# PROJECT FOR STRENGTHENING MATERNAL AND CHILD HEALTH BY TELEMEDICINE SYSTEM ESTABLISHMENT

-NEWSLETTER -



# Telemedicine in Action in Bhutan through JICA Support





## A JOURNEY TOWARD HEALTH EQUITY

In August 2025, the 4 experts' mission was conducted by joining hands with Bhutan's Ministry of Health to enhance the project.

### CONNECTING MOTHERS, SAVING LIVES: FIELD VISITS IN BUMTHANG

The team visited Primary Health Centers (PHCs) in Sephu and Chumey to ensure the effective use of iCTG devices. Local health assistants (HA) shared inspiring stories, including one HA who had personally benefited from iCTG during her own pregnancy. These visits revealed the transformative potential of technology in early detection of pregnancy complications even in Bhutan's most remote valleys.



However, challenges such as unstable internet connections and limited transportation remain. But healthcare workers' commitment and skill growth show remarkable progress.



### BUILDING SKILLS, BUILDING CONFIDENCE

Hands-on training sessions in Bumthang brought together 18 healthcare professionals from central Bhutan on 22 August, 2025. They practiced reading iCTG data and operating the iCTG devices on-site, supported by the newly launched OpenKGUMSB online training platform of the Khesar Gyalpo University of Medical Science of Bhutan supported by JICA.

This blended learning model – combines digital lessons with practical workshops paving the way for sustainable, nationwide capacity building in iCTG use, operation, data interpretation and maintenance

### BRINGING TECHNOLOGY HOME: SERVER MIGRATION & e-PIS INTEGRATION

Server migration for 82 iCTG devices is underway, from Japanese servers to Bhutan's national data center. This will mark a milestone in digital sovereignty. The maintenance training including server migration was provided by Japanese experts for 26 biomedical engineers from across Bhutan in Bumthang on 22 August, 2025. After the completion of the server migration, Bhutan can manage and maintain its telemedicine systems independently.



Integration with the national e-PIS (electronic Patient Information System) is also underway, promising seamless sharing of maternal health data

### INSPIRING THE NEXT GENERATION OF NURSES-INTEGRATION OF PRIVATE COLLEGES



While the project has already provided equipment to the Faculty of Nursing and Public Health (FNPH) and introduced iCTG in its lectures, this time the project was introduced to private universities. Lectures and live demonstrations were held at Apollo Bhutan Institute of Nursing and Royal Thimphu College. Students were excited to explore how iCTG brings modern fetal monitoring directly into Bhutanese communities. Their enthusiasm reflected a growing spirit of innovation in Bhutan's future healthcare workforce.

#### SUSTAINING THE MOMENTUM

As the project moves toward completion in early 2026, focus is now shifting to sustainability. Bhutan's Ministry of Health, KGUMSB, and GovTech are taking charge of education, maintenance, and evaluation to ensure longterm success.

Plans are also underway for Al-assisted fetal monitoring and continued expansion of telemedicine services



The August 2025 mission showcased how strong partnerships between academia, government, and technology innovators can transform healthcare. Together, Bhutan and Japan are proving that compassionate technology can bring quality care to every mother, everywhere.

### FACING CHALLENGES, EMPOWERING REMOTE HEALTHCARE

On 25 August 2025, experts and health workers from Bhutan's most remote PHCs—Soe, Lingzhi, Merak, Sakteng, Lunana, and Laya—joined an online—onsite workshop to discuss how to improve iCTG use in the field.

Participants shared the real challenges they face: unstable internet, rapid battery loss, and limited training opportunities due to harsh geography and nomadic lifestyles.



Despite these barriers, they practiced operating and interpreting iCTG devices with renewed confidence, supported by the OpenKGUMSB online modules.

Each PHC committed to introducing iCTG monitoring from 26 weeks of pregnancy and to providing continuous feedback.

This workshop showed that even under the toughest conditions, Bhutan's health workers are turning challenges into opportunities—proving that distance and terrain are no match for compassionate technology

### SHARING BHUTAN'S STORY WITH THE WORLD - ICMH2025

The 9th International Conference on Medical and Health Sciences (ICMH 2025) in Thimphu supported by several organizations including JICA, Kagawa University (Japan) and Chiang Mai University (Thailand), featured Bhutan's first international Telemedicine Symposium. Experts from Kagawa University, KGUMSB, and the Ministry of Health presented case studies and shared lessons on telemedicine for maternal and child health. The symposium highlighted Bhutan's emerging use of digital health and innovative technology

The symposium concluded with a shared commitment to:

- Strengthen national telemedicine policies;
- Nurture future digital health leaders through academia-industry collaboration;
- Build sustainable networks linking Kagawa University, KGUMSB, and Chiang Mai University; and
- Integrate these outcomes into JICA projects to support institutionalization and selfreliant development in Bhutan.



#### VOICES OF IMPACT: MEDIA TOUR SHOWCASES ICTG SUCCESS IN BHUTAN



To raise public awareness about the growing role of telemedicine in maternal and child health, JICA Bhutan organized a media tour from 27–30 September, that brought together representatives from Kuensel, Bhutan Today, Business Bhutan, and the Bhutan Broadcasting Service (BBS).

The group visited the Genekha Primary Health Care Center and Paro Hospital,

where healthcare workers demonstrated how iCTG devices are being used to monitor pregnant women safely and efficiently. During the visit, reporters witnessed realtime monitoring of fetal heart rates and learned how the iCTG devices transmit data instantly to specialists in larger hospitals. Health workers shared stories of early complication detection that helped save mothers and babies in remote communities.



The participating media houses provided overwhelmingly positive feedback, highlighting iCTG as a "game-changer for maternal health" and a shining example of Bhutan's innovation in digital healthcare.

Following the tour, several outlets published feature stories showcasing the collaboration between JICA, the Ministry of Health, and Kagawa University.