

# Opportunities in International Development – an Afghanistan Experience

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Corpus Christi, TX  
February 8, 2011



# Presentation Goals

- Provide information about agriculture and agricultural development activities in Afghanistan
- Discuss challenges of conducting and coordinating agricultural development in Afghanistan
- Highlight opportunities for involvement by Research Center Administrators





# Afghanistan Water, Agriculture and Technology Transfer Program Overview



## Objectives

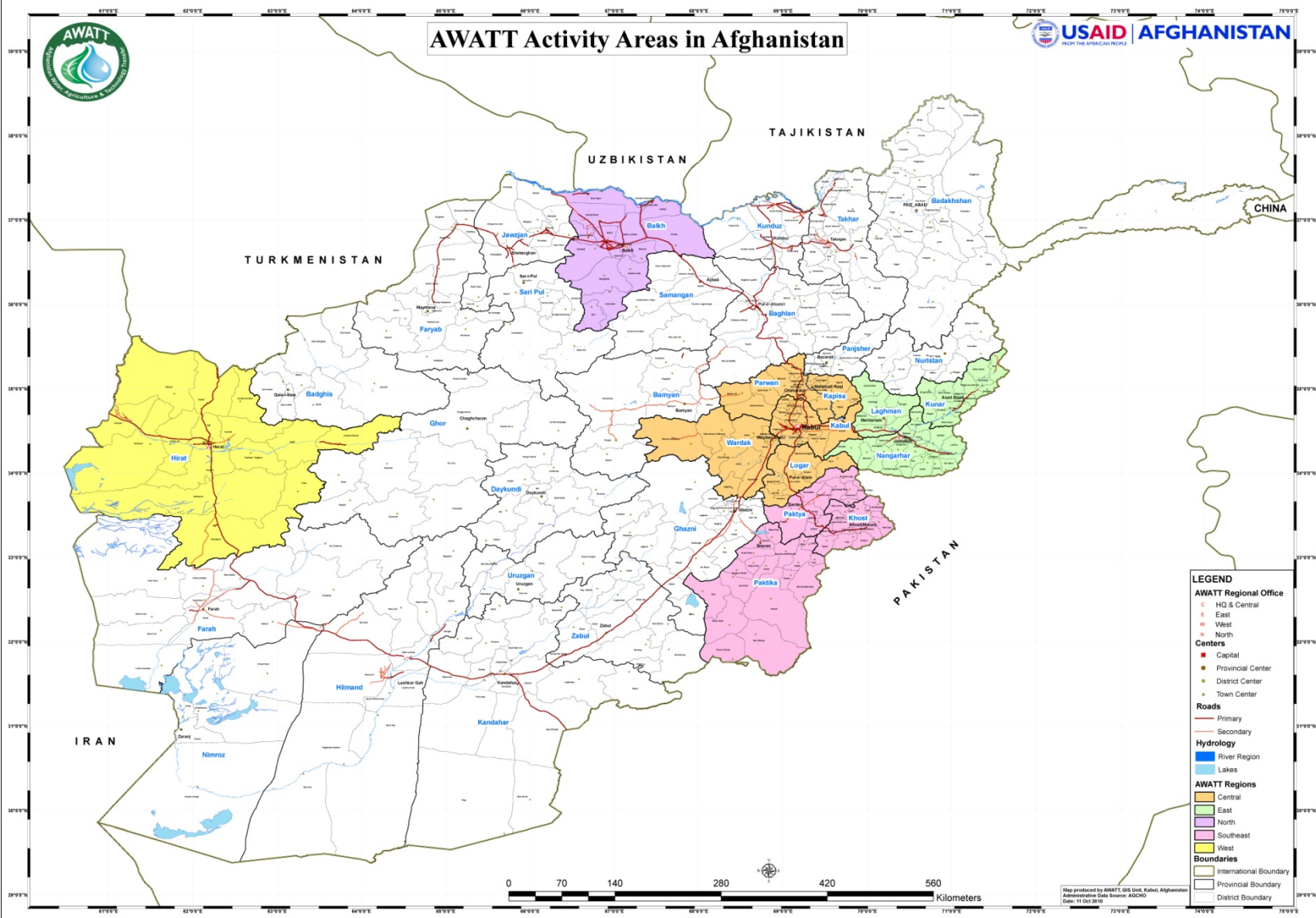
- Integrated Water Management
- Appropriate Agricultural Technology Transfer
- Technical Assistance to the Ministry of Agriculture, Irrigation and Livestock

