



6th Sino-Swiss High-Level Dialogue on Water Management on May 27th, 2014 in Crans-Montana

Key note by Federal Councillor Doris Leuthard

Excellencies, ladies and gentleman,

A warm welcome to this **6th Sino-Swiss High-Level Dialogue on Water Management** here in Crans Montana, Switzerland.

«Water is the principle or the element of things. All things are water ...» This quote from the Greek philosopher Thales of Miletus (625 - 547 BC) can be reduced to three words: water is life! Without water, there is no food, and without food, no existence - a lack of basic resources leads to conflict, violence and migration.

Switzerland is lucky to have rich water resources of high quality. We possess 5% of the water resources of Europe. A major part of this water is stored in our lakes (130 billion m³), glaciers (50 billion m³) and groundwater (150 billion m³). Every year 60 billion cubic metres of precipitation renew about a third of our stored water resources. The management of these water resources traditionally involves three aspects:

- using water bodies and their forces
- protecting water bodies
- Protecting against the forces of water
- Using water bodies and their forces:
Only 2% (two per cent) of annual precipitation is used as drinking water. If we include the requirements of industry, commerce and agriculture, this figure rises to 4%. In Switzerland, half of the drinking water can be used directly, without treatment, from its source. In comparison with other countries, this situation is very favourable, but this is not simply taken for granted: The water supply infrastructure has to be permanent managed, maintained and renewed. Water is not only used as drinking water but also to produce energy. Hydropower in Switzerland has a long tradition. Around 500 hydropower plants produce more than 50% of Switzerland's electricity output. Swiss hydropower plants are not only a source of energy, they also store energy: at times of low energy demand, they pump water to elevated reservoirs. At times of peak energy demand, this water can be used to produce electricity.
- Protecting water bodies:
Protecting water bodies has two aspects: firstly, protecting water as an essential resource, and secondly protecting water in its function as an ecosystem.

In recent centuries, incautious use and waste of water has caused considerable problems and concerns about water quality. Sewage plants were built in order to control the quality of municipal waste water and industrial waste water, and to reduce the concentration of nutrients. Significant improvements have been achieved in the meantime: today, water is of such good quality that people can swim in any lake or river and it is even possible to drink water directly from most rivers and lakes in Switzerland. However, micropollutants represent a new challenge. Significant reevaluation is required so that the water treatment infrastructure can deal with the challenge of micropollutants.

- Protecting against the forces of water:

Every year flooding on average causes economic damage, and a significant number of deaths and injuries. The damage caused by flooding is therefore the most significant natural hazard in Switzerland. To improve this situation, we invest in reducing flood risks. Flood risk management is based:

- firstly on prevention. Prevention involves land use planning, reinforcing existing and building new infrastructure against the effects of natural hazards, technical flood control measures on rivers, and maintaining protective forests;
- secondly on readiness and the ability to respond in an emergency. This includes good flood forecasting and well-established processes for warning and emergency planning;
- thirdly on recovery. Recovery includes an insurance system to help cover the cost of the damage, and building more robust infrastructure after a disaster.

To provide a suitable basis for flood risk management, in the last ten years hazard maps have been drawn up and now are available for all regions of Switzerland.

Water management with its three aspects – the use of water bodies and their forces, the protection of water bodies, and protection against the forces of water – is therefore an exceptionally challenging and complex task.

Water management and climate change are vital issues in many countries, not least China and Switzerland. Recent research has shown that both countries are particularly vulnerable to the effects of global warming. Switzerland aims to reduce greenhouse gases, and has also recently established a strategy for adapting to the effects of Climate Change. It is important to remember that water management and climate change don't stop at country's borders. International cooperation is of the highest importance.

I am delighted that one of the best examples of this kind of international cooperation is the collaboration between China and Switzerland in water management. Started more than ten years ago, this cooperation was formalized in 2009 through the signature of a MOU. Since then, this cooperation has become a very active process of exchange between our two countries. Mutual benefits come not only from regular high level dialogues, such as this week's 6th event here in Crans Montana, which Switzerland is honoured to host.

Mutual benefits also come from several joint projects within the scope of this cooperation. I am very satisfied that in Xinjiang province a warning system has been established successfully through the joint efforts of Chinese and Swiss specialists. It can alert more than one million people and allows them to prepare measures against the destructive force of floods regularly caused by a glacial lake.

In addition, I am delighted to see that joint Chinese and Swiss technology has been applied to improve flood forecasting and integrated risk management in the Han River basin, a tributary of the Yangtze River.

And I am pleased that detailed discussions are taking place between Chinese and Swiss experts on establishing a high level dam safety management system, including regulation, organisational and technical measures.

I am happy to learn that this cooperation will be continued and expanded with a project on integrated risk management in the Jinsha River Basin area and by a project on groundwater management in Hebei Province.

This cooperation fits in well with joint projects in the context of other MOUs in the environmental sector, such as one on environmental protection or another on forests.

The 6th High-Level Dialogue on Water Management will give us another opportunity to exchange recent findings on water management and climate change and to discuss progress and the upcoming activities in our cooperation projects.

Although we have been actively working towards sustainable water management for decades, we have to do more for our future – not only in Switzerland and in China but globally:

For people are only slowly becoming aware of how serious the situation is:

- **Global consumption of water is simply too high:**
 - 1 cup of coffee → 140 litres of water
 - 1 kilo of cheese → 5000 litres of water
 - 1 kilo of beef → 16,000 litres of water
- **Today over 800 million people in the world still do not have access to clean drinking water**, 1.7 (one point seven) billion people live without a regular supply of drinking water,¹ 1.8 (one point eight) million children under five die every year due to a lack of hygiene and of clean drinking water.²

So we must all work together at all levels, around the globe.

Excellencies, ladies and gentlemen, our Sino-Swiss exchange and cooperation will take us forward together, in order to tackle the present and future challenges in water management and to lead us to more sustainable ways to handle our natural resources, of which water is one of the most important. I warmly thank all the individuals and institutions involved for their efforts.

It is my sincere wish that all of you will continue and intensify this dialogue and cooperation in the coming years. I wish this 6th (sixth) High-Level Dialogue on Water Management every success and I am looking forward to a 7th (seventh) dialogue, where we will again be able to look back on the progress we have made in our joint projects. Thank you.

¹ [Deza](#)

² Deza