25 YEARS OF

LUXEMBOURG MONGOLIA

STRENGTHENING
CARDIOVASCULAR CARE

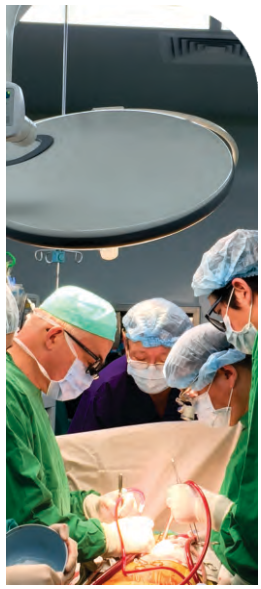
GOVERMENT OF MONGOLIA
MINISTRY OF HEALTH

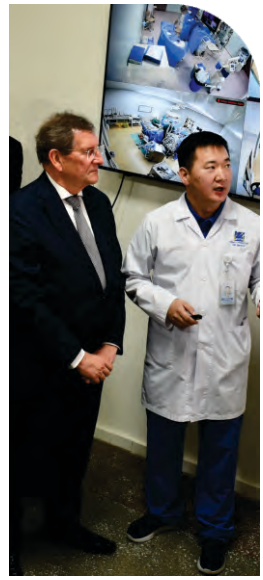
LUXEMBOURG AID & DEVELOPMENT

TSCH
THIRD STATE CENTRAL HOSPITAL, MONGOLIA

LUXDEV
Luxembourg Development Agency

CONTENTS





EDITORIAL

XAVIER BETTEL

Deputy Prime Minister

Minister for Foreign Affairs and Foreign Trade

Minister for Development Cooperation and Humanitarian Affairs

BATSHUGAR ENKHBAYAR

Minister of Health

In 2026, Mongolia and Luxembourg celebrate two remarkable milestones: 50 years of diplomatic relations and 25 years of cooperation in the field of cardiovascular health. These anniversaries are more than commemorations of time; they reflect a shared journey built on trust, solidarity, and a common commitment to improving people's lives.

Over the past five decades, relations between our two countries have steadily deepened, grounded in mutual respect and a shared vision of sustainable and inclusive development. Within this broader partnership, cooperation in the health sector, particularly in the fight against cardiovascular diseases, has emerged as a flagship example of what long-term collaboration can achieve.

Since 2001, our cooperation in the cardiovascular sector has contributed to a profound transformation of care across Mongolia. What began as a pioneering initiative to strengthen diagnostic capacities has evolved into a comprehensive approach encompassing prevention, treatment, cardiac surgery, and digital innovation, notably through telemedicine.

Today, people in Mongolia, even in the most remote areas, can benefit from improved access to quality care, illustrating how innovation, when designed around people's needs, can bridge distances and reduce inequalities.

At the heart of this success lies a strong and enduring partnership between institutions, healthcare professionals, and communities in both countries.

This publication tells a story of transformation, but above all, it tells the stories of the people inspiring it. Behind every statistic are lives improved, families supported, and dedicated professionals who have worked tirelessly to deliver better care. From doctors and nurses to patients and policymakers, these voices remind us that development cooperation is, first and foremost, about people.

As we look to the future, our joint ambition remains clear: to continue strengthening resilient health systems, to advance prevention, and to ensure that quality cardiovascular care is accessible to all. The establishment of the National Cardiovascular Centre marks a new chapter in this journey, one that will further consolidate achievements while opening new horizons for innovation, training, and research.

This anniversary is therefore not only a moment to reflect on what has been accomplished, but also an invitation to renew our shared commitment to the health of all.

01

LUXEMBOURG MONGOLIA IN BRIEF

WHAT YOU NEED TO KNOW BEFORE EMBARKING ON THIS JOURNEY

MONGOLIA

POPULATION

3,6 M inhab.
(2025)

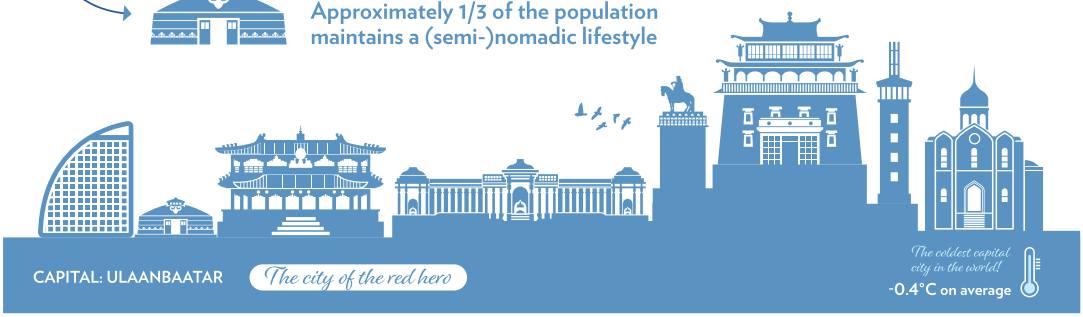
AREA

CURRENCY

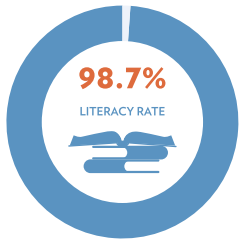
Mongolian tugrik

EUR 1 = MNT 4,140

Approximately 1/3 of the population maintains a (semi-)nomadic lifestyle



72 years
LIFE EXPECTANCY



6.8%
GDP GROWTH (2025)

WEATHER

265 days/year

270 mm/year

May - Oct. | 10°C - 30°C

Nov. - April | 0°C - 40°C

104/193
HUMAN DEVELOPMENT INDEX RANK (2025)

1%
POPULATION GROWTH RATE (2025)

2.2 inhab/km2
DENSITY (2025)
Mongolia is the least densely populated country in Asia.

