

THE MATERNAL AND NEWBORN HEALTH THEMATIC FUND

Case Studies on
Strengthening Midwifery
Services to Avert
Maternal and Newborn
Deaths



Ensuring rights and choices for all since 1969





BANGLADESH

A new cadre of professional midwives is successfully meeting the needs of women, newborns and families.

Maternal deaths in Bangladesh fell nearly 61 per cent between 2000 and 2014.¹ Though such progress is encouraging in this densely populated country, each year, 176 women still die per 100,000 live births.¹ Only about 42 per cent of women give birth under the care of a skilled attendant.²

Since 2010, the Maternal Health Thematic Fund (MHTF) has supported the Government of Bangladesh in its pledge to train an additional 3,000 midwives and double the share of births attended by a skilled health professional. Bangladesh has launched two new midwifery programmes: a six-month certificate in midwifery for nurse-midwives and a three-year, direct-entry midwifery diploma programme.

Midwifery successes backed by the MHTF have been leveraged to attract additional funding, garner enhanced public policy commitments and engage all relevant stakeholders. The results: significant improvements in maternal and newborn health, and declines in mortality and morbidity.

Key Implementation Strategies



Education

In 2013, the MHTF supported the launch of a three-year, direct-entry diploma midwifery programme, starting with a yearly intake of 525 students. The number has gradually increased to 1,625 across 54 public and private midwifery schools that meet all standards of the International Confederation of Midwives (ICM) and the World Health Organization (WHO). In 2016, members of the first class were licensed. That same year, 1,200 midwives certified under the a six-month post-basic course were successfully deployed to health facilities across the country. Currently, there are 1,600 certified midwives and 1,883 midwives with a three-year diploma. The first batch of 600 diploma midwives was deployed in July 2018. To strengthen clinical skills, UNFPA has sponsored over 1,500 midwifery graduate internships at 110 sub-district hospitals. During their internship, Interns have delivered over 13,757 babies and provided 30,000 women with family planning methods. To build the capacity of midwifery faculty members, 90 faculty from 38 institutes enrolled in a two-year master's programme on sexual and reproductive health through Dalarna University in Sweden. To date, UNFPA has supported over 38 midwifery education institutions with teaching and learning aids across Bangladesh.

MHTF Activity Timeline

-
- Direct-entry diploma programme planned.
 - Started development of midwifery curriculum.
 - Teaching materials, models and textbooks procured, and nursing educational programmes expanded to include midwifery.
 - Bangladesh Midwifery Society formed.
 - 525 students enter the midwifery diploma programme.
 - 25 teachers trained for three-year midwifery diploma.
 - 15 centres assessed for midwifery education.
 - Continued development of midwifery curriculum, teaching materials and textbooks.
 - Midwifery Strategy Workshop inaugural meeting.
 - Midwifery appears in the Health Sector Plan.
 - Capacity-building for service providers on midwifery, including post-basic training.
 - 500+ nurses had received post-basic training on midwifery and returned to their health facilities.



Association

In response to the Government's commitment to introduce a new cadre of professional midwives, the Bangladesh Midwifery Society was established in 2010. Today, the society has grown to include 1,100 members across the country and is a member of the International Confederation of Midwives. The Association plays a key role in raising the visibility of the midwifery profession during advocacy events such as celebrations of the International Day of the Midwife.



Policy and Regulation

The MHTF has assisted with the development of critical midwifery policies and regulations, including: licensing exam guidelines and registration guidelines for new graduates, a code of ethics and standard operating procedures.

In 2016, "Deployment of midwives" was selected by the Ministry of Health and Development Partners as a disbursement linked indicator. Additionally, the Strategic Investment and Project Implementation Plan for the next Bangladesh Health Sector Strategy 2017-2021 incorporates midwives as a cadre to fill gaps in vital maternal newborn and child health care. The Bangladesh Nursing and Midwifery Act was approved by the Parliament and launched in 2016.

- First International ICM Midwife Award is won by Bangladesh.
- National human resources for health plan finalized with midwifery included.
- Ongoing support for three-year diploma programme.

- 1,200 certified nurse-midwives deployed.
- Midwives strengthen quality emergency obstetric and neonatal care (EmONC) services.
- "Deployment of midwives" selected by the Ministry of Health as a development aid indicator.
- Nursing and Midwifery Act approved.

2014

2015

2016

2017/2018

- First batch of three-year diploma graduates!
- By the end of 2015, 1,600 certified midwives had been trained.

