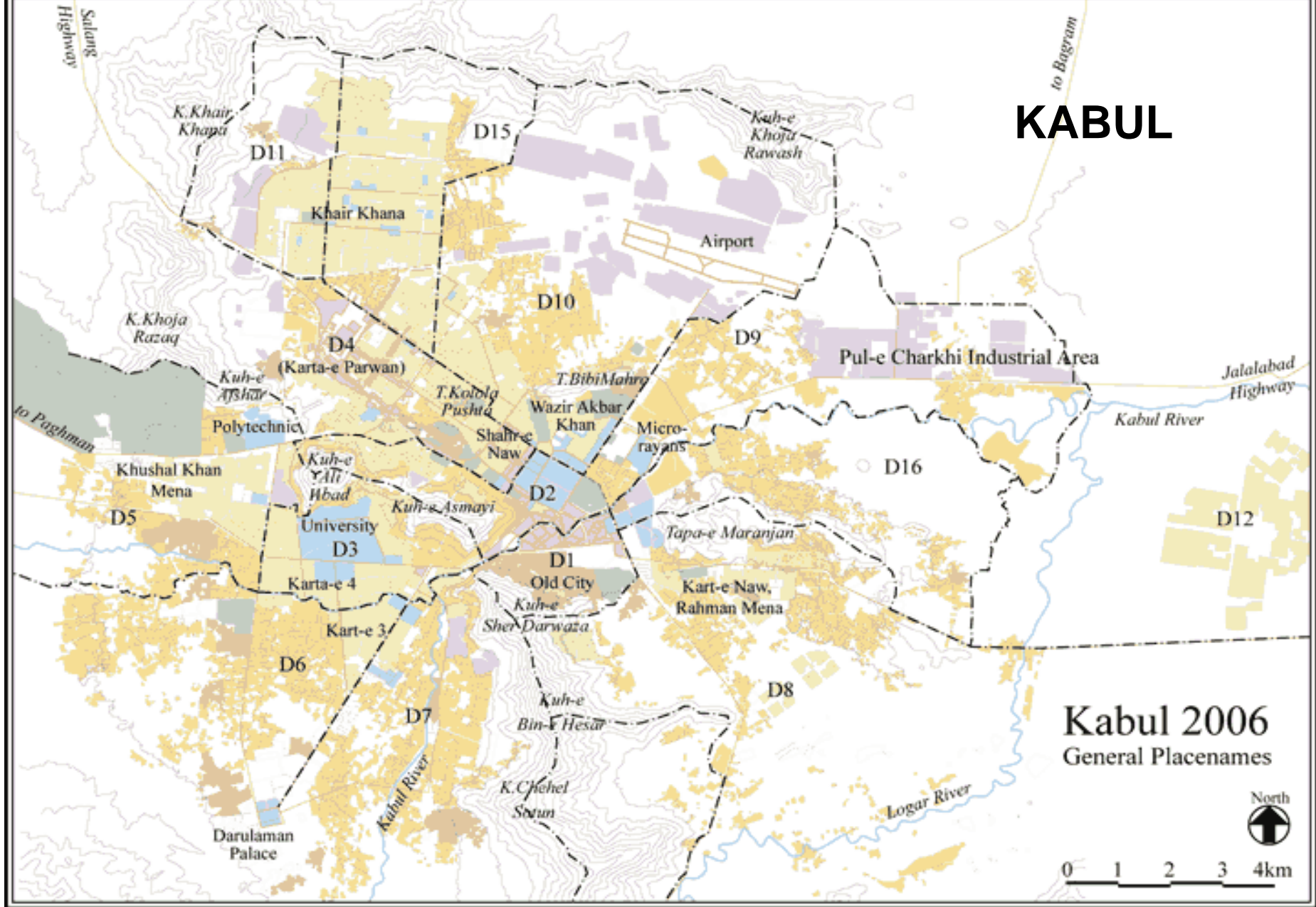




# **Sanitation and Environment Kabul City**

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# KABUL



## Impact of air pollution in Kabul

- 3,000 people die from air pollution and unsafe water in Kabul per year;
- 80% of Kabul's hospital patients suffer from air pollution;
- 900,000 vehicles in the city, 80% older than ten years;
- Many roads unpaved, creating dust;
- Afghanistan imports low-quality fuel ("dirty fuel");
- from a sample of 200 patients 80% had high levels of lead in their blood according to the National Environment Agency;
- Kabul is rapidly growing, already over 4 million inhabitants;