MAIN ACTIVITIES


Mining


Livestock farming


Agriculture

GRAND DUCHY OF LUXEMBOURG

POPULATION

690,000 inhab. (2025)

A country of diversity!

47% are internationals
170+ nationalities

AREA

AREA 2,586 KM²

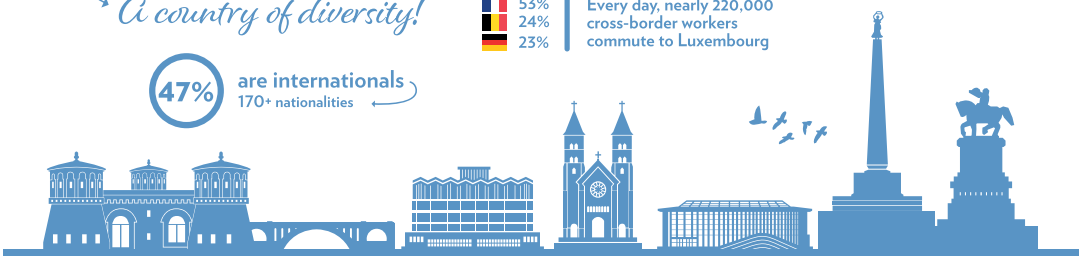
53%
24%
23%

Every day, nearly 220,000 cross-border workers commute to Luxembourg

CURRENCY

Euro (EUR)

MNT 1 = EUR 0.00024



CAPITAL: LUXEMBOURG CITY

MOTTO

Mir wëlle bleiwe wat mir sinn (We want to remain what we are)

82 years
LIFE EXPECTANCY

0.6%
GDP GROWTH (2025)

100%
LITERACY RATE

WEATHER

200 days/year

800 mm/year

May - Sept. | 15°C - 25°C

Oct. - April | 0°C 7°C

25/193
HUMAN DEVELOPMENT INDEX RANK (2025)

1.3%
POPULATION GROWTH RATE (2025)

264 inhab/km2
DENSITY (2025)

MAIN ACTIVITIES

Financial services

Industry

Services

EU institutions

02

25 YEARS OF COOPERATION IN SERVICE OF THE POPULATION

FROM THE FIRST PROJECT TO THE LATEST INITIATIVES

25 YEARS OF DEVELOPING THE CARDIOVASCULAR SECTOR

Since 2001, Luxembourg's Development Cooperation has been actively involved in the health sector in Mongolia. The objective: to support the country's efforts to combat cardiovascular diseases by strengthening cardiology at all levels, notably through telemedicine in the provinces. Here is a look back at the projects implemented by LuxDev over the past 25 years.

Cardiovascular diseases, a major public health issue exacerbated by the country's specific characteristics, are the leading cause of mortality in Mongolia.

Due to the vast size of the territory and its low population density, patients often have to travel long distances to access healthcare, made harder by limited transportation infrastructure and harsh climatic conditions. Added to this, provincial doctors often work with outdated equipment and limited access to specialist training, making it harder to diagnose and treat cardiovascular disease locally.

In this context, the development of telemedicine applied to cardiology was identified as a targeted response to these needs, connecting provincial doctors with specialist expertise based in the capital, through a digital network, to ultimately improve cardiac care for patients wherever they live.

The projects implemented by LuxDev in Mongolia in the health sector have built on this framework, with each project building on the achievements of those that came before it.

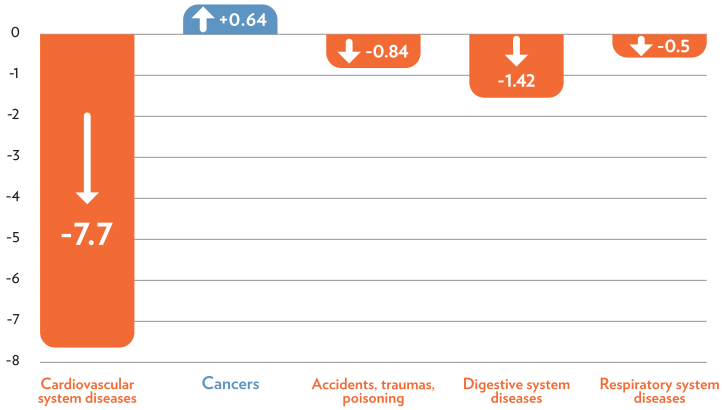
CONCRETE AND ENCOURAGING RESULTS

This adaptive, step-by-step approach has translated into several significant achievements. It has contributed to improving the health of the Mongolian population by reducing the mortality rate associated with cardiovascular diseases (from 24.4 deaths per 10,000 inhabitants in 2003 to 16.7 in 2025), as well as the case-fatality rate among patients with cardiovascular diseases (from 5.09% in 2003 to 1.37% in 2025). Behind these numbers is a national network of committed professionals, united by a shared vision of integrated cardiovascular care. This community of practice has strengthened collaboration across regions and fostered a sense of joint ownership and collective dynamic.

Coverage of high-quality health services has also expanded considerably: more people, regardless of where they live, now have access to essential cardiovascular care. At the same time, Luxembourg's Development Cooperation has supported Mongolia's health professionals in installing specialised equipment, developing and modernising diagnostic centres, and strengthening clinical training, improving the prevention, diagnosis, and management of cardiovascular diseases across the country.

Together, these achievements reflect years of close cooperation between Luxembourg and Mongolia, connecting doctors through telemedicine and laying the groundwork.

