at the molecular level, to ensure the purity of the water as much as possible, the second is a mineral filter to add the minerals needed by the body, and the third is an active carbon filter to remove any taste from the water.

Thus, our generators produce drinking water of the highest quality possible.

How do AguaPARS generators work?



16. Why does AguaPARS claim to produce drinking water of the highest quality?

In all water purification systems, the input to the system is either polluted, mixed with many salts, toxic and chemical substances, and/or heavy metals, and then, after going through various stages, this pollution is removed to some extent and it becomes drinkable. AguaPARS generators produce pure water without salts, without toxic substances, and are completely hygienic. For this reason, as you can see from the water analysis results on the AguaPARS website, our water can be among the best quality waters in the world.

17. How do AguaPARS generators help the environment?

Using a water generator means we have the potential to complete the removal of plastic bottles, the transportation chain, and reduction of fuel consumption.

18. What are the other advantages of AguaPARS generators?

By creating your water fountain, fresh, clean, and healthy drinking water is always available, right where you need it. A unique and innovative technology, an advanced and registered condensation system, efficient and economical, with low electrical consumption, and compatible with renewable energies, along with purification systems with UV lamps and low-temperature water circulation. They guarantee a good taste and that no chemicals like chlorine are added. Just plug in the generator and wait for the water to be produced, then drink it. It does not require any infrastructure or pipes. All you need to produce water is air and electricity.

19. Why is the water produced by AguaPARS generators even healthier than bottled water?

Results of research conducted in France show that most mineral water bottles contain microplastics. In this research, the "Action for the Environment" institute has studied and analyzed the mineral water bottles of several factories in a specialized laboratory. Based on its findings, at least 7 out of 9 bottles of mineral water contain small plastic particles suspended in the water. The size of these particles is usually smaller than 5 mm and their number is often small but different in the produced water of different factories. Absorbing a large amount of microplastics can have potentially harmful effects, such as cell death and allergic reactions. Thanks to their powerful filtering systems, AguaPARS generators ensure that your drinking water does not have any microplastics.

20. Does the water produced by AguaPARS generators have a special taste?

We ensure the water from our generators is the most delicious possible. Water extracted from the air is generally "lighter" than tap water. Also, the mineralization process involves adding calcium and magnesium to improve mouthfeel and taste.

21. Can I turn off my AguaPARS generator?

No. Once you plug in the generator, you shouldn't turn it off. The advanced system of AguaPARS generators controls the whole production process, starting it when the tank empties, and halting it when the tank is full. When the production is stopped, the electrical consumption is reduced by 95% but the water flow in the tank continues and the health level of the water is controlled by UV lamps. If for any reason you have to turn off the generator for a long time, you must discard the water in its tank.

22. Do AguaPARS generators also filter the ambient air?

Air purification is part of the water production process, and this is especially ideal for cities with high levels of air pollution.

23. Is it possible to cool or heat the outgoing water?

Yes. A water cooler or heater can be added to the generator upon request. Also, some models of AguaPARS generators are equipped by default with a water cooler, a heater, or both.

24. Are AguaPARS generators equipped with a water storage tank? What happens when the tank is full?

Each of the AguaPARS generators has an internal tank that is gradually filled during water production. When the water level reaches the maximum limit, the generator stops production, but the water flow in the tank continues and the UV lamp keeps it fresh and healthy. At this time, electricity consumption is reduced by 95%. With the lowering of the water level of the tank, the production process is resumed.

25. How long does it take for the water tank to be filled and ready for use after connecting the AguaPARS generator to the electricity and turning it on?

Everything depends on the humidity and temperature of the environment and of course the volume of the generator tank and its production capacity. The ideal conditions are 80% humidity and around 30 degrees Celsius ambient temperature. In this condition, the generator reaches its

maximum efficiency and can produce water according to its nominal capacity for 24 hours. For example, a generator with a capacity of 50 liters of water per day can produce 50 liters of drinking water in 24 hours at a temperature of about 30 degrees Celsius and ambient air humidity of about 80%, that is, about 2 liters per hour.

