

## ***A New Hospital for Bamyan***



*A project undertaken by the Aga Khan Development Network, in cooperation with the Government of Afghanistan, and with the financial support of the Government of Canada (Global Affairs Canada), the Aga Khan Foundation Canada and the Government of France (Agence Française de Développement)*

## INTRODUCTION: THE OLD AND NEW BAMYAN HOSPITALS

Health care in the mountains of Afghanistan can be a challenge, particularly for women and children. Until recently, many areas had only one doctor for every 50,000 inhabitants, midwife training programmes were dormant until the early 2000s and over 90 percent of private pharmaceutical outlets did not have even five essential drugs in stock.

Even today, 10 percent of children die before the age of five. An Afghan woman has a 1 in 52 chance of dying due to pregnancy or childbirth. These conditions disproportionately affect remote, rural areas, where health facilities are often inadequate or do not exist at all.

The case for upgrading the provincial Hospital in Bamyan was clear. When the Aga Khan Health Services (AKHS) took responsibility for the operations of the Bamyan Provincial Hospital in 2004, medical staff at the Hospital's old facility were struggling to meet the health needs of the community.

Through a public-private partnership with the Government of Afghanistan, AKHS undertook the challenge of upgrading the Hospital to meet Afghanistan's Essential Package of Hospital Services.

The old Hospital was upgraded and expanded. New equipment was installed and a stock of medicines was secured. Training programmes for staff started.

The staff and services at the Hospital steadily improved, through upgrades to training and equipment under the management of AKHS. The 35-bed facility – of which 15 beds were originally in tents – grew to accommodate 100 beds and expanded to services such as diagnostics and surgery.

Now the Hospital is starting a new chapter as it moves into a new, purpose-built facility.

**Below:** The reception areas of the old Hospital (left) and the new one (right). In today's modern Hospital, waiting times for patients have been reduced significantly.



*The New Bamyan Hospital*



*The number of major operations has risen by 400%, from 150 in 2004 to 600 in 2016.*

# A NEW HOSPITAL FOR BAMYAN

Over the course of little over a decade, the number of admissions to the old Bamyan Hospital had risen from 1,900 in 2004 to more than 11,000 in 2016. Outpatient attendances had increased from 43,000 to 175,000; deliveries from 100 to more than 3,000; and the number of major operations from 150 to more than 600.

Expansion of the existing Hospital had its limits. As a response to the clear need for a purpose-built facility, the local Bamyan government allocated 6.4 acres for a new Hospital to be built on the outskirts of town.

Construction began in 2013, led by the Aga Khan Agency for Habitat, which specializes in ecologically friendly and seismic-resistant construction. The new facility cost US\$ 22.8 million (30.3 million CAD) to build, of which \$US 17 million (23 million CAD) was funded by the Government of Canada. Aga Khan Foundation Canada contributed US\$ 3.2 million (4.3 million CAD) to the construction, and the Government of France donated US\$ 2.3 million (3 million CAD). In October 2016, the Hospital services moved from the old to the new premises.

The new 141-bed, state-of-the-art Hospital is designed to be structurally safe, seismic-resistant and highly energy-efficient. The Hospital's innovative "rammed earth" construction was designed to be both durable and to blend in with the environment. Rammed earth also provides for better insulation. Over half of the new Hospital's power is supplied by solar panels located on a hilltop behind the Hospital, on a piece of land donated by the Bamyan government.



The Hospital's special low-impact, rammed-earth architecture (**above**) is designed to be not only culturally sensitive to the surrounding area, but also durable and seismic-resistant. The 400-KW solar plant (**below**) provides for the majority of the electricity supply for the Hospital.



## Inpatient Services

- Surgery services (four operating theatres, anaesthesia, pre-op and post-op recovery, sterilization)
- High Dependency Unit
- Obstetrics and Gynaecology services (including three delivery rooms)
- Paediatrics (including Therapeutic Feeding Unit and Neonatal Intensive Care Unit)
- General Internal Medicine services
- 24-hour Accident & Emergency department

## Outpatient services

- Surgery
- Internal medicine
- Obstetrics and Gynaecology
- Paediatrics, TB-DOTS, vaccination
- Mental health and dental services
- 24-hour pharmacy
- Telemedicine

**+physiotherapy services, a laboratory and blood bank, x-ray and ultrasound services, and a 24-hour ambulance.**

*Paediatric services include a Therapeutic Feeding Unit, a Neonatal intensive Care Unit, vaccination and TB-DOTS for effective treatment of tuberculosis.*



*An e-health link has benefited more than 9,000 patients in Bamyan alone. Over 4,000 Afghan medical personnel, including those at the French Medical Institute for Mothers and Children, have participated in diagnostic and training opportunities facilitated by the technology.*



## REBUILDING THE HEALTH INFRASTRUCTURE IN AFGHANISTAN



AKDN's overall commitment to training health professionals is perhaps best illustrated by its commitment to training midwives. Since 2005, it has trained over 400 community midwives, about 10 percent of the total.

The Bamyan Hospital is part of a broader effort by the Aga Khan Development Network (AKDN) and its partners to help rebuild the health infrastructure of the country. Its programmes range from health posts to hospitals to medical training.

Every year, it provides primary and curative health care through a health system – accredited by the International Organization for Standardization (ISO-certified) – to over 1.6 million patients. The system is comprised of four hospitals, 12 basic and comprehensive health centres, 11 sub-centres, one prison health clinic and over 125 health posts.

The French Medical Institute for Mothers and Children (FMIC), a tertiary paediatric hospital in Kabul that is managed by the Aga Khan University (AKU) as part of a partnership with the governments of France and Afghanistan and the French NGO, La Chaîne de L'Espoir, was the first hospital in Afghanistan to perform open and closed heart surgeries. Since its opening, FMIC has recorded nearly 780,000 patient visits and performed

more than 22,800 surgeries (of which over 2,300 were cardiac surgeries), 470,000 radiology procedures and 2.5 million laboratory tests. It has also provided care worth more than US\$ 25 million at no charge.

AKDN also trains doctors, nurses, midwives, health professionals and administrators. It supports health policy, nursing standards and midwifery education. In 2012, for example, FMIC launched a programme in post-graduate medical education, which now covers seven disciplines (paediatric medicine, paediatric surgery, anaesthesiology, paediatric orthopaedics, paediatric cardiology, pathology and radiology). Additionally, more than 4,000 Afghan medical personnel have participated in diagnostic and training opportunities facilitated by e-health technology.

AKDN has conducted medical education, training and learning sessions for nearly 13,000 health professionals. Since 2005, for example, AKDN has trained over 400 midwives in the country, about 10 percent of the total. The training of midwives plays a vital role in reducing maternal mortality, which in Afghanistan has dropped from 1,600/100,000 live births in 2003 to 400/100,000 live births in 2015.

An e-health system, which allows hospitals serving remoter populations to consult FMIC in Kabul, Aga Khan University Hospital in Karachi and other hospitals, has benefited over 20,000 patients throughout the country.

His Highness the Aga Khan greeting graduates of the Community Midwifery Education Programme in Bamyan.



**The Aga Khan Development Network (AKDN)** is a group of development agencies with mandates that include the environment, health, education, architecture, culture, microfinance, rural development, disaster reduction, the promotion of private-sector enterprise and the revitalisation of historic cities. AKDN agencies conduct their programmes without regard to faith, origin or gender and have decades of experience in integrating economic, social and cultural development.

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