Decrease in mortality from the five leading causes of death in the Mongolian population, per 10,000 individuals, between 2003 and 2025



SIX CONSECUTIVE PROJECTS

PILOT PROJECT - CARDIOVASCULAR DIAGNOSTIC CENTRE (2001–2007)

At a time when patients in Mongolia's provinces often faced long journeys to reach a specialist, this pilot project set out to improve the diagnosis and treatment of cardiovascular disease. A reference centre was established at Shastin Hospital, equipped with essential diagnostic tools and connected to provincial hospitals, alongside training for local doctors and specialists, laying the foundations for the national network that would follow.

€ 954,000

CARDIOVASCULAR DIAGNOSTIC CENTRE - PHASE II (2007–2012)

This phase strengthened prevention and case management across the network built during the pilot. Telemedicine consultations were introduced (including an electronic medical record system for remote case-sharing), clinical training was extended to all provincial cardiologists, and an interventional cardiology component was added (catheter-based procedures, such as angioplasty, used to treat heart conditions without open surgery).

€ 2,431,000
€ 340,000

EXTENDING CARDIOLOGY AND TELEMEDICINE NATIONWIDE (2012–2017)

In line with Mongolia's Health Sector Strategic Master Plan (2006–2015), this phase extended cardiovascular care and telemedicine to the entire country. The network reached all 21 provinces and 9 districts, and cardiac surgery was introduced in Mongolia for the first time, at Shastin Hospital. Alongside this, Luxembourg's project worked closely with a parallel UNFPA-led project extending telemedicine to maternal and child health, together launching two national platforms: MnCardio (for cardiovascular care) and MnObs (for maternal and newborn health), that remain in use today.

€ 8,371,183
€ 2,247,233
€ 744,826

CONSOLIDATING CARDIOVASCULAR SERVICES AND THE NATIONAL CARDIOVASCULAR CENTRE (2017–2022)

Building on the previous phases, this project consolidated cardiovascular health services both nationwide and at the National Cardiovascular Centre. Capacity was strengthened across prevention, cardiac surgery, interventional cardiology, and provincial cardiology services, and the architectural design for a dedicated National Cardiovascular Centre building was developed and approved by the relevant Mongolian authorities.

€ 4,500,000
€ 1,780,000

CARDIOLOGY, CARDIAC SURGERY AND TELEMEDICINE (2022–2027)

This project aims to reduce illness and death from cardiovascular disease across Mongolia, supporting the national action plan for cardiovascular disease prevention, strengthening surgical capacity at the National Cardiovascular Centre, extending cardiovascular health services nationwide, and institutionalising the achievements of previous phases. In 2024 alone, 422 open-heart surgeries were performed, a national record, and the project has begun sharing Mongolia's experience through South-South cooperation with Laos.

€ 5,600,000
€ 2,960,000

SUPPORT FOR THE ESTABLISHMENT OF THE NATIONAL CARDIOVASCULAR CENTRE (2026–2032)

To reduce mortality from non-communicable diseases and improve access to high-quality cardiovascular care, this project supports the construction, equipping, and commissioning of a National Cardiovascular Centre —bringing advanced diagnosis, surgery, intensive care, rehabilitation, and prevention services together under one roof. Luxembourg's contribution complements a sovereign loan from the EBRD for construction, illustrating a blended-financing approach, with construction expected to begin in 2027.

€ 22,500,000
€ 29,793,233
EBRD € 850,000

European Bank for Reconstruction and Development (EBRD)

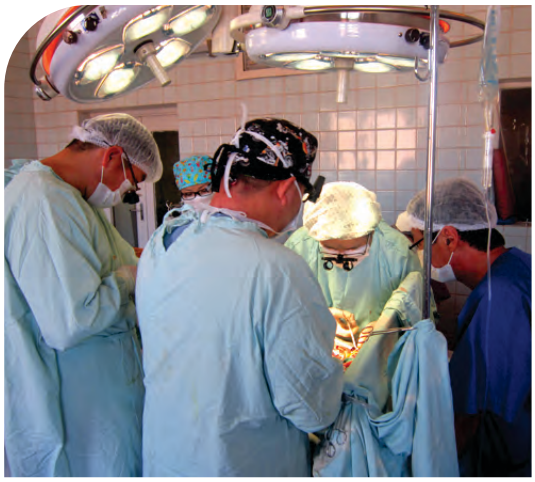
FROM CARDIOLOGY TO CARDIAC SURGERY AND BEYOND

In the early 2000s, the prospect of developing cardiac surgery in Mongolia was already under consideration. However, both Luxembourgish and Mongolian professionals chose not to pursue it prematurely. Their approach was clear: either a complete and high-quality care pathway could be established, or no intervention would be undertaken. Cardiac surgery requires excellence at every stage, from accurate diagnosis and patient selection to surgery, intensive post-operative care, and long-term rehabilitation. At the time, although Mongolian surgeons were experienced, the overall environment, infrastructure, and level of specialised expertise were not yet adequate to support such complex interventions safely and sustainably.

After a decade of sustained cooperation, this situation had fundamentally changed. By 2011, cardiology services had been strengthened significantly across the country. Provincial cardiologists were now able to identify patients requiring surgical intervention more effectively. They had also developed strong professional networks, allowing them to seek guidance from the Shastin Hospital and other centres when needed, ensuring better continuity of care.

