

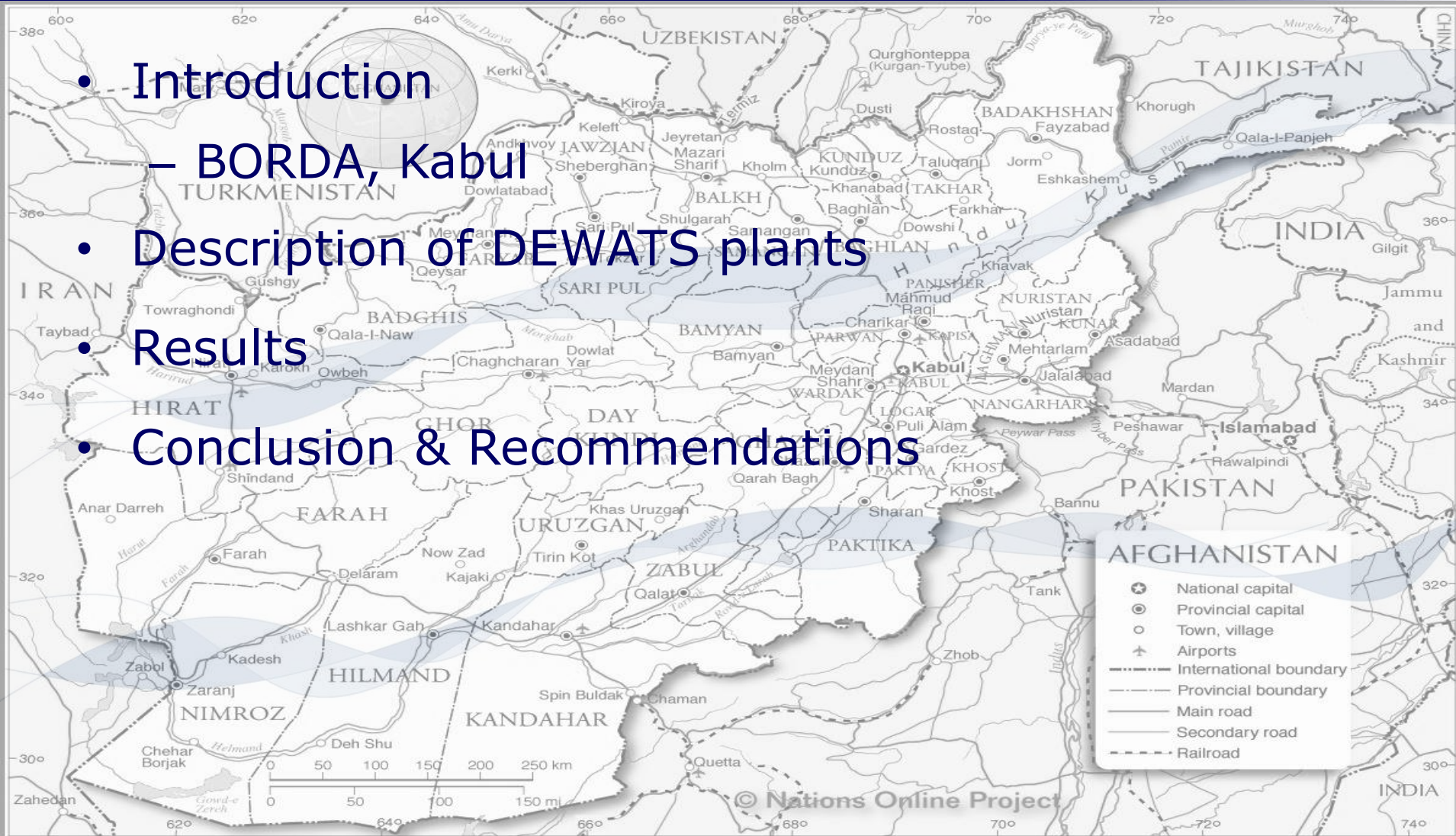
Start-up and performance of DEWATS plants in Afghanistan