## Duration and presence

- March 3, 2008 – March 2, 2011
- Program Offices in four provinces (Balkh, Herat, Kabul, and Nangarhar)



# AWATT Activity Areas in Afghanistan



- LEGEND**
- AWATT Regional Office**
    - HQ & Central
    - East
    - West
    - North
  - Centers**
    - Capital
    - Provincial Center
    - District Center
    - Town Center
  - Roads**
    - Primary
    - Secondary
  - Hydrology**
    - River Region
    - Lakes
  - AWATT Regions**
    - Central
    - East
    - North
    - Southeast
    - West
  - Boundaries**
    - International Boundary
    - Provincial Boundary
    - District Boundary

Map produced by AWATT, GIS Unit, Kabul, Afghanistan  
Administrative Data Source: AGRHO  
Date: 11 Oct 2019



# Afghanistan Geography & People

- **Capital:** Kabul
- **Area:** 647,500 sq km (slightly smaller than Texas) (landlocked)
- **Climate:** arid to semiarid; cold winters and hot summers
- **Elevation:** 258 m (Amu Darya) to 7,485 m (Noshak)
- **Population:** 29,121,286 – (22,490,022 in Texas)
- **Population growth rate:** 2.471% (2010 est.)
- **Life expectancy at birth:** 44.65 years
- **Ethnic groups:** Pashtun 42%, Tajik 27%, Hazara 9%, Uzbek 9%, Aimak 4%, Turkmen 3%, Baloch 2%, other 4%
- **Religions:** Sunni Muslim 80%, Shi'a Muslim 19%, other 1%
- **Languages:** Afghan Persian or Dari (official) 50%, Pashto (official) 35%, Turkic languages 11%, 30 minor languages 4%, much bilingualism
- **Literacy:** 28.1% (male - 43.1%; female -12.6%) 2000 est.



# Afghanistan Economy & Transportation

- **GDP – per capita:** \$1,000 (2010 est.) – (\$36,484 in TX)
  - **GDP – composition by sector:** agriculture – 31%, industry – 26%, services – 43% (excludes opium production)
  - **Labor Force:** 15 million (2004 est.)
  - **Labor force – by occupation:** agriculture 78.6%; industry - 5.7%, services – 15.7% (FY08/09 est.)
  - **Unemployment:** 35% (2008 est.)
- 
- **Airports:** 53 (19 with paved runways) – (1,873 in TX)
  - **Pipelines:** gas – 466 km (2009) – (504,782 km in TX)
  - **Roadways:** 42,150 km (paved 12,350 km) – (244,707 km in TX)
  - **Railways:** 25 km (railway programs are being designed) – (22,540 KM in TX)

Source: CIA World Factbook. <https://www.cia.gov/library/publications/the-world-factbook/geos/af.html#> (Jan. 21, 2011)

# Problems

- Low Crop Yields
  - monoculture cropping
  - low fertility
  - irrigation problems
- Degraded Watersheds
  - overgrazed
  - highly erodible
- High Unemployment
  - poppy cultivation
  - Taliban



# AWATT Project Activities

## Forage Production for Livestock Production

Almost all Afghan farmers keep animals of some sort, and while there have been numerous assistance programs targeting them, most of these have been through veterinary health. Until now, none have recognized that the centuries-old Afghan practice of free-range grazing their sheep and goats is both damaging to upper watersheds and unproductive for meat or milk.