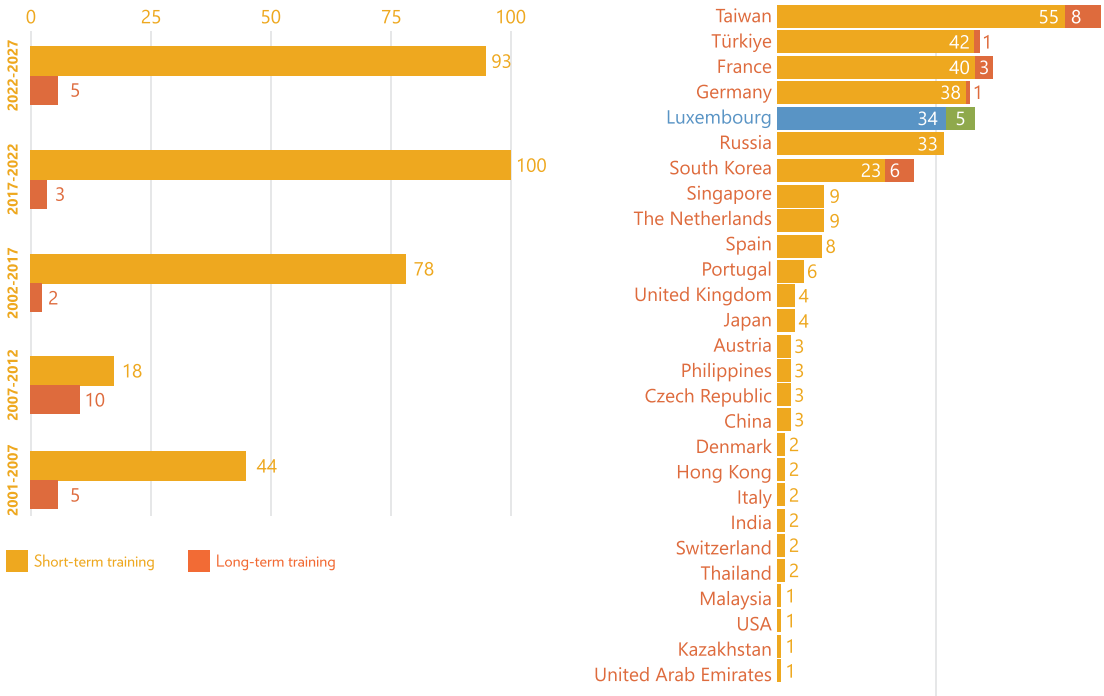
It was in this context that a team from the Luxembourg National Institute for Cardiac Surgery and Interventional Cardiology (INCCI) in Luxembourg - also known as the Luxembourg Heart Centre, conducted a field assessment. Based on their findings, they confirmed that the conditions were now in place to launch a cardiac surgery project. LuxDev subsequently formalised a cooperation agreement with the INCCI, providing the technical expertise necessary to design and implement this new phase.

By 2016, tangible progress had been achieved. Two operating theatres were fully renovated and equipped, and the skills of cardiac surgeons, anesthethetists, perfusionists and nurses were significantly strengtened through targeted training and hands-on mentorship. Working conditions within the cardiac surgery department at Shastin Hospital improved considerably. These advancements translated into a steady increase in surgical procedures and a marked reduction in mortality rates.



A cardiac surgery operating room prior to Luxembourg's support

Newly equipped and modernised operating theatre



Number of international trainings attended by Mongolian health professionals per project phase and by country (as of June 2026)

Since then, the Luxembourg Heart Centre has continued to support Mongolia through regular expert missions. During these missions, complex procedures are performed jointly with Mongolian teams, further consolidating local expertise. Importantly, these interventions have allowed many patients to receive life-saving treatment within Mongolia, that would previously have required costly and often inaccessible care abroad.

The results are striking: the proportion of cardiovascular surgeries performed by international experts declined dramatically from over 74% in 2017 to just 10% in 2025, demonstrating a significant transfer of skills and the growing autonomy of Mongolian medical teams.

Since 2022, the cooperation between Luxembourg and Mongolia has entered a new phase, expanding into the prevention of cardiovascular diseases, marking a new and essential phase in this long-standing partnership.

This evolution reflects a simple but critical reality: while improving diagnosis and treatment saves lives, prevention reduces the need for either. Cardiovascular diseases are strongly linked to modifiable risk factors such as smoking, unhealthy diets, physical inactivity, and hypertension. Addressing these factors requires action beyond hospitals, through public awareness, early detection, and community-based interventions.

Over the past three years, the Luxembourg-Mongolia cooperation has made significant progress in advancing Mongolia's National Strategy for the prevention of cardiovascular diseases. A nationwide survey on knowledge, attitudes and practices was conducted among more than 2,500 citizens, providing valuable insights into public awareness and behaviours related to cardiovascular risk factors.

Building on this evidence, large-scale awareness campaigns were implemented, reaching over 850,000 people through key events such as World Heart Day and World Hypertension Day. A wide range of educational materials was also developed, addressing major risk factors including smoking, unhealthy diets, obesity, and physical inactivity.

To promote early detection, blood pressure monitors were installed in nine public locations, enabling citizens to check their health status easily and encouraging timely medical consultation.

By combining prevention, diagnosis, treatment, and surgery, Mongolia and Luxembourg are now working together towards a comprehensive and sustainable approach to cardiovascular health, ensuring that progress achieved today will have a lasting impact for future generations.