- EmONC mentorship programme established.
- Midwives engaged in maternal death surveillance and response.
- First batch of 600 midwives with three-year diplomas deployed.



Humanitarian Aid

Bangladesh experienced five different humanitarian crises just in 2017, including a major refugee influx, large landslides, major flooding and a devastating cyclone. Through non-governmental organizations, 130 midwives were deployed to strengthen the humanitarian response. The midwives work in and around refugee camps, and in remote coastal areas regularly hit with damaging cyclones. Through their work, the lives of the most vulnerable women and children continue to be saved. Midwives have distributed over 4,000 clean delivery kits; conducted over 30,000 antenatal care visits, 3,000 postnatal care visits and 1,000 deliveries; and referred over 200 cases of obstetric emergencies.

Catalytic Impact on Maternal Health

Maternal Health Indicators

INDICATOR	2011	2014
Maternal mortality ratio	237 per 100,000 live births (2011) ¹	176 per 100,000 live births (2015) ¹
Percentage of births with skilled attendant	32% ³	42% ²
Percentage of pregnant women with four-plus antenatal care visits	26% ³	31% ⁴
Percentage of institutional delivery	29% ³	37% ⁴
Postnatal care for mothers	27% ³	34% ⁴



Catalytic Funding

MHTF support for midwifery has catalysed additional funding since 2010.

DONOR	PROJECT YEARS	FUNDING (FISTULA AND EmONC)	MIDWIFERY	TOTAL BUDGET*
MHTF	2011-2018	569,769	106,542	676,311
UNFPA regular resources	2011-2018	3,727,236	1,784,297	5,511,533
Government of Canada	2011-2016	3,689,425		6,149,043
	2017-2022	1,950,000	6,300,000	12,500,000
Government of Sweden	2015-2016		1,085,466	1,085,466
	2017-2021	710,000	5,104,306	6,827,883
Government of the United Kingdom	2016-2021		7,606,950	7,606,950
	2018-2022	2,302,206	150,000	10,381,944
Humanitarian funds (multiple donors**)	2015-2018	5,517,121	1,839,040	9,195,203

*Total budget includes the budget for all UNFPA mandated programme areas and not only MHTF focus areas.

**The governments of Australia, Canada, China, Denmark, Japan, New Zealand, the Republic of Korea and the United Kingdom; the United Nations Central Emergency Response Fund, the Swedish Association for the UN and UNFPA emergency funds.

1 WHO, United Nations Children's Fund, UNFPA, World Bank Group and United Nations Population Division Maternal Mortality Estimation Inter-Agency Group. Maternal Mortality in 1990-2015. Bangladesh. http://www.who.int/gho/maternal_health/countries/bgd.pdf.

2 United Nations Statistics Division. Millennium Development Goals Database. <http://data.un.org/Data.aspx?d=MDG&f=seriesRowID%3A570>

3 National Institute of Population Research and Training. Bangladesh: Demographic and Health Surveys 2011. Dhaka, Bangladesh. <https://dhsprogram.com/pubs/pdf/fr265/fr265.pdf>.

4 National Institute of Population Research and Training. Bangladesh: Demographic and Health Surveys 2014. Dhaka, Bangladesh. <https://dhsprogram.com/pubs/pdf/FR311/FR311.pdf>.

Acknowledgements

This case study was produced in collaboration with the UNFPA Sexual and Reproductive Health Branch and the Bangladesh Country Office with inputs from the following technical experts: Rondi Anderson, Technical Specialist Midwifery UNFPA Bangladesh and Geeta Lal, Senior Technical Advisor and Global Midwifery Programme Coordinator, Technical Division, UNFPA New York

