Speech by H.R.H. the Prince of Orange, Chair of UNSGAB, to the CSD-17 Round Table Discussion in New York, 14 May 2009,

on Integrated Land and Water Management for Sustainable Agricultural and Rural Development

Madam Chair, Excellencies, Distinguished Delegates, Ladies and Gentlemen,

When people think about the water crisis they usually think of lack of access to safe drinking water. That, of course, is one important aspect of the crisis: almost one billion people live without access to the most basic daily requirement: drinking water. But the water crisis has another aspect, less well-known, but equally important: over 2.5 billion of our fellow citizens live without basic sanitation depriving them from health, dignity and development.

As the Chair of the U.N. Secretary-General's Advisory Board on Water and Sanitation, my primary task is to galvanize actions of national governments, international organizations and regional and global development banks to dedicate more resources and effectively coordinate to meet the Millennium Development Goal targets for water and sanitation. Halving by 2015 the number of people without safe water and sanitation is a vital goal, but it is not the only goal, and it cannot be achieved without devoting concern and energy to other important challenges such as agriculture and rural development.

Water and agriculture, I am sure everyone here knows, are inseparable. Agriculture consumes 70 percent of all freshwater withdrawals and 90 percent of overall consumption. And, so, the water crisis is in many ways an agriculture crisis. We must change the way we grow our food.

Rural development also requires improved access to drinking water and better sanitation. Around the globe, people are flocking to cities at a worryingly high rate. Why? Figures published last year by the Joint Monitoring Programme of WHO and UNICEF offer at least part of the answer. In urban areas, sanitation coverage has risen to 79 per cent; in rural areas, it has reached only 45 per cent. Five times as many rural dwellers as urban dwellers do not have improved drinking water supplies. Making life viable and fulfilling in rural areas includes many things--education, health services and employment. As important as those services are, water and sanitation are even more essential to keeping rural populations vibrant and healthy.

A week from now, our Board will meet in Sofia, Bulgaria. There, the Black Sea Countries will resolve to improve sanitation and water quality for their rural areas. Together with ministers, we will strategize about how the elements of our framework for action-the Hashimoto Action Plan-can improve water and sanitation in their rural areas.

I don't want to overwhelm you with statistics - since I'm pretty sure you all know the situation and are convinced we need to act. But allow me to mention just a few. The world's population is projected in the next 40 years to grow to about 9 billion from 6.5 billion. That means 2.5 billion extra mouths. And virtually all will be born in developing countries. Food production must double by 2050. But the challenge we face is even bigger than just growing more food. Nearly every one of the billion people who live on less than \$ 1 dollar a day depends directly on agriculture for their daily livelihoods. Poverty reduction, rural development and agriculture are necessarily linked.

Recently, I was in Afghanistan where these links are becoming so evident that peace building and reconstruction efforts are increasingly promoting agricultural development by investing in irrigation, crop improvements and infrastructure such as roads to allow farmers to get their crops to market. The planners realize what many of us have long known: supporting a resilient agricultural sector is the most effective way to bring peace, stability and sustainable development to any region.

Too often, however, water is still mismanaged. Decisions about agricultural development do not adequately reflect the value and importance of water inputs. That is why our sustainable development guide book, Agenda 21, devotes a chapter to the critical link between effective water management and food production and rural development. If we are to greatly increase food production, alleviate poverty while maintaining ecological systems, we must join forces between water and agriculture! We must give water its due place when agriculture policy and investments are debated.

The competition for scarce water resources is in many countries intense and growing. Greater competition raises difficult, often fractious, questions: who will get the water, and who will decide on the water distribution. Stronger competition often leads to greater risks for people and ecosystems. Ecosystems are threatened by the way we grow our food and use water. Climate change is making this even worse, affecting every part of society, ecosystems and economies at all levels.

Water scarcity is on the rise. By 2025, 1.8 billion people will live in countries or regions with absolute water scarcity. Fully two-thirds of the world population could face conditions of water stress. Yet we are not responding. Conflicts between water haves and water have-nots will lead to social instability and unrest.

Madam Chair,

Let's avoid this bleak scenario. Let's do something about water scarcity. Where to begin? The most obvious place to start, of course, is agriculture. The possible gains are enormous. Consider that for a 1 percent gain in agricultural water productivity frees up ten times that much water for other water uses. And as the Comprehensive Assessment of Water Management in Agriculture has noted, the greatest potential increases in yield are in rain-fed agricultural areas. The bulk of the world's agricultural production continues to be rainfed, and that is the type of farming many of the world's poorest rural people are engaged in. Because of the high investment costs in irrigation development and the growing competition for water, the scope for further expansion of irrigation is limited in many parts of the world. We must therefore enhance the productivity of rainfed agriculture. Doing so will lessen the need for more water in these areas while also curtailing the expansion of irrigated land. But to realize these potential gains leaders must focus now on better land and water management in these areas.