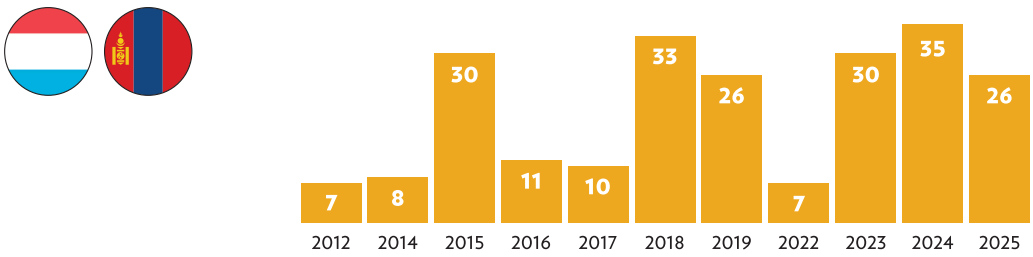
THE LUXEMBOURG HEART CENTER: A KEY PARTNER IN DRIVING EXCELLENCE

Founded in Luxembourg in 1997, the National Institute for Cardiac Surgery and Interventional Cardiology (INCCI) widely known as the Luxembourg Heart Centre is a specialised reference hospital dedicated to the invasive treatment of cardiovascular diseases.

The Centre brings together cardiac surgery, interventional cardiology and intensive cardiac care within a single interdisciplinary centre of excellence. To ensure comprehensive and coordinated treatment for heart and major vascular conditions, it mobilises a wide range of expertise, including anaesthesia, cardiac surgery, electrophysiology and interventional cardiology.

As a national centre of excellence, the Luxembourg Heart Centre works in close collaboration with Luxembourg's four hospitals and covers the full continuum of care — from emergency response and hospital treatment to outpatient services, rehabilitation, and therapeutic education. This integrated approach ensures high-quality, patient-centred care throughout the patient journey, while contributing to continuous innovation and knowledge transfer both nationally and internationally.

Number of cardiovascular surgeries conducted with INCCI and Mongolian teams



TELEMEDICINE IN MONGOLIA: A TRANSFORMATION UNDERWAY

When the first telemedicine project was launched in the early 2000s, the concept was still largely unknown in Mongolia. Healthcare delivery was fragmented: doctors worked in isolation, with limited communication between provinces and little access to specialist expertise. For patients in remote areas, accessing quality care often meant long and costly journeys to the capital.

The introduction of telemedicine marked a turning point. Initially, the system relied on basic tools such as dial-up internet and email, allowing only limited exchanges between doctors. Over time, however, both the technology and its use evolved significantly.

A major breakthrough came with the development of MnCardio, an open-source, web-based platform that enables the sharing of complete patient files, including images, videos, and diagnostic reports. Today, MnCardio, launched in 2009 with Luxembourg support, has grown into a national system supporting teleconsultations, multidisciplinary collaboration, patient follow-up, and hospital management functions such as admissions and surgical waiting lists.

Despite challenges — including limited digital literacy and slow internet connectivity — the system was successfully adapted through user-friendly design, continuous training, and technical optimisation for low-bandwidth environments. Its flexible, user-driven development has ensured that it responds effectively to the needs of healthcare professionals across the country.

The impact on medical practice has been profound. Telemedicine has significantly reduced unnecessary patient transfers by enabling provincial doctors to seek expert advice remotely and manage cases locally.

Telemedicine reduces unnecessary referrals, saving patients and their families significant time, money and stress.
Dr Mungunchimeg Dagva
(Senior Sector Advisor, LuxDev)

Beyond improving efficiency, telemedicine has transformed the way doctors work. It has fostered collaboration between central and local practitioners, creating integrated teams working together from diagnosis to treatment and follow-up. It is also laying the groundwork for national disease registries, improving data availability, and supporting more effective health planning.

Looking ahead, telemedicine is entering a new phase. Plans are underway to expand MnCardio to enable direct interaction between patients and their doctors, extending its reach beyond healthcare professionals to the population it ultimately serves.

One of our priorities is to develop tools that allow people to connect more easily with doctors and access timely health advice.

More than two decades on, what began as a simple network between a handful of doctors now connects an entire country's healthcare system, with patients ultimately benefiting from stronger collaboration and more coordinated care.

STRENGTHENING HEALTH SYSTEMS THROUGH MULTILATERAL PARTNERSHIPS

Luxembourg's support for Mongolia's health sector extends beyond its bilateral cardiovascular programme. Through partnerships with UNICEF and UNFPA, it addresses broader health needs from maternal and child health to prevention and early detection. By reinforcing primary healthcare and addressing risk factors from an early stage, these collaborations help reduce the future burden of cardiovascular disease.

Through UNFPA, Luxembourg has supported the expansion of telemedicine to maternal and newborn health services across Mongolia. Between 2007 and 2019, a multi-phase programme extended teleconsultations to all 21 provinces, strengthened obstetric and ultrasound capacities and improved access to specialist maternal care for women in remote areas. The programme contributed to earlier detection and management of pregnancy complications, helping to reduce maternal mortality. The current UNFPA programme (2022–2027) builds on this experience, telemedicine, capacity building, stronger data systems, and prevention to reduce preventable maternal and perinatal deaths. It also addresses cardiovascular needs, including improved fetal screening for congenital heart diseases and the development of neonatal cardiac surgery capacity in collaboration with the National Cardiovascular Centre at Shastin Hospital.

UNICEF takes a broader prevention approach, targeting cardiovascular risks from childhood onwards. The ongoing programme supports the early detection and prevention of congenital and rheumatic heart disease, alongside wider non-communicable diseases (NCDs). Nationwide screening, improved diagnostic capacities, healthcare workers training and the promotion of healthy lifestyles among children and adolescents are central to this work. By addressing risk factors such as streptococcal infections, obesity, poor nutrition, and physical inactivity, the UNICEF programme aims to reduce the future burden of cardiovascular disease while strengthening primary healthcare.

Together, these partnerships extend Luxembourg's bilateral cardiovascular programme beyond specialized care. While bilateral support focuses on telemedicine, specialist services and surgical capacity, collaboration with UNFPA and UNICEF strengthens maternal and child health, early detection, and prevention. This broader approach connects different parts of the health system,from pregnancy and childhood through to adult care, while strengthening access to healthcare across Mongolia.