# FACTS

- Kabul produces nearly 3,000 tons of solid waste/day - collection capacity = 400 tons; no solid waste disposal system;
- Weak drainage system and surface water system;
- Dry latrine for 85% of the houses;
- Septic tanks for approx. 12% of the houses but majority of poor quality;
- Sewage System for only 3% of the houses.



# Actions Required

## Cleaning of the city from accumulated solid waste and human excreta disposal (latrine cleaning)

- Solid Waste Management
- Liquid Waste Collection and Disposal
- Public septic tanks
- Side Ditches Drainage and road Improvement (cleaning and recons.)
- Removal of Vagrant and Mad dogs:
- Treatment of Latrines (filling the pits with soil and gravel, spraying insecticide chemicals)
- Construction and Rehabilitation of Public Latrine and Private Latrine:

Dry latrine and damages latrine due to poor drainage



- Specific waste, produced by industries, hospitals, and destruction/construction debris, has dramatically increased the volume of waste;
- This mixed waste collection results in health hazards;
- There is a strong need to have an integrated approach to collect separately and dispose waste from clinics and organic waste;
- More than 2,400 bakeries in the city use wooden stoves, and typically around such installations soot-ridden smoke billows into the air;



# Harmonization

Kabul mayor, Eng. Nawandish talked about a new 5-year plan for the city in a televised interview. He talked about more or less 70 projects including tunneling and asphaltting the city's main and sub roads, creating new parks and improving Kabul's sanitation.



According to news sources, approximately 17,000 jobs will be created through these projects, which require more than 2 billion dollars for its implementation.

An important component of these projects will be the establishment of four canal systems. These canalization systems will be used for discarding the sewage although still untreated and discharged into the Kabul river.

- Kabul's cleanliness is a social, health-related and environmental priority;
- The canalization project is a priority;
- Lack of sewage systems in Kabul has brought about immense health, social and administrative challenges;
- A number of city reconstruction projects have either been put off or delayed due to this problem;
- Rainwater and sewerage water gradually mixes with the dust on roads and turn into mud which cause a variety of diseases;
- Septic tanks were used but due to the three decades of war, the tanks were not emptied. As a result, human filth was either been absorbed in the land or it overflows;





## **Solid Waste management slipping out of control in Kabul**

- Production of over 3,000 tons of solid waste, causing serious health and environmental damage, according to Kabul Municipality;
- The municipality reckons there is now a daily build-up of at least 400 tons of solid waste in and around Kabul city (109,500 tons annually);
- Despite its 2,000 workers and 110 trucks, the municipality says it cannot keep pace with daily solid waste production in Kabul.

Waste materials posing a direct health hazard to children who play nearby and/or those who try to eke out a living by scavenging anything of value from the rubbish.

### **Water-borne diseases**

According to the State of the World's Toilets 2007 report, Afghanistan's toilets are "the world's worst".

UNICEF estimates that only 12% of Afghans have access to sanitation and 23% to improved drinking water, and says water-borne diseases



## Health risks

- The piles of solid waste in Kabul are a major source of diseases, air pollution and environmental problems
- The Ministry of Public Health estimates that air pollution hastens the deaths of about 3,000 people in Kabul every year.
- “Unmanaged and insecure waste in the city causes various skin diseases, respiratory infections and contaminates water sources which then cause water-borne diseases Ministry of Health spokesman.