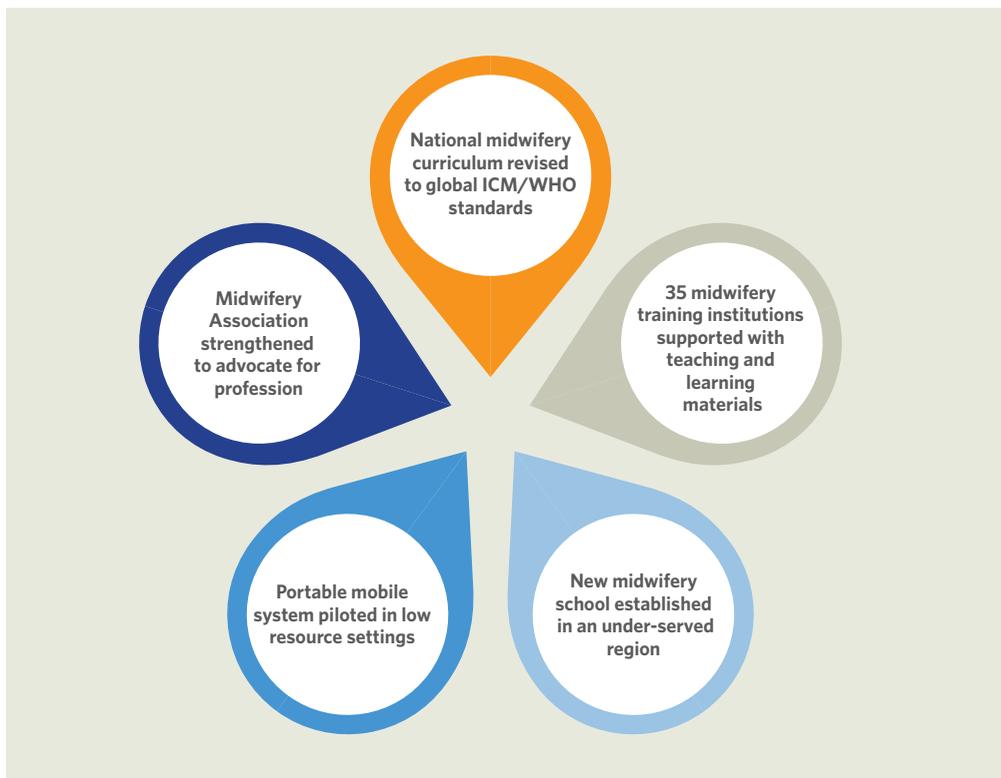
Photo credits: UNFPA Bangladesh



ETHIOPIA

In less than a decade, the number of midwives increased 10 times, while the maternal mortality ratio fell by 40 per cent.

In 2009, Ethiopia had only 1,275 midwives caring for a population of over 85 million people.¹ This critical shortage contributed to some of the highest maternal and newborn death rates in the world. Through the support of the Maternal Health Thematic Fund (MHTF), policy changes were implemented and resources mobilized from other partners. A sharper focus on training midwives included scaling up quality midwifery education. Today, 12,069 midwives are equitably distributed across Ethiopia. The maternal mortality ratio has fallen over 40 per cent between 2008 and 2015.²



Key Implementation Strategies



Accelerated Midwifery Training Programme

Starting in 2009, along with the Swedish International Development Agency (Sida), the MHTF supported the Accelerated Midwifery Training Programme to improve access to quality reproductive health services in remote areas. Between 2011 and 2015, the MHTF helped train 4,471 midwives in 15 health science colleges across six regions, aiding Ethiopia's targeted drive to train 8,635 midwives under the UN Secretary-General's Global Strategy for Women and Children's Health. A performance assessment in 2016 found that 99 per cent of all programme graduates had been deployed in 3,500 health centres across the country. A vast majority of centres now have two or three midwives; and the total numbers of antenatal visits and deliveries at centres have seen significant increases in normal deliveries.



A Portable Mobile Learning System - An Innovative Approach

In 2016, Ethiopia piloted a **Mobile Learning System** that provided a simple, portable and cost-effective solution for training health workers in low resource and rural settings. By the end of 2017, 80 training sessions had reached over 1,500 participants in seven training sites (two universities and five health centres). A particular success was that rural health workers, who otherwise struggle with poor infrastructure, a lack of electricity and limited Internet connectivity, were able to get world-class training. Multimedia e-learning modules covered key obstetric emergencies, family planning and antenatal care. Trainings on danger signs in pregnancy, acute watery diarrhoea and nutrition were conducted to raise awareness among community members. Based on the success of the pilot, the national Government is scaling up the mobile learning system across several new in-service training and mentorship sites.

Enabling Providers in Rural and Low-Resource Areas to Deliver Lifesaving Interventions



691
Midwives
and students trained



318
Community health-care
workers and nurses



506
Community members,
mostly pregnant women

Advocacy

The annual celebration of the International Day of the Midwife galvanizes awareness and support from policymakers and donors. In 2008, the MHTF was the only funder of the celebrations, but it has since been joined by the World Health Organization (WHO), the United States Agency for International Development (USAID), Jhpiego, the United Nations Children's Fund (UNICEF), Save the Children and the International Center for AIDS Care and Treatment Program. The MHTF helped catalyze engagement by highlighting the importance of midwifery education and provision of midwifery services in reducing maternal mortality. The annual celebrations have helped bring all relevant stakeholders together and build political commitment.