26. What are the uses of AguaPARS generators? In what places and for what purposes can they be used?

They can be placed in homes, offices, education centers, retail, hospitals, government offices, industrial plants, boats and ships, farms and stables, agriculture, horticulture and greenhouses, military bases, NGOs shelters, and in relief after natural disasters such as earthquakes or floods, etc.

27. How can I choose the generator I need?

First, you should know whether you want to use water directly for consumption, i.e., you are directly filling glasses, or you are planning to fill water tanks. If you plan to consume water directly, you should choose one of the home or office models, and if you plan to fill water tanks, you should choose one of the industrial models.

Then you need to know your water consumption and calculate it. For example, do you only need drinking water? Or do you need both drinking and cooking water? Or do you need water for bathing and washing? Maybe you need water for irrigation and agriculture? In each of these cases, your daily intake will be different.

Now, after knowing the required amount, you should visit the AguaPARS website and, following our recommendation, choose a generator that produces one step more than your daily water requirement. For example, if you need ten liters of water a day, choose a 20-liter generator. Why? This is because you cannot have ideal environmental conditions all 365 days of the year for your generator to produce at its maximum capacity. Therefore, if you have a generator with a higher capacity, you will receive the maximum amount of water you need even in non-ideal conditions.

28. How is the service and maintenance of AguaPARS generators?

The only maintenance needed is the change of filters, which can be easily done by the end user. We also have our after-sales service and a 2-year warranty.

29. When do the filters of AguaPARS generators need to be replaced?

You can see the filter replacement time on the generator screen. But as an estimate, if the generator is used to the maximum, the filters should last about one year.

30. What is the guarantee of AguaPARS generators?

AguaPARS generators have a two-year warranty from the time of purchase.

31. What is the advantage of producing water from air humidity?

Water produced from air humidity is distilled water. Therefore, it is not at all like the water of other water sources and is very clean. It has no toxic substances, no chemicals, no harmful substances, or heavy metals. You can even drink it directly in the short term. On the other hand, humidity is more and more accessible, so water can be produced in more places and more and more people can have their water source.

32. Is it safe and healthy to make water from the air?

Air is a cleaner resource than soil. Producing water from the air eliminates the need to pump underground water and the fear of soil contamination. In addition, your water generated by AguaPARS systems goes through a strong filtering process that removes dust and particles left in the air.