3rd IWA Development Congress &
Exhibition

Masoume Mirzaei

16th of October 2013

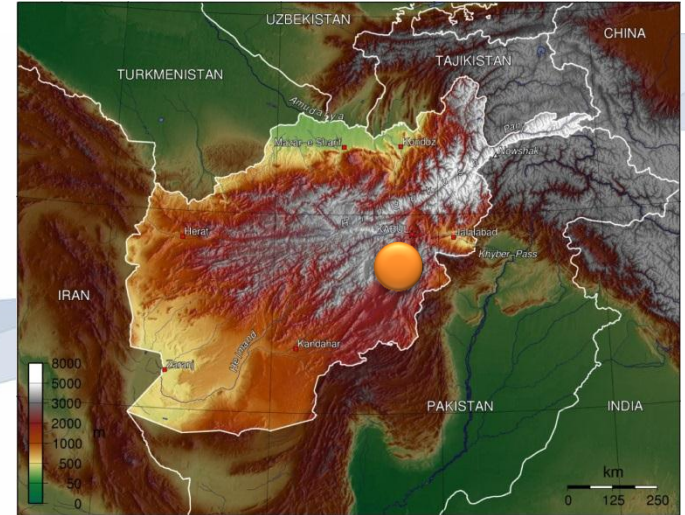
- Introduction
 - BORDA, Kabul
- Description of DEWATS plants
- Results
- Conclusion & Recommendations



- DEWATS implementation
- School Based Sanitation
- Capacity building
- Prefab DEWATS



- Kabul
 - Located in a narrow valley
 - 1700 m above sea level
 - Population: 3300000
 - -25 to +37°C
 - Water sources: ground water
 - WW treatments system and common practices:
 - Flush toilet with soak pit
 - Use of dry toilet system (anal cleansing with water or stones)



Monitored DEWATS plants

- Training Centre and prefab factory
(17-60 people)
- Governmental office
(200 people)
- Mosque
(1000-4000-10000 people per prayer time)



Tr

ACT DEWATS project

Grease trap

collection tank and percolation bed

ABR

Settler

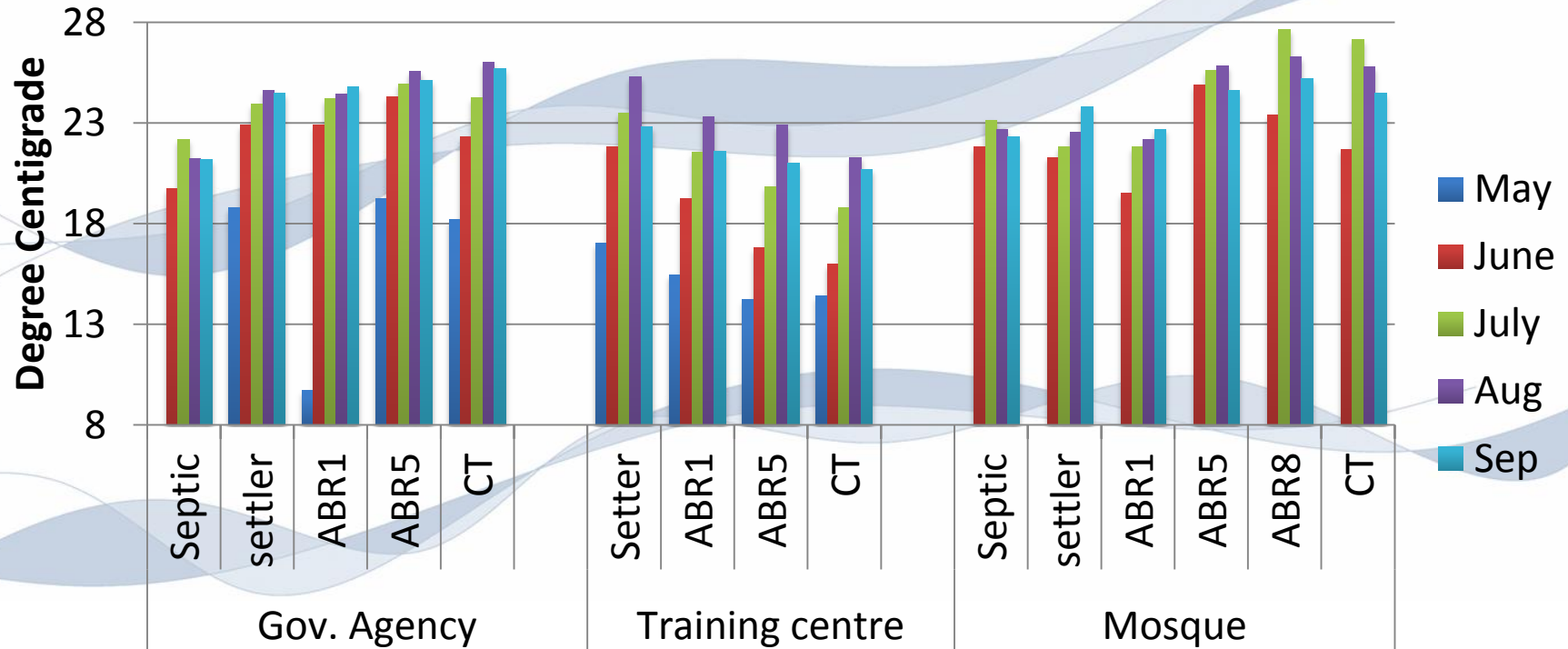
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- DE

