Afghanistan University Linkage with North American Institutions of Higher Education: Lessons Learned and the Way Ahead

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January 25, 2011
Educational Partnership
Between
University of Hartford
and
Herat University

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University of Hartford
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Three Decades of War
Still Waiting
APC, Abutment for Bridge
Irrigation Infrastructure
Way out of Quagmire
All out Effort to Publicize
Engineering News Record
Engineering has hit rock bottom in this war-ravaged nation, leaving
educators anguishling over how to train desperately needed engineers
when the nation's schools are on life support.

If ever a country was in
desperate need of engineers, it
is Afghanistan. More than 20
years of near constant
warfare—not to mention the
legacy of neglect left by the
Taliban's repressive five-year
regime—has left the landlocked,
Central Asian nation in tatters.
For all intents and purposes, it
has no infrastructure to speak
of. The country is in bad
shape. Everything needs to be
built again from scratch, and all
projects and buildings need
engineers,” especially civil
engineers, says M. Sabah
Keshavarz, an associate
professor of civil and environmental engineering at the University of Hartford,
who has traveled to Afghanistan repeatedly in the last year. The areas requiring
urgent attention are transportation, irrigation and agriculture, sewage and
water systems, communications, and power generation. “And engineers are
needed in all these fields.” With its landscape dominated by mountains and
deserts, good roads and bridges were a rarity in Afghanistan before the
the Great and Genghis Khan to the British Empire and the Soviet Union. Its strategic location amidst the Middle East, Central Asia, and the Indian subcontinent has made it a desirable possession since the beginnings of the ancient Silk Route more than 2,000 years ago.

In more modern times, the people of Afghanistan have suffered the consequences of nearly constant war as the result of the Soviet occupation (1979-89) and the years of civil unrest leading up to the rise to power of the Taliban, whose hard-line religious regime was overthrown in November 2001.

After nearly a quarter-century of war and political unrest, the country is in ruins and dependent on foreign aid. More than 10 million land mines, a legacy of the constant warfare, pose a daily hazard to Afghans. Roads are in bad repair from frequent use by heavy military vehicles. Many bombed-out bridges have not been re-built, and much of the country is without reliable electricity. Afghanistan's minister of irrigation, water resources, and environment, Yusuf Nutstani, said recently that only one in five Afghans nationwide has access to safe drinking water.

Urgent attention needs to be focused on irrigation, transportation, agriculture, sewage and water systems, communications, and power generation. It is a monumental job, made even more difficult by the country's critical shortage of engineers.

One University of Hartford professor is determined to see that aspiring engineers in Afghanistan receive the education they need to help rebuild their country.

M. Saleh Keshawarz, an associate professor of civil and environmental engineering at the University, grew up in Afghanistan. He has made many trips back to his native country since 2001 to lend his expertise in such areas as water resources management and irrigation. Most recently, he has turned his attention to revitalizing engineering education at Herat University in western Afghanistan.

Since the fall of the Taliban government, much of the international aid to Afghanistan has been in the form of security and emergency relief. Keshawarz is concerned that these efforts will not have a lasting effect and that the country will revert to the prior conditions of poverty and anarchy that led to the rise of the Taliban.
First Major Workshop on Engineering Curriculum, 2005

Basis for Current Engineering Curriculum at
• Kabul
• Herat
• Kandahar
Assessment
Library
Detailed Assessment
Herat, Afghanistan
Ministry of Higher Education
USAID/AeQuality
World Bank/SHEP
Herat University
University of Hartford
Achievements
First Batch, November 2007

Bradley Airport
Final Presentation
Dean of Engineering

Engineering Professors from HU and UH
Applause to Graduates from Herat
Then
Asphalt Laboratory
Now
Welcome to the Workshop on the Current Status and Future Direction of Engineering Education in Afghanistan

Herat University, Faculty of Engineering
Distance Learning Room
PC Lab
Concrete Lab

Yes, it is being used heavily
Faculty Scholarships

• Seventeen Master’s Degrees at Hartford: Twelve Civil, Three Mechatronics, Two Architecture

• One Master’s Degree: AIT

• Three Master’s Degrees at Slovak Republic
Faculty Strength
In addition to Civil Engineering

Two New Programs

- Architecture

- Mechatronics
Further Activities:

- Architecture Studio Tables (built in Herat)
- Architecture equipment, 120 sets
- PC Library for Architecture
- AC/Heaters
- Engineering Library Shelving
The Opportunity is Ours to Lose
Acknowledgement

- Ministry of Higher Education
- Herat University
- USAID
- The World Bank
- SHEP
- AeQuality/WSU
Thank You