## ECONOMIC AND SOCIAL COUNCIL

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**Check Against Delivery** 

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## Statement by Mr. Michael Zaide, Planning Division, Water Authority of Israel

"Drought"

16th Session of the Commission on Sustainable Development

United Nations, New York
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Thank you Mr. Chairman and to the distinguished panellists.

I would like to address the issue of drought through the Israeli experience.

The Israeli water sector has suffered from consecutive years of drought (including this year). The situation has developed into a severe crisis in agriculture and urban use. Water supply did not meet requirements in spite of the fact that there was more than a 50% reduction in agricultural allocation and that urban demand per capita is less than developed countries in semi arid areas.

During the crisis, we reached all operational lines in all aquifers. In fact, we have almost no water in our reservoirs for the coming years, especially if we take quality considerations into account.

The current cumulative deficit in Israel's renewable water resources amounts to approximately 1,500 MCM (almost equal to 2007 potable water usage and half of the operational storage).

The Coastal aquifer, the only multi-year reservoir, is contaminated. In recent years there have been multiple planning efforts for its rehabilitation.

The main reasons for the crisis are:

- Decrease in natural replenishment: In the last 16 years we have seen a 20 percent reduction in natural replenishment.
- Increased demand due to population growth & the rising standard of living.
- Abundance of human activities on top of the natural resources have increased quality problems (Nitrates, Chlorides, VOC).

Current activities of the water sector are based on a new water sector policy that incorporates sustainable development actions and are based upon these components:

- 1. Establishing one central water authority that is responsible for all management functions including setting water tariffs.
- 2. Incorporating demand management measures.
- 3. Ensuring water supply by reclamation and desalination.
- 4. Raising the readiness for climate change by increasing the standards of reliability.

The policy for addressing both drought issues and sustainable development are mainly:

- Demand management measures implemented by adopting a new model of water pricing for urban use and in addition setting extractions levies. Full cost recovery pricing for water should be implemented in conjunction with meeting social requirements.
- Appropriate legislation must lead people to incorporate water saving activities. Education and explanation will ensure long term results. Water saving devices and advanced technologies for irrigation should be used. Water conservation must become a way of life in our region.
- Increasing development of sea water desalination plants.

Additionally, natural resources must be preserved and protected with regard to both quantity and quality. The improvement in supplied water quality will reduce the accumulation of salts in the aquifers since most urban effluents are reclaimed.

Intensive action is being taken to deal with contaminated parts of the aquifers.

Drought affects trans-boundary issues as well; manufactured water will be the source of fulfilling existing and future agreements with our neighbors. Regional master plans must be focused on the production of new water resources.

Every drop of sewage effluents must be reused in adequate quality. Sewage effluents will be the main water resource for agriculture in our region. Municipal and industrial usages will be addressed as the surplus of effluents increases.

By reducing water extraction in the natural water resources and thereby elevating water levels, Nature will be compensated after years of depletion.

On the basis of this policy, the Water Authority consolidated a national master plan and the government of Israel is already implementing some of these recommendations:

- Desalination of 500 MCM of sea water and in addition 50 MCM of brackish water.
- 2. The amount of total reclaimed treated sewage for agriculture will be increased from recent 340 up to 500 by 2015 MCM.
- 3. Treating polluted parts of the aquifer.

The estimated cost of the plan is 5 billion US\$. Hopefully all projects will be completed by 2015.

Completion of these projects will help to eradicate the effects of drought.

Thank you!