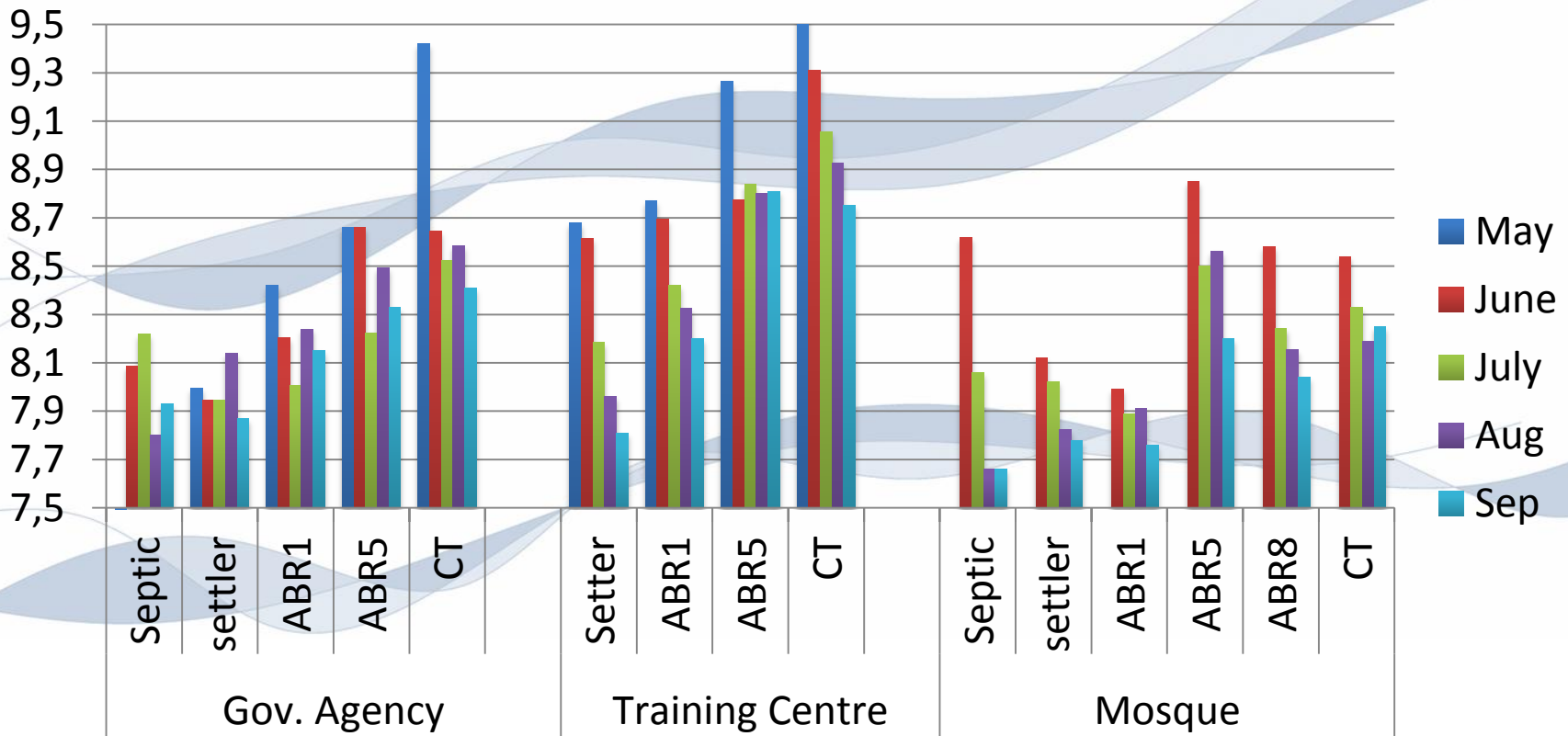


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