Japan Water Forum

Symposium On Climate Change

CLIMATE EVOLUTIONS:

A FEW RESOLUTIONS TO PRESERVE WATER RESOURCES

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Ladies and gentlemen,

I have listened very carefully to the different speakers and particularly to Dr. M. Han Seung-Soo, and I would like to pay tribute to the quality of what has been said about climate and water.

Personally in my quality of President of the World Water Council, I do not like to use for the future the word climate change. Because a change is something that comes brutally, in a particular moment. A change is something clear, immediately measurable.

It is not like this for climate and I prefer to talk about evolutions, which seems to me more realistic.

Those climate evolutions and their consequences on water, Man has known how to adapt himself to them and my conviction is strong that he will continue to do so.

On the contrary, something that we well know because we live it everyday is that climate evolutions are not the first enemy of water.

Why? Because there is first the demographic growth, the natural growth of population and its repartition on the planet's surface. One more billion of human beings each ten to twelve years, it is not an easy thing to take into account, and it delays significantly the capacity to reach the Millennium Development Goals.

And more, the fact that a great part of the world's population is living in mega-cities and in costal areas, creates new tensions zones for the accessibility to the resource.

In those cities, the availability of water does not correspond to the needs which stem from these evolutions. Many of these cities are already or will be suffering from thirst during this century due to the lack of -eventually imposed- measures which must be adopted rapidly.

And at this moment, the superposition of the water resources map with the one of demographic growth is taking a really strategic significance.

All these would still be a little thing if human activity effects on the quality of water wouldn't be added. This activity, principally agricultural and industrial, gravely contaminates the water and the air. It threatens access to water in the absence of a treatment and purification of water. It damages, delays, slows down the access to water for the greatest number. It justifies that today, when considering the state of the rivers and groundwater reserves, the World Water Council can actually talk of a new kind of true "sanitary bombs".

It is thus clear, and you all know this, Man remains water's first enemy. The climate should not be the scapegoat which can lead us to forget about our insouciance, our errors and our incapacity to make the permanent relationship between Man and water evolve.

If we do not manage to change this relationship, we will condemn men and women who dwell on this earth to remain unequal when it comes to access to water and sanitation. If we do not change it, we are promising our children a world in which they won't be able to drink nor breathe at will.

Obviously we do not want this kind of world and accordingly access to water for all is no longer today a question of priority but rather a precondition.

A precondition to life, a precondition to development, a precondition to prosperity and even, let's dare to say it, a precondition to happiness.

Then how can we face those evolutions, those threats on water, and those insufficiencies in sanitation? How decision makers and professionals can agree to specify common actions that would be efficient and long-lasting?

First by saying "stop" to wasting, all kind of wasting. Convince that EVERYWHERE and FOR ALL USES, we need TO CONSUME LESS. Not only by taking a shower rather than a bath or by using water saving toilet flushing devices.

The real challenges aren't there. They are in water for agriculture, water for energy and water for industry. That is where the greatest savings lie that can have a substantial impact on the consumption chart. There's an enormous task of awareness-raising ahead of us. We will not escape from that and nor will our children or grandchildren.

And second consume less will not be enough because water needs to be better, much better managed. We must convince of the universal virtues of drop irrigation, detect leaks, prevent pollution; Man is challenged to come up with new and bold solutions.

Third, water resources protection is becoming a decisive stake for the future. Protecting, but also optimizing management and developing alternatives resources. Let's name the principal actions that public and private, national or local operators are currently implementing.

1. Coping with the chronicle damaging of water resources:

All chemical products are unwanted elements that damages the resources use for the production of fresh water. Those pollutions are often diffuse and hard to distinguish but do damage the quality of rivers and groundwater reserves. Identify those pollutions, control them and act to reduce them cannot be seen out of water treatment.

2. Prevent and fight against accidental pollutions:

Human activity is, by nature or simply because its techniques are imperfect, often responsible of dangers or pollutions: fires, blasts, transport accidents, pipe breaks, etc. All those are events that can generate serious accidental pollutions of water resources.

3. Position and supervise protection areas:

Those protection areas, clearly delimited and officially known, are essential around the points of catchments for fresh water production.

4. Monitor the resource:

By monitoring regularly the quality and the level of its resources, the community can manage more precisely its uses and evaluate the efficiency of the protection programs that are implemented.

5. Manage water resources tapping in a long-term perspective:

Using water resources without damaging the water-capital is a necessity to protect the common heritage and to satisfy the needs in fresh water on the long-term.

6. Protecting resources also means saving water:

Saving water enables to reduce directly the tapping on resources. Different means exist to save water:

- Fight against wastes in the canal system

20 to 50% of distributed water is being lost in runaway systems in numerous cities. An expertise is being developed to reduce those wastes.

- Manage the demand

The essential complement to these actions consists of developing the consumer responsibility by generalizing individual water meters and by making available the necessary information to help him controlling his water consumption.

7. To diversify resources:

In some countries, it is necessary to give the priority to the domestic use of fresh water, due to its scarcity. It is often necessary to have recourse to alternative resources to limit water tapping on fresh water reserves.

- Recycling used water is a widespread practice in the regions of the world that are more affected by the lack of water. It enables to valorize water at the end of the cycle, by giving it another use, for example agricultural or industrial. To avoid sanitary risks, it must be carefully controlled.

- The most abundant resource is salt water: around 25% of the world's population is living at less than 25 km from the seacoast. This number, even if it is approximate, shows the interest of the techniques of desalination to satisfy at least a part of the needs.

- Reload artificially groundwater reserves constitutes a third solution. It is used to restore or to protect groundwater reserves, to fight against its lowering and to make them more productive.

Pumping deeper or transferring water volumes by canal or forced duct on greatest distances are all possible new solutions.

We also have to keep in mind that all those solutions are demanding more and more energy. More and more energy and notably those which are renewable will be privileged. And in this field too, there's a lot of progress to be made. This will happen gradually, day after day. Solar, wind geothermal and nuclear energy will be developed with better efficiency and lower costs because there is no doubt that Man will manage to better harness them. And water will be one of the first elements to benefit from that. Undoubtedly, access to water lies on the progresses made in the field of energy. The faith of both is tied and this is why both world councils of energy and water have decided to establish strong and sustainable work relations.

Here are, Ladies and Gentlemen, a few comments on climate evolutions and its consequences on water. I would be pleased to answer your questions and I thank you for your attention.