Luxembourg's multilateral partnerships therefore reinforce its wider contribution to Mongolia's health system. By combining specialised care with prevention, early detection and stronger primary healthcare, they help improve health outcomes today while laying the foundations for healthier lives in the future.

THE NATIONAL CARDIOVASCULAR CENTRE BECOMES A REALITY

After 25 years of cooperation between Luxembourg and Mongolia, a long-standing ambition is now becoming a reality: the construction of a new, purpose-built facility to house the National Cardiovascular Centre (NCC) within the Shastin Central Hospital.

The idea has been in development for many years: to bring cardiovascular care, expertise, training, telemedicine, prevention and research together in one central place, creating a national hub for cardiovascular excellence.

The need is clear. Demographic trends, including an ageing population, point to a steady increase in demand for cardiology services and cardiac surgery. At the same time, risk factors such as unhealthy diets and high levels of air pollution continue to contribute to Mongolia's high burden of cardiovascular disease. Limited access to specialised services also remains a challenge, particularly outside the capital.

Mongolia's cardiovascular care system remains fragmented and under-resourced. The new infrastructure will help address this critical gap while providing a strong foundation for further development of specialised care, telemedicine, prevention, education and research.

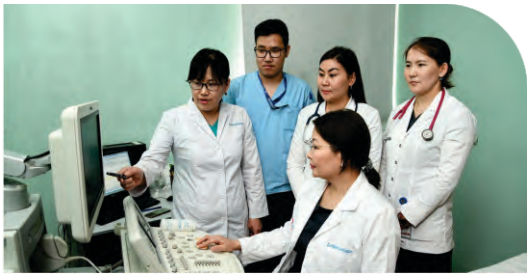
Currently, the NCC treats around 80,000 outpatients and admits more than 6,500 patients each year. With the new infrastructure, it is expected to reach up to 10,000 hospitalisations annually within the next decade. The centre will primarily receive patients referred from facilities lacking specialised diagnostic equipment, while also ensuring continuity of care for complex cases, including post-operative follow-up, heart failure management, and rehabilitation services.

The future NCC will play an important role in reducing inequalities in access to care. Integrated within Mongolia's wider healthcare network, it will serve not only urban populations but patients from across the country, supporting all 21 provincial hospitals, 9 district hospitals and several health centres through referrals, telemedicine and training.

Prevention and public awareness will be another important part of the centre's role, helping to improve cardiovascular health and reduce the burden of disease across the population.

For more than two decades, we dreamed not simply of constructing a building, but of creating a national home for cardiovascular excellence where every patient, regardless of where they live, can receive worldclass care. Today, that dream is becoming reality.

Dr Mungunchimeg DAGVA | Senior sectoral advisor, LuxDev



A MODERN FACILITY DESIGNED FOR EXCELLENCE

Designed by an international consortium of consulting, engineering and architectural firms, working in close collaboration with Mongolian experts, the new NCC will be built on the site of Shastin Central Hospital and will share key logistical and support services with the existing hospital.

The eight-storey building will cover 15,079 m^2 and include:

- 120 inpatient beds
- 6 consultation rooms
- 1 MRI scanner and 1 CT scanner
- 2 electrocardiography rooms
- 2 echocardiography rooms
- 2 stress testing rooms
- 4 catheterisation laboratories
- 4 cardiac surgery operating theatres
- 1 hybrid operating theatre
- 1 resuscitation room
- 1 cardiac rehabilitation unit
- 1 training centre for medical staff
- 1 dedicated telemedicine centre supporting nationwide services

A BLENDED FINANCING APPROACH

The NCC is being financed through a combination of international and national resources:

- EUR 29.79 million from the Government of Mongolia through a loan from the European Bank for Reconstruction and Development (EBRD), to finance the construction of the facility;
- EUR 22.5 million grant from Luxembourg to fund medical equipment and the projects "soft" components including technical assistance, operational planning, capacity development, monitoring and evaluation, and institutional strengthening;
- EUR 850,000 grant from the EBRD to support social and environment standards and facilitate construction procurement.

Together, these contributions cover both the construction and equipping of the new facility, as well as the expertise and support needed to ensure its long-term operation.

Luxembourg's support also predates the current construction project. Before the COVID-19 pandemic, Luxembourg supported the early stages of the project by financing the architectural studies, an early investment that reflects its long-standing commitment to the development of Mongolia's cardiovascular sector.

PROJECT OVERVIEW

SECTOR

84 months

DURATION

BENEFICIARIES

BUDGET: EUR 53.15 MILLION

LUXEMBOURG: EUR 22.50 million
MONGOLIA: EUR 29.79 million *(loan from the EBRD to the Mongolian Ministry of Finance)*
EBRD: EUR 850,000

SDG

03

VOICES FROM MONGOLIA

DISCOVER THE STORIES OF THREE MONGOLIANS WHO SHARE THEIR EXPERIENCES.

THE STORY OF A PATIENT

B. Purev with her son

THE STORY OF B. PUREV, A YOUNG WOMAN WHO UNDERWENT HEART SURGERY IN MONGOLIA

I was born in Dornod Province, approximately 650 km from Ulaanbaatar. While I was a university student, I sought care at my provincial hospital and was referred to the Third State Central Hospital for further diagnosis and treatment.

There, I met Dr. Mungunchimeg, who had just returned from advanced training in Luxembourg. With care and precision, she gave me a diagnosis and confirmed my condition and recommended surgical treatment.