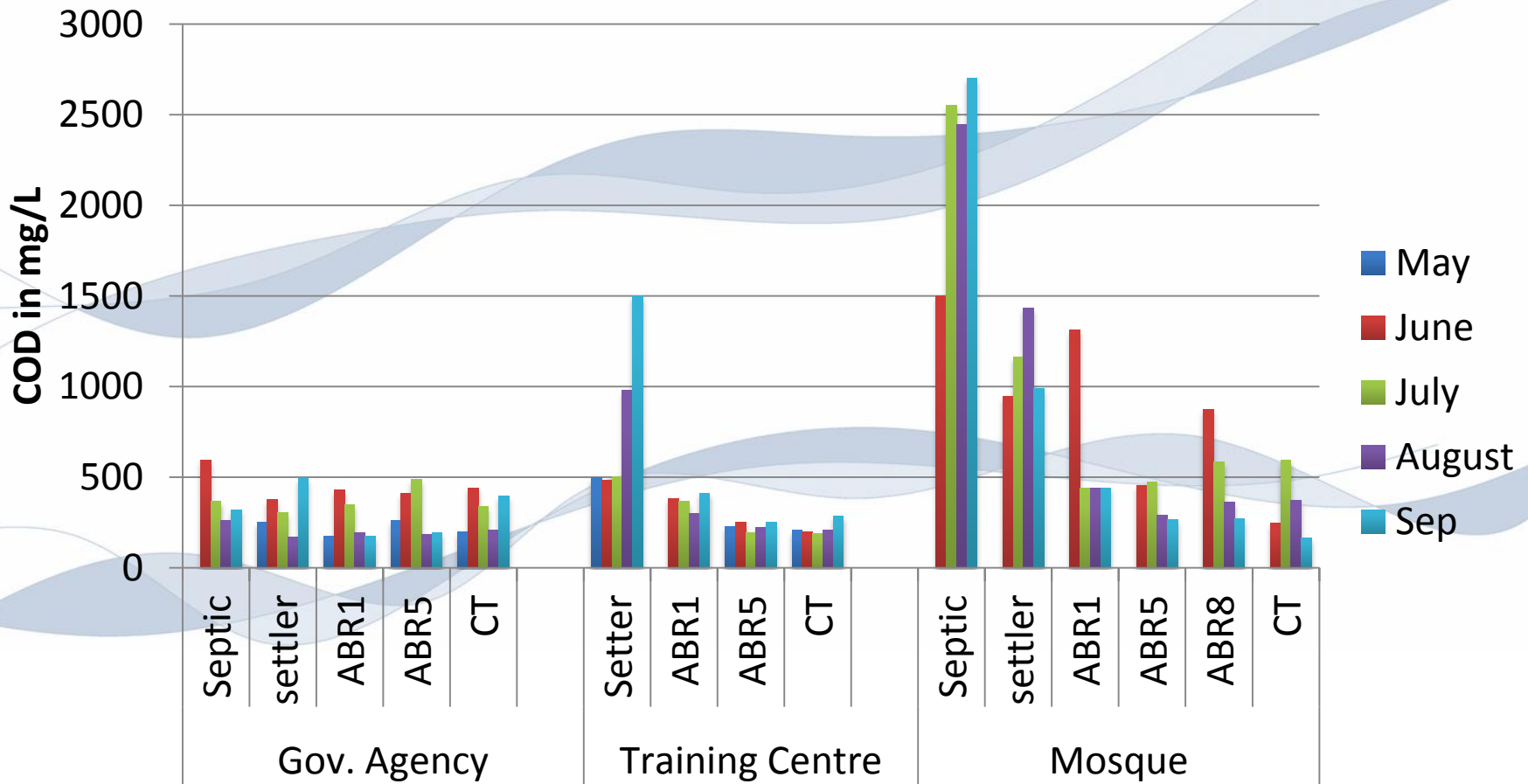
- Temperature comparison