33. What is drinking water and what characteristics should it have?

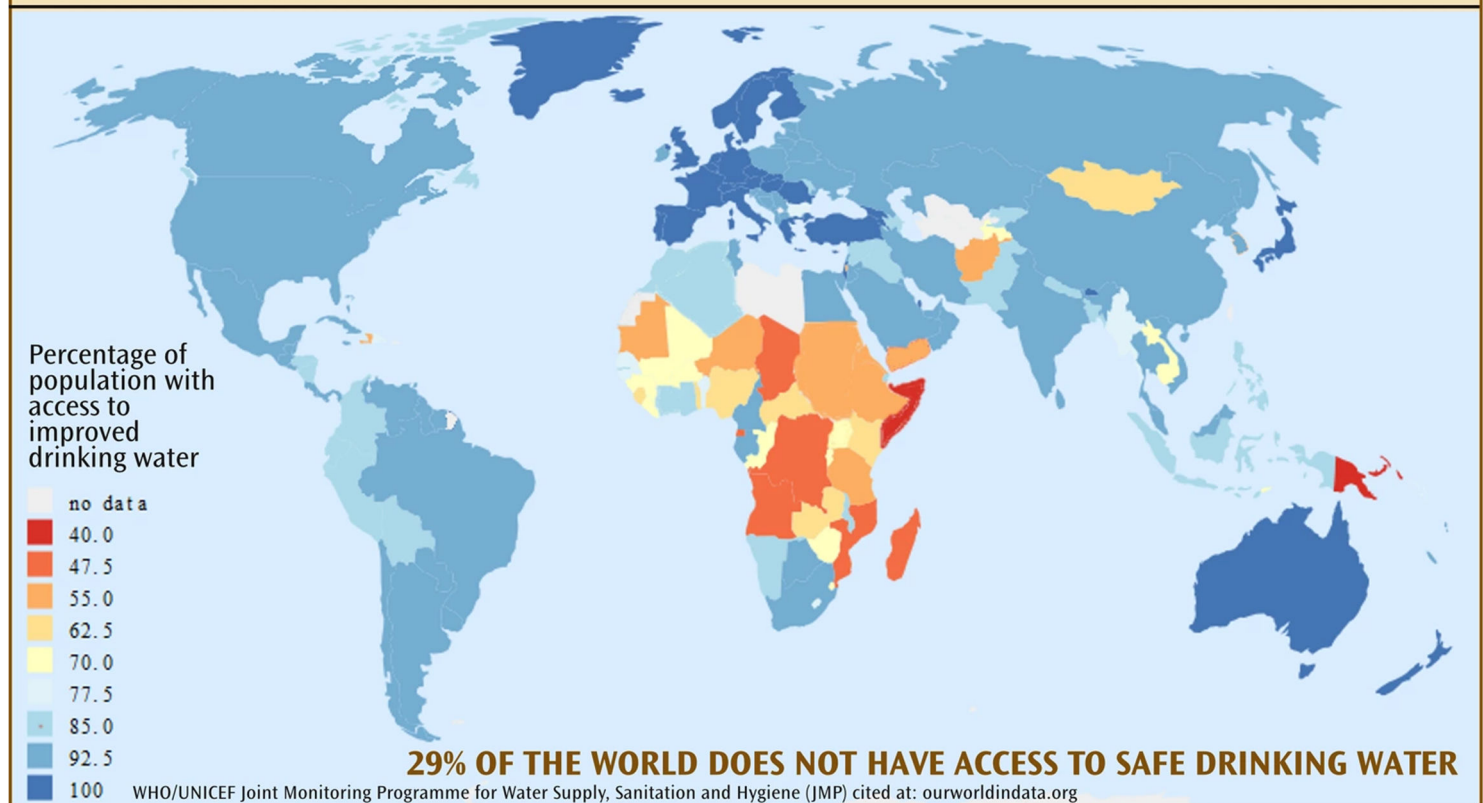
Drinking water or potable water is water of suitable quality that can be drunk without any short-term or long-term negative effects. It is processed after extraction from water sources and the salts and substances in it are controlled. For long-term and short-term drinking, water must be completely clear and colorless and the number of mineral salts in it should be less than 5 grams per liter. Thus, excess minerals, such as calcium, magnesium, iron, and copper, can lead in the long run to diseases such as kidney stones and cardiovascular diseases. Water should not contain toxic substances, nor have an unpleasant smell. It must pass microbiological tests and comply with the official standardized levels.

34. What percentage of people on the planet do not have access to potable water?

Currently, 30% of people in the world do not have access to drinking water, i.e., about 3 billion people get their drinking water either from improved and/or bottled water sources, which can require a journey of at least 30 minutes to access. Either they use unprotected wells and springs, or they collect unfiltered surface water from lakes, wetlands, rivers, and streams, which can be very unhealthy and dangerous. Therefore, with research conducted by major global institutions over the next decade, it is believed that 50% of the world's population will live in areas that will not have access to clean, fresh, and healthy drinking water. Some people have even gone further and believe that future wars will be wars over water resources.