When the Luxembourg Heart Center team came to Mongolia, I underwent cardiovascular surgery at the Shastin hospital. At the time, this type of complex procedure was not available in Mongolia, and I did not have the financial means to pursue treatment abroad, where it would have been very costly.

Through the support of the project, I was able to receive this surgery successfully in my own country- an opportunity that had a lasting impact on my life.

Today, I am working and living a happy life with my family. I remain deeply grateful to the people of Luxembourg for their generosity and support, and I sincerely wish them all the very best.

INTERVIEW

A PARTNERSHIP AT EVERY LEVEL

Dr. Tugsdelger SOVD
Director, Department of Sector Monitoring, Evaluation and Internal Audit,
Ministry of Health of Mongolia

Lasting results are built on lasting relationships. Over the past 25 years, the Luxembourg-Mongolia cooperation in the cardiovascular sector has benefited from the dedication and leadership of many professionals who have remained committed to transforming ambitious plans into lasting results. Among them is Dr. Tugsdelger Sovd, a long-serving official at the Ministry of Health who has accompanied the partnership for many years. In this interview, she reflects on how Luxembourg's support has helped strengthen Mongolia's health system and advance national priorities in the fight against cardiovascular diseases.

Can you introduce your role within the Ministry of Health and your involvement with the Luxembourg-supported programmes?

I have worked at the Ministry of Health for more than 20 years, focusing on public health, monitoring and evaluation. I have closely followed and contributed to the cooperation between Mongolia and Luxembourg since its early stages. In 2023, I also served as Chair of the Steering Committee for the Cardiology, Cardiac Surgery and Telemedicine Project.

How do you assess the contribution of Luxembourg to Mongolia's health sector?

The Luxembourg–Mongolia cooperation is a remarkable example of a long-term, consistent and strategic partnership. Rather than focusing on isolated projects, it has supported the gradual development of an entire system from basic diagnostic services to advanced cardiac care, telemedicine, and more recently prevention.

What makes this cooperation particularly valuable is that us been closely aligned with our national priorities. At each stage, Luxembourg's support has responded to clearly identified needs within the Mongolian health system. It has strengthened infrastructure, developed the skills of healthcare professionals, and introduced new approaches that have been fully integrated into our national policies and practices.

In what ways has this cooperation supported Mongolia's national health strategies?

Cardiovascular diseases are the leading cause of mortality in Mongolia. Addressing them is therefore a central pillar of our national strategy for non-communicable diseases. Luxembourg's support has directly contributed to this objective in several ways. First, it has improved access to quality care across the country, particularly through telemedicine. In a country as vast and sparsely populated as Mongolia, this has been a game-changer. It allows us to connect provincial hospitals with specialists in Ulaanbaatar and ensure earlier diagnosis and better management of patients.

Second, the cooperation has played a key role in developing national capacities, especially in cardiac surgery and specialised care. The progressive strengthening of the National Cardiovascular Centre is fully aligned with our ambition to build centres of excellence and reduce dependency on treatment abroad.

Finally, the growing focus on prevention supports our national priorities around early detection and addressing risk factors such as hypertension, unhealthy diets, and tobacco use.

What impact do you see on healthcare professionals and patients?

The impact is very tangible. For healthcare professionals, the cooperation has provided continuous opportunities for training, knowledge exchange, and professional development. Doctors and nurses across the country are now part of a national network, supported by telemedicine and common clinical standards.

For patients, the benefits are equally significant. Today, many people can receive diagnosis and treatment closer to home, without the need for costly travel to the capital—or abroad. This has reduced both the financial burden on families and inequalities in access to care.

Looking ahead, what are the key priorities for the future?

Our priority is to consolidate and expand the achievements made so far. The establishment of the new National Cardiovascular Centre will be a major milestone, enabling us to further improve quality of care, training and research. At the same time, we want to continue strengthening prevention and primary healthcare, as this is essential to reduce the long-term burden of cardiovascular diseases.

More broadly, we aim to build a resilient and integrated health system, in which innovation—including telemedicine—continues to support equitable access to health care across the country.

What makes this cooperation particularly valuable is its alignment with our national strategies.

A FOCUS ON RESULTS AND IMPACT

AN ANALYSIS BY DR TSEDEV-OCHIR

How have technologies and procedures evolved since the start of the Luxembourg–Mongolia cooperation? How many unnecessary patient referrals have been avoided thanks to telemedicine? And what progress has been made in cardiovascular care? These are important questions when assessing the impact of 25 years of cooperation. Dr Tumur-Ochir TSEDEV-OCHIR, Director General of Third State Central Shastin Hospital, reflects on the changes he has witnessed and the results achieved.

DR TSEDEV-OCHIR'S CV

After graduating from medical university in 1994, Dr Tumur-Ochir TSEDEV-OCHIR began his career as a pulmonologist at Shastin Central Hospital. He became Head of the Pulmonology Department in 2004, before serving as hospital Deputy Director and becoming General Director in 2013.

Over the course of his career, he has continued to develop his expertise through international training in hospital management and respiratory medicine, including in Taiwan, South Korea, Japan and Singapore. Since 2017, he has also served as President of the Mongolian Respiratory Society.

In recognition of his contribution to Mongolian healthcare, Dr Tsedev-Ochir has received several national awards, including the State Honoured Doctor Award in 2021. Under his 13 year leadership, Shastin Hospital has been recognised as a leading medical institution in Mongolia's health sector, receiving the award for outstanding performance for eight consecutive years.