# AWATT Project Activities

## System of Rice Intensification



SRI can be applied to any variety of rice wherever rice grows. It uses less seed (five kg per hectare), less water (about 50%) and produces significantly higher yields (as much as double) compared to the traditional method of rice cultivation

# AWATT Project Activities

## On-farm Irrigation Turnouts



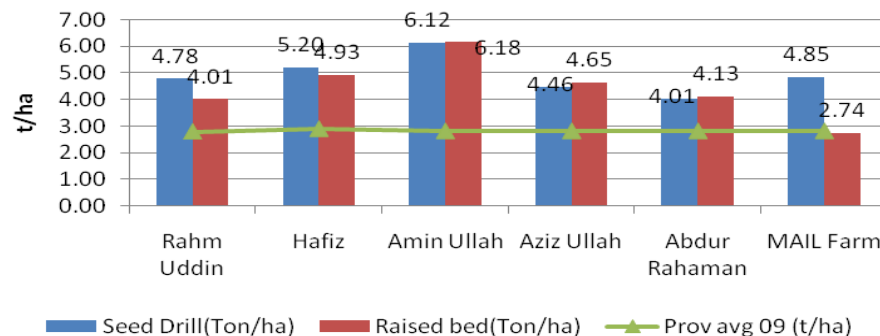
**FARM TURNOUTS** - One of AWATT's major successes in recent months has been building simple reinforced concrete farm turnouts that replace manual methods of diverting water from tertiary canals into farmers' fields. These have been greeted by farmers with major enthusiasm as they save water, time, and labor.

# AWATT Project Activities

## Laser Land Leveling



**Wheat Yield Results from laser leveled demo plots, Nangarhar**



# AWATT Project Activities

## Canal and karez rehabilitation



Improved karezes and canals in Heart's Shindand district, including soils testing to determine impediments to flow. Project affects the lives directly and indirectly of 900,000 people, 85% of whom depend on agriculture.

# AWATT Project Activities

## Reclaiming watersheds

Employment opportunities for 600 people working on a community watershed reclamation pilot in Nangarhar and Balkh, including approximately 200 women who are working in home nurseries to provide seedlings to the terraced hillsides.



# AWATT Project Activities

## Technical Assistance to MAIL

- Mobilize Mirabs to Improve Irrigation Efficiency and Equity
- Information Technology
- Technical Assistance



# Challenges to Living in Afghanistan

- 11½ time zones away & different work week
- Difficult work and living conditions



# Challenges to Living in Afghanistan

We are getting spotty reports on a suicide bombing that took place in a supermarket a little more than an hour ago a couple of blocks from us.

Didn't want you to worry when you wake up and see the news. All the team is fine.

Pen



The blast was about 3 blocks from our compound at a store we frequently visit.

Roger



# Infrastructure Challenges

- Utilities and Services
- Cold Storage
- Transportation



# Challenges to Research

- Competition for Qualified Staff by NGOs
- Security
- Lack of Resources



# The Fun Part

In the short term, USAID and USDA have several good projects to improve agricultural productivity through simple low-cost innovations, some of which can raise productivity by 20-30%. We visited one of USAID/USDA's implementing partners, AWATT, an impressive outfit whose contract is due for renewal or extension in early 2011.

- Ambassador Sedwill to General Patraeus and to Ambassador Eikenberry



# Why Get Involved?

Dear all

First of all allow me to express my cordial greetings together with Merry Christmas and Happy New Year to you and through you to your honorable families.

I am pleased as an Afghan to endeavor hard within AWATT program to work for the innocent people of my country. My hard work is my distinctiveness. I appreciate the golden opportunity provided from USAID for NMSU/ AWATT to bring our people out from the darkness of a scary 30 years war and terrorism to the world of democracy and humanity because of development. We Afghan people are committed to work hard and hard and run fast and fast to the extent we can. Please convey my cordial complements to your family and wish you the year 2011 and years after that to be prosperous and happy

Eng. H. Hussain Khaurin  
NMSU/ AWATT/ NRM Specialist



# Potential Project Funding Sources

USAID - \$130 million for  
Agriculture Projects – total  
\$1.15 billion (FY09)

World Bank – currently has 23  
projects with commitment of  
\$900.6 million

Asian Development Bank - \$2.1  
billion in assistance as of Dec.  
2009



# Thank You