PEOPLE WITH ACCESS TO IMPROVED DRINKING WATER SOURCE

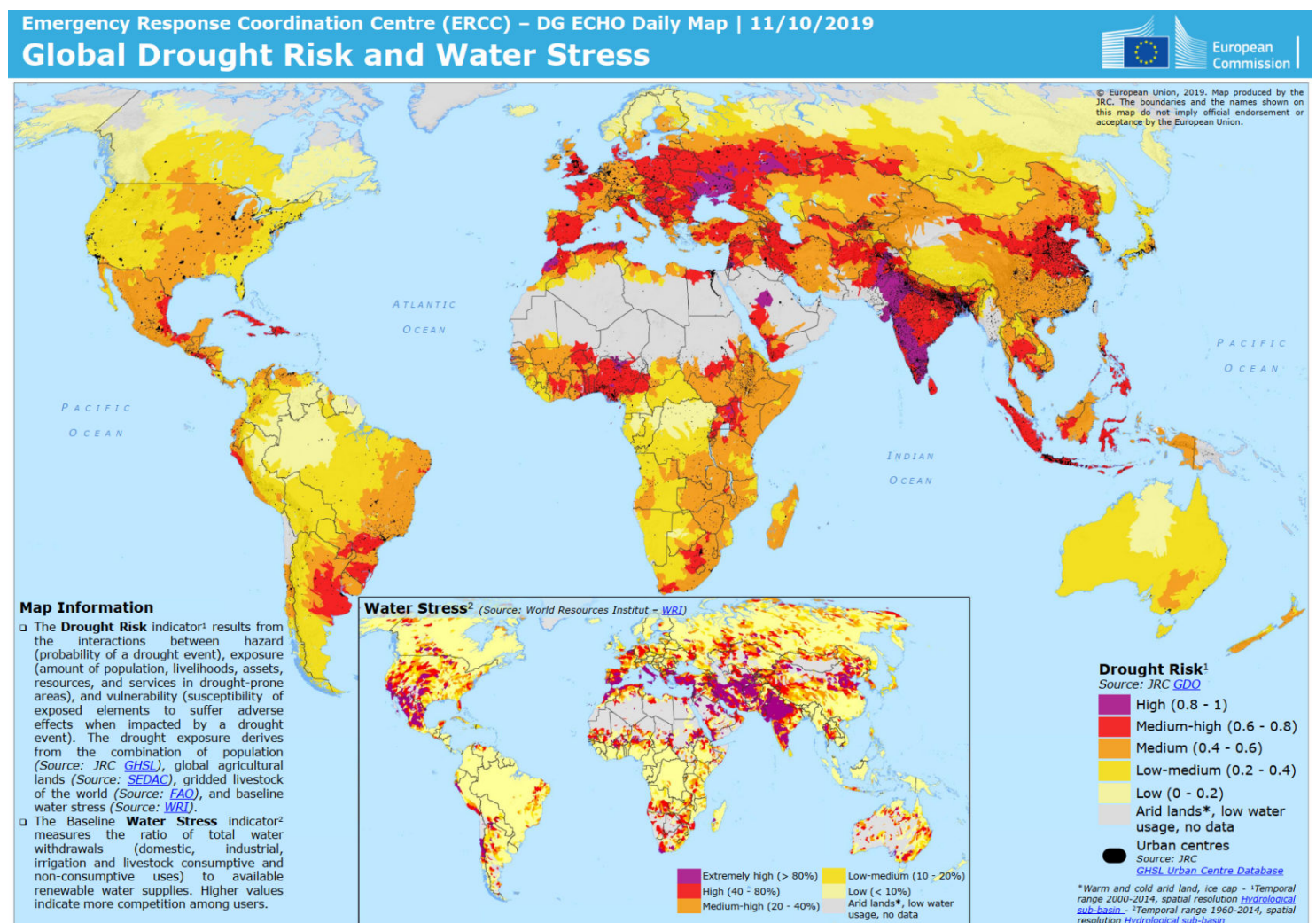
AN IMPROVED DRINKING WATER SOURCE INCLUDES PIPED WATER ON PREMISES (PIPED HOUSEHOLD WATER CONNECTION LOCATED INSIDE THE USER'S DWELLING, PLOT OR YARD), AND OTHER IMPROVED DRINKING WATER SOURCES (PUBLIC TAPS OR STANDPIPES, TUBE WELLS OR BOREHOLES, PROTECTED DUG WELLS, PROTECTED SPRINGS, AND RAINWATER COLLECTION). HAVING ACCESS TO AN IMPROVED WATER SOURCE INCREASES THE LIKELIHOOD THAT DRINKING WATER IS CLEAN AND SAFE, BUT IT DOES NOT GUARANTEE THAT IT IS FREE FROM CONTAMINATION.



www.theglobaleducationproject.org

35. How real is the problem of global drought and how much does it threaten humanity?

The problem of global drought is very real and it is increasing. In the latest edition of the UN World Water Development Report, UNESCO and UN-Water warn that if international cooperation in this field is not strengthened, these shortages will worsen in the coming decades, especially in cities. Globally, 2 billion people (26 % of the population) do not have access to safe drinking water and 3.6 billion people (46 %) do not have access to safe managed sanitation, according to the report published by UNESCO on behalf of UN-Water. Between 2 and 3 billion people face water shortages for at least one month a year, which poses serious risks to livelihoods, particularly through food security and access to electricity. The world's urban population facing water scarcity is projected to double from 930 million in 2016 to 1.7 to 2.4 billion in 2050. The increasing incidence of severe and long-term droughts also puts pressure on ecosystems and has unfortunate consequences for plant and animal species.