5,311
CONSULTATIONS SINCE THE LAUNCH OF MNCARDIO IN 2012

-50%
OF UNNECESSARY PATIENT REFERRALS IN 20 YEARS

2,750
PACEMAKER IMPLANTATIONS BETWEEN 2008 AND 2025

1,260
ABLATION BETWEEN 2015 AND 2024

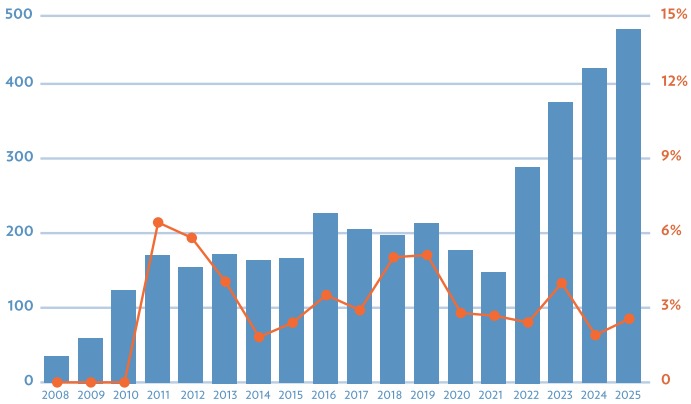
31,327
ANGIOGRAPHIES SINCE 2000 (2,328 JUST IN 2025)

19,677
STENT IMPLANTATIONS SINCE 2000 (1,657 IN 2025)

Expanding access to cardiac care

In 2003, 80.3% of patients were unnecessarily transferred to the National Cardiovascular Centre (NCC). By 2025, this figure had fallen to 38%, a reduction of more than half over two decades. Today, basic diagnostic services such as electrocardiograms, echocardiography and stress testing are routinely provided at local hospitals, allowing patients to receive care closer to home.

The successive projects implemented by LuxDev have also contributed to a steady increase in open-heart procedures, while mortality following surgery fell to 2.75% in 2025, including in complex cases. This reflects both the expansion of surgical capacity and improvements in the quality of care.



Annual number of open-heart surgeries and mortality at Shastin hospital between 2008 and 2025

Mortality
Open-heart surgeries

Interventional cardiology at the NCC

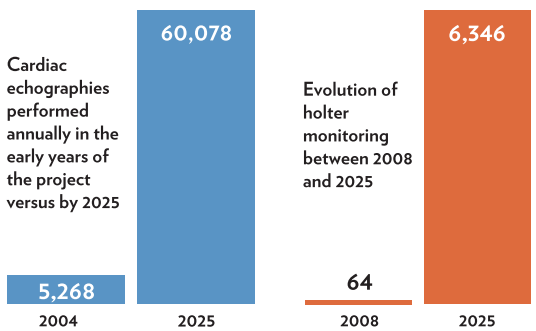
Over the past decade, interventional cardiology at the NCC has evolved considerably. Pacemaker implantation remains the most common procedure, with more than 2,750 implementations performed. At the same time, ablation procedures have grown significantly, with more than 1,260 carried out to date, making them an increasingly important part of arrhythmia management.

Overall, I would say we have evolved from a programme focused primarily on pacemaker implantations into a comprehensive centre providing a broad range of arrhythmia treatments and advanced structural interventions, positioning us as a national reference centre for interventional cardiology. Most medical treatments can now also be provided at local hospitals without requiring patients to travel to the NCC. Several hospitals have further developed their capacity to perform interventional procedures, including coronary angiography and percutaneous coronary intervention, with guidance and supervision from the NCC team. The expansion of coronary diagnostics and treatment illustrates this progress. In 2025 alone, more than 2,328 angiographies and 1,657 stent implantations were performed. Over the course of the cooperation, these figures have reached more than 31,327 angiographies and 19,677 stent implantations.

Cardiovascular diagnosis across the country The installation of echocardiography and Holter-monitoring equipment in 31 hospitals across Mongolia has made essential cardiac diagnostics much more accessible. Since the equipment was introduced, more than 475,000 cardiac echographies and over 32,000 Holter studies have been performed.

The number of echocardiograms performed each year has increased steadily, from around 5,000 in the early years of the programme to more than 60,000 in 2025. Holter monitoring, introduced a few years later, has followed a similar trajectory, increasing from just 64 studies in its first year (2008) to more than 6,346 in 2025.

These services have helped shift cardiac diagnosis from a highly centralised service that was difficult for many patients to access to a routine component of medical care in hospitals across the country. Earlier diagnosis means that heart conditions can be identified and treated sooner.



Building skills and expertise

Beyond the technology and procedures, we knew that enhancing the country's healthcare capacity was equally important. Therefore, a major focus was on human capital development.

Over the years, more than 20 different training and capacity-building activities have reached over 26,600 healthcare workers. Training was delivered through a combination of face-to-face activities and, increasingly from 2014 onwards, digital platforms. These proved particularly valuable during the COVID-19 pandemic.

The cooperation also supported 406 international training fellowships, giving Mongolian healthcare professionals opportunities to develop specialised expertise abroad and bring this knowledge back to the national health system.

As a result, expertise in cardiac care is now more widely distributed across Mongolia, strengthening both local services and the national referral system.

Reducing cardiovascular mortality

Reducing cardiovascular mortality has been a central objective of the cooperation. While the prevalence of cardiovascular disease has continued to increase, cardiovascular mortality has declined steadily.

Among the major disease categories, cardiovascular diseases have recorded the largest reduction in mortality, falling by 7.7 deaths per 10,000 population. By comparison, reductions for other leading causes of death have been around 1 death per 10,000 population. The ambition is to reduce cardiovascular mortality by a further 14 deaths per 10,000 population by 2030.

After 25 years of cooperation, the changes are visible not only in the number of procedures performed, but also in where and how patients receive care: more diagnoses are made locally, more treatments are available within Mongolia, and specialised expertise has become more widely distributed across the health system.