Association

MHTF technical and financial support has helped strengthen Ethiopia's Midwifery Association so it can play key roles in advocacy, continuous professional development, resource mobilization and monitoring the quality of care. UNFPA assisted it in drafting, implementing and evaluating its Strategic Plan. The association previously had very limited funding and only three staff members. Through continuous investment and capacity building by the MHTF, it now has a staff of 35 members, a membership of 5,500 midwives, an operating budget of over \$500,000, and partners including WHO, USAID, UNICEF, Jhpiego, Save the Children and Maternity Worldwide. The Association leads celebrations of the International Day of the Midwife each year, and conducts in-service trainings on topics such as respectful maternity care and basic emergency obstetric care.

Policy and Regulation

The MHTF participated in the development of the Ethiopia National Reproductive Health Strategy 2010-2015, the Road Map for the Reduction of Maternal Mortality and Morbidity 2016-2020, and the Road Map for Midwifery Education and Service Quality 2016-2025. It has also supported the development of midwifery clinical care standards and licensure exam standards to ensure that all midwives are competent in providing quality care to mothers and their newborns.

Impact on Maternal Health

INDICATOR	2011	2016
Total population	90 million ¹	102.4 million ¹
Maternal mortality ratio	482 per 100,000 live births ²	353 per 100,000 live births (2015) ²
Neonatal mortality ratio	3,780 per 100,000 live births ³	2,760 per 100,000 live births ³
Skilled birth attendance	10% ⁴	28% ⁵
Institutional delivery	10% ⁴	26% ⁵
Number of midwives	1,275	12,069
Number of schools supported	8	35
Contraceptive prevalence rate	28.6% ⁶	35.9% ⁶

Catalytic Impact

The MHTF has collaborated with other United Nations Health Agencies (H6) and NGOs to strengthen midwifery education and services. Additional funds were mobilized from Sida and further supplemented by UNFPA regular resources to further scale up quality midwifery education.

	Total funding	Duration
MHTF	\$11,264,017	2009-2017
Sida	\$3,800,000	2010-2014
H6	\$2,247,000	2013-2017
UNFPA regular resources	\$125,000	2017

1 The World Bank DataBank. Population, total. <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=ET>.

2 The World Bank DataBank. Maternal mortality ratio (per 100,000 live births). <https://data.worldbank.org/indicator/SH.STA.MMRT?locations=ET>.

3 The World Bank DataBank. Maternal mortality ratio (per 100,000 live births). <https://data.worldbank.org/indicator/SH.STA.MMRT?locations=ET>.

4 Central Statistical Agency. Ethiopia: Demographic and Health Survey 2011. Addis Ababa, Ethiopia. <https://dhsprogram.com/pubs/pdf/FR255/FR255.pdf>.

5 Central Statistical Agency. Ethiopia: Demographic and Health Survey 2016. Addis Ababa, Ethiopia. <https://dhsprogram.com/pubs/pdf/FR328/FR328.pdf>.

6 The World Bank DataBank. Contraceptive prevalence, any methods (percentage of women aged 15 to 49). <https://data.worldbank.org/indicator/SP.DYN.CONU.ZS?locations=ET&view=chart>

Conclusion

Ethiopia has used innovative approaches to midwifery education as part of a national commitment to substantially increase the number of midwives. Close attention to regulation and support provided by the Midwives Association are gradually leading to improvements in the quality of care offered by newly trained midwives to mothers and their newborns.



Acknowledgements

This case study was produced in collaboration with the UNFPA Sexual and Reproductive Health Branch and the Ethiopia Country Office with inputs from the following technical experts: Dorothy Lazaro and Aster Berhe, Country Midwife Advisors UNFPA Ethiopia and Geeta Lal, Senior Technical Advisor and Global Midwifery Programme Coordinator, Technical Division, UNFPA New York
Photo credits: UNFPA Ethiopia



SOUTH SUDAN

Strong early successes of the MHTF propelled funding and national commitment for midwifery and maternal health in a fragile humanitarian context.

Though maternal mortality has fallen over 55 per cent in South Sudan since 1990, it still has some of the world's worst maternal health indicators. The United Nations estimated mortality rate in 2015 was an alarming 789 women per 100,000 live births, the fifth highest rate globally. The lifetime risk of maternal death is 1 in 26 compared to 1 in 6,000 in high-income countries. Girls aged 15 to 19 years old continue to die, predominantly from maternal causes.