36. What is the impact of global warming and climate change on global water resources?

Over the past 100 years, the Earth has become abnormally warmer, which worries scientists. Climate change and the increase in global warming have caused the spread of droughts, and this change also causes heterogeneity in the distribution of precipitation and affects water resources. An increase in temperature, thus evaporation and transpiration, and a decrease in precipitation, will increase the phenomenon of desertification and soil salinization. Also, climate change can difficult or even make impossible to predict weather patterns, and this uncertainty hampers the maintenance of crops in areas that rely on agriculture. In short, every year the earth will be hotter than the previous year, droughts will spread more every year and the water resources will be more limited.



37. What are the sources of water supply?

Sources of drinking water include surface water, groundwater, and saline water. Surface water includes water from rivers, lakes, wetlands, and natural storage dams. Groundwater, which is located in aquifers (groundwater tables) is accessible through drilling wells, channeling, and using water pump devices. The volume of both of these waters is decreasing in many regions of the world, and they are becoming not suitable for drinking directly. Therefore, a complete cycle of microbial and physical purification of salts and toxins should be performed and control of them. The third source is the salty waters of the oceans and seas, which cannot be consumed because they contain a high level of salts, and their purification must be done by advanced desalination mechanisms, which are very energy-consuming.



River



Stream



Reservoir



Rain



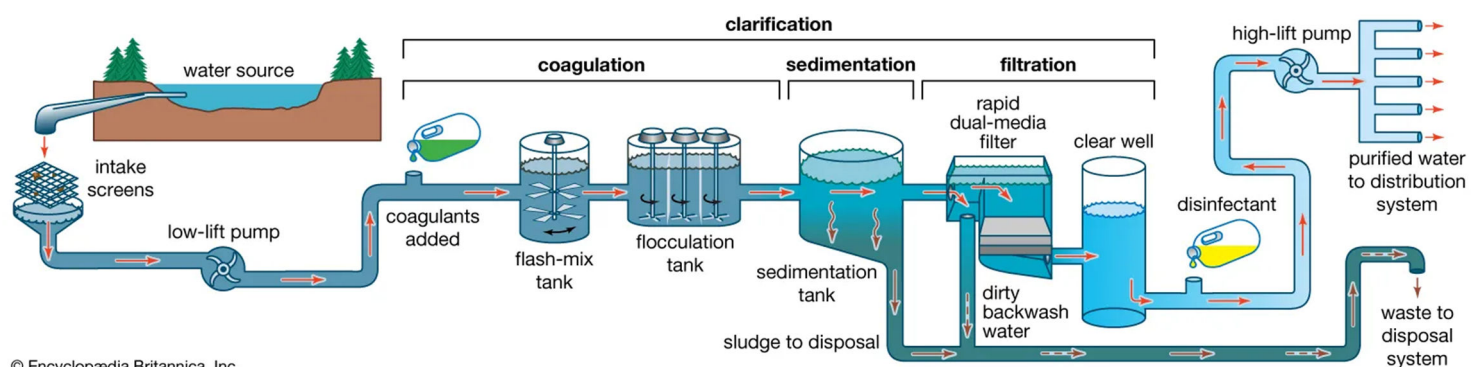
Pond



Handpump



Well



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38. Is there another source of drinking water that is inexhaustible?

Yes. Production of drinking water from air humidity. Moisture is found all over the planet. More than 80% of dry land on earth has humidity levels above 50%. This is also an infinite source, because every year, with the rise of temperatures of the planet, the amount of water evaporation from the seas and oceans increases, and so does the level of air humidity. In this matter the AguaPARS Generators can help people create their water fountain, fresh, clean, and healthy drinking water is always available, right where you need it.



39. Who is the manufacturer of AguaPARS generators?

PARS EcoTech Group in Spain is the manufacturer of AguaPARS generators.



40. How can we order AguaPARS water generators?

To order, you can refer to the contact page on its website: www.AguapARS.com

