



Center for Policy and Human Development

### ***Guest Lecture Series 2009***

## **Ground Water Quality, Quantity & Problems of Kabul City**

### **A lecture by Professor Naim Eqrar**

**May 20, 2009, Kabul--** The UNDP Center for Policy and Human Development (CPHD) held its first guest lecture of the year 2009. Professor Mohammad Naim Eqrar, Head of the Geo-sciences Faculty of Kabul University, delivered his lecture on *“problems of groundwater quality and quantity of Kabul city”*.

The lecture was significant for two main reasons. First, because it was the first of certain type of lectures in 2009, and second, it was highly relevant to the theme of the 3<sup>rd</sup> Afghanistan Human Development Report (AHDR) 2009 on **water**.

The lecture was attended by approximately more than 100 participants; among them were Kabul University’s lecturers, students, national and international geologists and the general audience. Prominent figures such as the Senior Advisor on environment to the President of Afghanistan and former Kabul University Chancellor, Dr. Abdul Rahman Ashraf while engineers at certain water related organizations and independent journalists were also present.

Prof. Mohammad Naim Eqrar’s lecture consisted of points such as geological overview of Kabul city’s groundwater challenges, both quality and quantity, and their consequences. Prof. Eqrar also went over the causes of Kabul city’s water shortage and what could be done to prevent water scarcity. Furthermore, he elaborated the problems of water contamination, its consequences, general awareness and reasons for contamination in Kabul city. He reiterated that water in Kabul city is threatened by a multitude of contaminants, resulting in an unprecedented water contamination crisis. Because of the continuous drought, ever-increasing population, overexploitation of groundwater and low annual precipitation, the present water sources near Kabul will fully be utilized soon, thus leading to water shortage.



Prof. Eqrar also identified the problems of open channels, waste materials that contaminate Kabul River and lead to water-borne diseases that could prove fatal if left untreated. In conclusion, the

lecturer provided sound policy recommendations that could deal with the aforementioned obstacles in the long run that are outlined in brief as following:

- Utilization of full sustainable potential
- Increased recharge of ground water resources
- Development of new sources in Kabul City from either Panjsher province and/or Logar province watersheds
- Development of new storages for surface water supply
- Building convenient infrastructure i.e. water treatment plant etc
- Protection zones are required around and up stream of the well field, both in existing and new wells.
- Sewerage/ waste water system (*The system of pipes used to collect and carry rain, waste water and trade waste away for treatment and disposal*) construction
- Urgent need for action is required to protect the groundwater and to prevent health hazards
- Sewerage for the whole city cannot be installed in short or midterm, but long term solutions are needed

As the lecture concluded, the stage was opened for discussion and Q&A sessions. The audience showed great interest and enthusiasm in the topic of the lecture. Kabul University students as well as the participants from various institutions, who are currently engaged with projects related to water, discussed and presented their views of the general situation of Kabul water. Their questions, views and comments were well received and in return Prof. Eqrar provided answers to the questions accordingly.