In 2011, South Sudan had only 12 fully qualified midwives. With UNFPA and partner support, there are now over 600 fully trained midwives, but they still meet only around 10 per cent of the need. A context of ongoing conflict, a rapidly depreciating currency, economic and food crises, and deteriorating health infrastructure presents significant challenges.

Despite these obstacles, the leveraging of support from UNFPA's Maternal Health Thematic Fund (MHTF) has secured over \$77 million in additional funding for midwifery from a multitude of sources, including the governments of Australia, Canada and Sweden. Overall, South Sudan is an incredible example of how early MHTF seed funding can catalyse much greater resources and international commitment to fuel larger programmes and strengthen health systems.

MHTF Activity Timeline

- UNFPA/ICM (International Confederation of Midwives) Programme is launched by MHTF.
- First midwifery diploma programme established at Juba College of Nursing and Midwifery in collaboration with the Real Medicine Foundation and St. Mary's Isle of Wight.
- The MHTF recruits two international midwifery specialists to build national capacity in midwifery.
- Australian AID extends support for deploying international UN Volunteer midwives.
- The Strengthening Midwifery Services Project is launched with Canadian International Development Agency support of CAD 19.5 million (2012-2016).
- Diploma Midwifery Curriculum approved by the Ministry of Health; over 200 students are enrolled.
- Four national training institutes supported and fully equipped with educational and learning materials. Nine tutors trained in the United Republic of Tanzania.

2009-2010

2011

2012

2013

- 18 UN Volunteer midwives deployed to hospitals in all 10 states.
- First International Day of the Midwife celebrated.
- National and subnational nursing and midwifery associations launched.
- Finalization of diploma midwifery curriculum.
- 16 midwifery students commence studies in Uganda.
- First major stakeholder consultation on midwifery regulations held.
- Four UN Volunteer tutors deployed at training institutes.

- Over 270 students enrolled in nursing/midwifery training programmes.
- The Deploying Midwives Project (2013-2017) launched, mobilizing CAD 10.6 million from the Government of Canada for deploying 30 international midwives.
- Midwives and Nurses Association holds first nationwide conference with over 390 participants.
- EmONC needs assessment conducted with CAD 3.1 million in funding from the Government of Canada

- An additional six national tutor/mentors trained in Tanzania through South-South collaboration and deployed at health sciences institutes in South Sudan.
- Regional emergency obstetric and neonatal care (EmONC) investment plans developed through nationwide consultations.
- Progress evaluation conducted for the Strengthening Midwifery Services Project.

- Phase II of the Strengthening Midwifery Services Project is funded by the governments of Canada (CAD 50 million) and Sweden (SEK 85 million).
- Midwifery is dubbed a key priority of the Government of South Sudan; midwives are listed as a key health cadre for strengthening under the Health Policy 2016-2026.
- National workshop on maternal death surveillance and response held for 35 health workers; advocacy session conducted with 30 parliamentarians.

2014

2015

2016

2017

- 64 per cent of national midwifery schools are following ICM standards.
- Nursing and Midwifery Strategic Plan (2014-2018) is launched.
- Cost extension approved for deploying 15 national midwives for CAD 3.1 million.
- Partnership established with the Canadian Association of Midwives for strengthening the South Sudan Midwifery Association.

- 339 midwives and 89 nurses have been trained with support from UNFPA.
- Over 80 per cent of graduates are placed in facilities across South Sudan.
- Second National Nursing and Midwifery Conference held with over 400 participants.
- 14 students are given scholarships for bachelor's and master's degrees in Kenya.
- Five students commence training as tutors in Tanzania.

Catalytic Impact

The MHTF backed substantial development in health human resource capacity by expanding midwifery education in South Sudan. In 2010, the first diploma midwifery programme was established at the Juba College of Nursing and Midwifery. Soon after, in 2011, the first Diploma Midwifery Curriculum and Education Standards were finalized and launched. In parallel, 16 South Sudanese students were sent to Uganda to pursue midwifery training as part of an overseas scholarship programme. Additional funding from the governments of Australia, Italy and Sweden provided maternal health supplies to improve skills laboratories and libraries for midwifery teaching in hospitals.

In 2011, 18 UN Volunteer midwives were deployed across all 10 states of South Sudan; this marked the beginning of a series of midwife deployments across the country. In 2011, the South Sudan Nurses and Midwives Association was established, and the International Day of the Midwife was celebrated for the first time in the country.