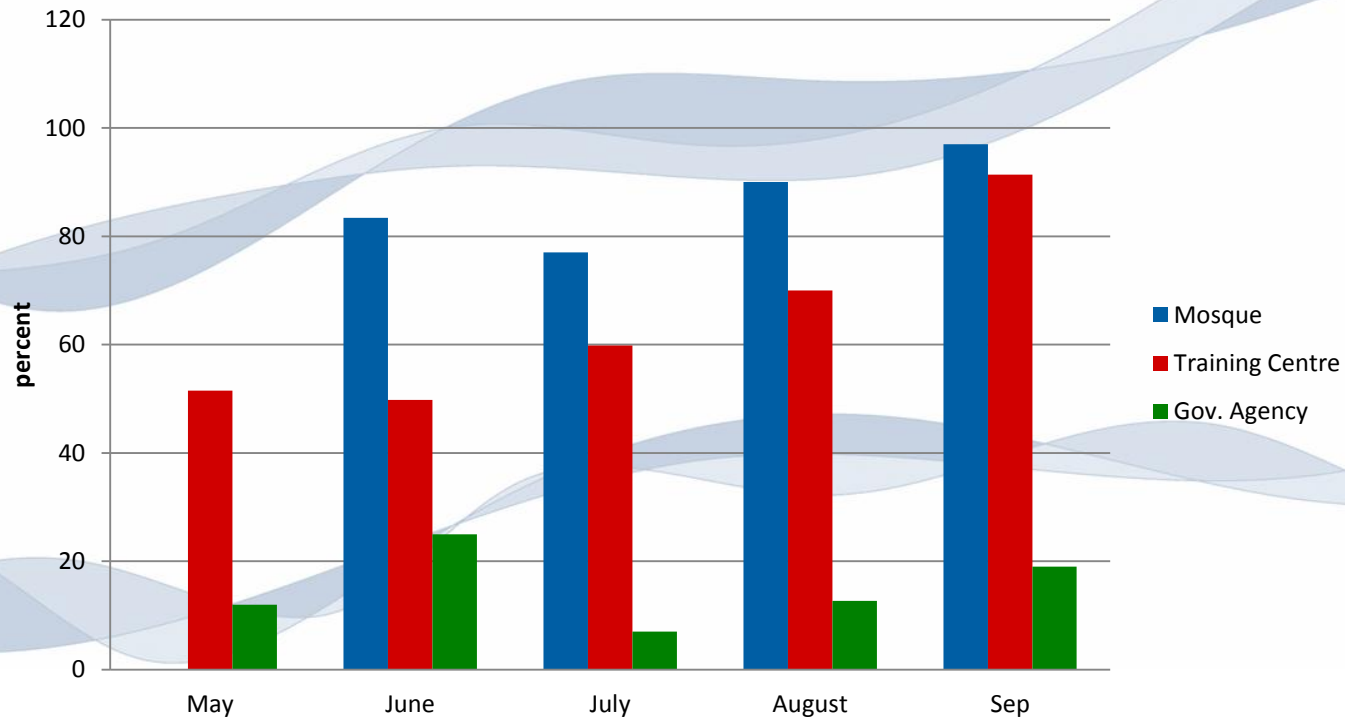
- pH comparison



- COD value comparison



- Treatment efficiency



- High organic load shows high treatment efficiency
- Gov.Agency needs longer startup period
- Sludge buildup measurement
- Prolonged monitoring necessary
- Influence of winter season



Thank you!

Tashakkor!

Asante sana