

# FORESTS, RANGELANDS AND CLIMATE CHANGE IN THE NEAR EAST REGION

## Afghanistan

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# *Introduction*

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- ❑ Afghanistan is a landlocked country with 65.22 million hectares area.
- ❑ Population is roughly 27 million (15% in urban and 85% in rural areas) with 3.6% population growth rate.
- ❑ Afghanistan is situated in arid and semi-arid areas.
- ❑ The climate of the country is strongly influenced by its topography, in general the summer is hot (up to 35°C) and the winter is cold (-15°C).
- ❑ Rangelands cover 45% where the forest occupies only 3% of Afghanistan's total land area.
- ❑ Main sources of Water is snowfed with 65,000 million m<sup>3</sup>/year potential.



# *Facts & Figures concerning Climate Change in Afghanistan*

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- Mean annual temperature in Afghanistan has increased by 0.6°C since 1960, at an average rate of around 0.13°C per decade.
- Mean rainfall over Afghanistan has decreased slightly at an average rate of 0.5mm per month (or 2% per decade) since 1960. This is mainly as a result of a fall in spring rainfall of 2.7mm per month (6.6% per decade).



# *Impacts of Climate Change in Afghanistan*

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## □ *On hydrology:*

- The most adverse impacts of climate change in Afghanistan are drought related, including associated dynamics of desertification and land degradation.

## □ *On agriculture:*

- Crop failure levels due to water shortages and the amount of potentially productive land left uncultivated will likely increase.
- The effects of environmental degradation and lower agricultural output reduce the availability of animal feed, and the funds available for livestock husbandry.

## □ *Socio-economic impacts:*

- The poor are most vulnerable to the effects of climate change in Afghanistan, climatic shocks have the potential to tip a large percentage of population into poverty.
- Impacts on human health, such as increased prevalence of disease.



# *National actions for addressing Climate Change*

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- Formulation of National Plans for Sustainable Community-based Management of both Rangelands and Forests.
- A new Forest Law has just been passed by Parliament (August, 2011); a new Rangelands Law is currently still only in draft.
- A National Conservation Strategy and Country Report on Climate Change are being overseen by the National Environmental Protection Agency (NEPA).



# *Key gaps, constraints and challenges in addressing climate change*

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- Security – the worsening security situation in Afghanistan makes fieldwork studies and pilot projects, particularly in the more unstable provinces, very difficult to carry out.
- Limited studies have been carried out on climate change and its impact in Afghanistan.
- Lack of availability of reliable historic meteorological records.
- Complex topography in Afghanistan creates significant local variations in climate.



# *Key gaps, constraints and challenges in addressing climate change*

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- Enforcement & lawlessness; land degradation problems such as illegal land-grabbing, ploughing up of pastures for rain-fed agriculture, and deforestation, continue unabated throughout Afghanistan.
- In Afghanistan poverty is a root cause of natural resources degradation. Eradication of poverty is therefore essential for resources conservation.
- There is generally insufficient accurate data within Government Ministries for the development and planning of natural resources management programmes and projects.



## *Recommendations and conclusions*

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- Developing of Climate Change as a key cross-cutting theme throughout Government of Afghanistan's policy, especially in the mandate of the Ministry of Agriculture, Irrigation and Livestock.
- Addressing the problems of Natural Resource degradation through strategic actions by potential donor support and aid programmes and by international organisations.
- Adapt a natural resources conservation and management awareness education programme among the local communities.
- Adapting and strengthening of Community Based Natural Resource Management (CBNRM)



Thank You