Ladies and Gentlemen,

We all know that an integrated approach is needed to achieve sustainable development. That is why our Board devoted a chapter in the Hashimoto Action Plan to integrated water resources management. Several years ago, we asked the Secretary-General to initiate a review of water-related decisions made during CSD-13, including a review of National IWRM and water efficiency plans during last year's CSD. The results were encouraging, but it is clear that water efficiency, particularly as it relates to agriculture, does not figure strongly enough in our IWRM planning. This is partly a result of fragmented decision-making: water ministries and water managers often do not plan with agricultural departments and irrigation engineers. Long term agricultural planning based on realistic projections of water use and future water availability is often shoddy or completely absent. I encourage countries to continue improving and implementing their IWRM approaches with a stronger emphasis on water efficiency in agriculture.

Consider this. California recently declared a state of emergency because of water shortages. But California, according to the Pacific Institute, could easily meet all its needs for decades to come just by implementing current water-saving techniques. So California can meet its water needs with current technology. This underscores a crucial fact: our water challenges are not only, or even primarily, technological; they are challenges of governance and political will.

Last year was the International Year of Sanitation. Our Board called for this sanitation year as we believe that an open and frank global dialogue on how to meet the MDG sanitation target was desperately needed. We've been truly gratified by the action and increased political will we've observed. Now, we see an opportunity to build on this enthusiasm to promote what we call "the other side of sanitation," in particular water reuse and waste water treatment.

Waste water treatment is rather expensive. That is one reason so little waste water is treated in developing countries. But efforts to increase water reuse are underway around the world. There are different reuse opportunities with different social, economic and environmental values. The most obvious reuse opportunity is for agriculture. Indeed, millions of farmers already use unsafe wastewater since this is their only irrigation source. The challenge is to treat wastewater in such a way that it is safe for irrigation purposes. It can be done as has been demonstrated for instance in Namibia, South Africa and Tunisia and a number of other countries.

Madam Chair,

Before I finish, let me touch briefly on several global water-related trends that will have substantial impacts on agriculture. Climate change is bringing much greater variability in rainfall. Rainfall in some areas is increasing, in others it is decreasing, by as much as 20 percent. Such fluctuations make farming much more difficult. Climate change also will surely bring a significant increase in floods and droughts and other extreme water events. At the 5th World Water Forum in March our Board supported the release of the Water and Disasters Action Plan. It sets forth recommendations to help countries, regional players and international organizations better contend with such water-related disasters.

Another global trend that is affecting agriculture is the anticipated rapid rise in firstgeneration biofuel production pushed by huge increases in government subsidies. Biofuels are promoted as a way of helping to combat global warming and securing domestic energy supplies. Many, however, are beginning to question the wisdom of replacing fossil fuels with first-generation biofuels in view of the acute pressure their production places on water resources both for irrigation and refinery production. With current technology, it takes 2,500 liters of water to produce just 1 liter of liquid biofuel. Biofuel production policies should heed the projected competition for water, and emphasize biofuels that require less energy and water, such as second and third generation varieties produced with non-food inputs such as stems, husks or industry waste like woodchips. As the World Water Assessment Programme notes, "under conditions of water scarcity, producing fuel for automobiles instead of producing food for a growing population becomes less socially acceptable, especially in developing countries."

Ladies and Gentlemen,

Let me remind you to one last global trend-our changing consumption patterns and diets. Growing one kilogram of wheat requires about 1,000 liters of water; producing one kilogram of beef demands 16 times that much water. The diets of North Americans and Europeans use about 5,000 liters of water per person per day. Compare that to the vegetarian diets of Africa and Asia, which require on average 2,000 liters. As people climb out of poverty, and change their diets, the demand for water to produce food increases.We cannot expect mankind to change its eating habits overnight, so it is evident that the agriculture and water sector have to join forces and drastically reduce by at least 50% the use of water to produce our future food requirements.

Madam Chair,

I have touched on many issues this afternoon: feeding our growing global population, keeping rural communities vital, the importance of rainfed agriculture, wastewater treatment and reuse, IWRM, and biofuels. These challenges move across many fields and disciplines - and water is central to them all. When we design our policies and allocate our resources, let us not forget this fundamental fact. For if we can effectively manage our water while working with communities to establish basic sanitation our chances of meeting all the MDGs will be greatly enhanced.

Thank you