These initial successes catalysed substantial funding from international donors, starting in 2012:

- Canada provided CAD 19.5 million to launch the Strengthening Midwifery Services Project (2012-2016). Under it, UNFPA helped train 339 midwives and 89 nurses. To date, over 80 per cent of graduates have been deployed across South Sudan. Ten state-level nursing and midwifery associations have been established.

- Canada provided CAD 10.6 million to launch the Deploying Midwives Project (2013-2017). This investment funded the deployment of 30 international midwife volunteers to hospitals throughout all 10 states. A cost extension in 2015 of CAD 3.1 million resulted in the deployment of 15 national UN Volunteer midwives.

- The governments of Canada and Sweden jointly came together in 2015-2016 to fund Phase II of the Strengthening Midwifery Services Project. It aims to improve midwifery education and strategic nationwide availability of comprehensive gender-responsive maternal and child health services.

Midwifery Funding



2016-20: CAD 50million (approx. US \$40million) for Strengthening Midwifery Services Project Phase II



2015-2018: SEK 85 million (approx. US \$10 million) for Strengthening Midwifery Services Project Phase II

Other Maternal Health Funding

2012-16: CAD 3 million for an EmONC needs assessment and maternal mortality survey

2011 -2013: US \$731,000 for equipping maternal health hospitals and health facilities

Progress and Results

Since MHTF involvement began in 2009, visible progress has been made on maternal health indicators through direct support and the catalytic engagement of partners.

INDICATOR	January 2010	January 2018
Number of professional midwives trained on ICM essential competencies	12	Over 600 (UNFPA has trained 339 and supported others)
Number of voluntary applicants for the annual intake in midwifery schools	Less than 20	Over 150
Number of health sciences institutes with professional midwifery training programmes	0	16
Midwifery education curriculum based on ICM standards	No	Yes
Functional midwifery association	No association in place	National and 14 state chapters established and functional
Number of members (nurses and midwives) registered in the midwifery association	Not applicable as association was not established	906
Association has a costed strategic plan	Not applicable	Yes
Midwifery regulations/ regulatory framework	No regulations in place	Final draft regulations submitted to the Ministry of Justice
Number of midwives trained in leadership and management	0	22
National midwifery strategic plan	No	Updated costed plan completed
Number of midwifery policies issued by the Government	0	4
United Nations Volunteer midwives deployed in service delivery sites as clinical mentors	0	42
Midwifery integrated in UNFPA South Sudan country programme	Few activities included in workplan	Midwifery is a key indicator in the UNFPA Country Programme 2019-2021
Maternal mortality rate ¹	876	789 (2015)

1 WHO, United Nations Children's Fund, UNFPA, World Bank Group and United Nations Population Division Maternal Mortality Estimation Inter-Agency Group. Maternal Mortality in 1990-2015. Bangladesh. https://www.unfpa.org/sites/default/files/pub-pdf/9789241565141_eng.pdf

Acknowledgements

This case study was produced in collaboration with the UNFPA Sexual and Reproductive Health Branch and the South Sudan Country Office with inputs from the following technical experts: Gillian Butts-Garnett, Technical Specialist Midwifery UNFPA South Sudan and Geeta Lal, Senior Technical Advisor and Global Midwifery Programme Coordinator, Technical Division, UNFPA New York | Photo credits: UNFPA South Sudan



With strong financial and technical support from UNFPA's Maternal Health Thematic Fund (MHTF), professional midwifery programmes have been introduced in over 65 developing countries over the past decade in collaboration with the International Confederation of Midwives and other global partners and national governments.

Three case studies from Bangladesh, Ethiopia and South Sudan document the significant catalytic impact the MHTF has had in strengthening midwifery education, associations, regulations and policy. Impressed by the results and outcomes of the midwifery programme and the strategic direction provided by the MHTF in comprehensively addressing maternal mortality and morbidity, national governments have increased their commitment and additional donors and partners have stepped in, thereby bringing financial stability and sustainability and influencing national scale-up of the midwifery programme in several countries.



Ensuring rights and choices for all since 1969

United Nations Population Fund
605 Third Avenue
New York, NY 10158
www.unfpa.org

February 2019

These case studies were developed by the Sexual and Reproductive Health Branch (SRHB) in the Technical Division of UNFPA under the leadership of Anneka Knutsson, Chief SRHB and Geeta Lal, Senior Technical Advisor and Global Midwifery Programme Coordinator in collaboration with UNFPA Country Offices in Bangladesh, Ethiopia and South Sudan.