Efficient water, power production vital: WB

'Rising food and energy demand to put pressure on water supplies'

ROGER HARRISON | ARAB NEWS

JEDDAH: Climate change, demographic pressure, finance, energy and food production are the predictable pressures that are looming ever more threateningly on the horizon and which have to be addressed now. Jamal Saghir, the director of the World Bank, left delegates in no doubt as to the importance of the challenges to the Kingdom and mankind in general over the next 40 years or so when he addressed the Saudi Water and Power Conference on Monday.

"The aquifers are emptying and have about forty years left in them," he told delegates. "They will be empty at the point when climate change is at its peak. The government has to adopt long term policies to address this."

He noted that food and energy demands would rise increasing the pressure on water supplies. Climate change would add pressure through variability of water supplies and increase the security risks associated with places of plenty and shortage. The credit crisis, he said, had threatened a shortage of finance for new energy and water infrastructure projects and maintenance.

THOUGHT-PROVOKING: An exhibition was held on Monday to mark the SWPF 2009 in Jeddah. Photo shows experts participating in a panel discussion on the "Impact of the global financial crisis on utilities." (AN photo by Marwan Al-Johani)

It was, he opined, impossible to address these as single issues. A holistic approach that took the links between water and energy production was needed.

He gave the example of China — which when growing at eight to one percent a year exhibited a growth in water demand of 15 percent. "The link is cyclical; if we produce energy more efficiently, then we use less water, which in turn means we use energy more efficiently," he said.

Saghir said that the technology existed to make vast energy and water savings, pointing out that recycling wastewater for reuse was very low in most countries, with Israel leading the reusers with a rate of 30 percent. The key was to recognize the link between energy and water use and develop integrated polices that addressed both issues.

Steve Bolze, president and CEO of Power and Water, GE Energy, said that by 2030, the world would need double the amount of power and triple the amount of water. The power demand forecast for Saudi Arabia was that it would, from the pressures of population growth, nearly double by 2018 along with the demand for a better quality of life and a growing industrial base.

Fred Pearce, a scientific journalist, was of the view that Concentrated Solar Power (CSP) had real potential. He noted the Desertec project under way in the Sahara that looked to examine the viability of power generation from solar energy and export it to Europe. "However a key constraint on CSP is the need for access to water to generate power and clean the concentrating reflectors," he told delegates. By definition, desert areas where solar efficiency is highest were usually devoid of water.

From the floor, a questioner launched the possibility of a whole new area of discussion. Geothermal energy was, he said, available in abundance in the Kingdom but had rarely been discussed.