<u>Executive Summary</u>:

The Status of
Community Based Health Workers
in Rural Bangladesh

INTRODUCTION

Bangladesh has made tremendous strides in maternal and child health over the last thirty years. Still more than 7,300 mothers and 113,884 newborns died in Bangladesh in 2008 mainly due to inadequate care around the time of childbirth (1). The country does not have enough skilled birth attendants and 73% of deliveries occur at home without proper assistance. About half of the neonatal deaths occur in the first day of life and about three quarters in the first week, mostly from preventable causes. In addition, Bangladesh has one of the world's highest malnutrition rates, and coverage for treatment of common diseases is low.

Studies have shown that home-based newborn care interventions can prevent 30–60% of newborn deaths in high mortality settings under controlled conditions. Therefore, WHO and UNICEF now recommend home visits in the baby's first week of life to improve newborn survival. Community health workers (CHWs), especially those trained in essential newborn care (ENC) can save the lives of children. In a Joint Declaration entitled "Home visits for the newborn child: A strategy to improve survival", the WHO and UNICEF focused on the need for health workers trained in essential newborn care. The Joint Statement recommends home visits by workers trained in essential newborn care in the first week of a baby's life to improve newborn survival. ENC is comprised of very simple behaviours and practices for all newborns (e.g. thermal/hygienic care, breastfeeding, etc.), that can easily be implemented at home. ENC is included in the National Neonatal Health Strategy, and integrated into Bangladesh's recent Health Population and Nutrition Sector Development Program 2011 – 2016.

Maternal and neonatal health statistics show that there is a need for more health workers serving their local communities across Bangladesh, but there has never been a clear picture of how many community health workers there are in Bangladesh, who deploys them and in which areas. The report which accompanies this Executive Summary, entitled "The Status of Community Based Health Workers in Rural Bangladesh" is a first step towards identifying the number of rural community health workers in Bangladesh and providing data on those trained in essential newborn care. It provides data on the number of workers and identifies them by type. The report includes breakouts for government and non-government workers and identifies those funded by large time-bound programs (i.e. large-scale, government supported mother and child health programs) in addition to routine and sustained community-level workers. Above all, the goal of this report is to identify needs in rural Bangladesh, to aid the Government of Bangladesh (GoB) and donors in future program planning to reduce maternal and newborn mortality.

The report findings are based on secondary data analysis. The Ministry of Health & Family Welfare (MOH&FW) has endorsed this data collection process which relied entirely on the cooperation of the GoB, non-governmental organizations (NGOs) and other stakeholders. The focus was on rural, community-based health workers; urban areas have not been included. Trained ENC workers in this analysis are defined as those health workers receiving a minimum 2-day ENC training, often part of more comprehensive training. The analysis did not include volunteers or untrained community mobilizers as CHWs.
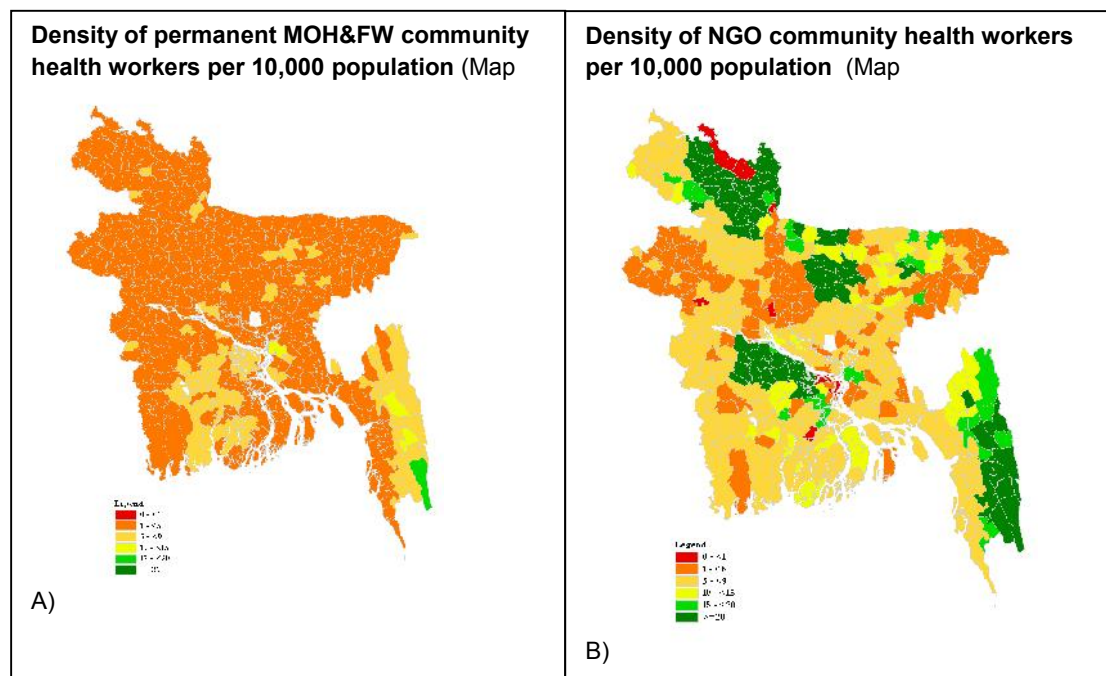
OVERALL RESULTS
Community Health Workers
The study showed that Ministry of Health & Family Welfare (MOH&FW) health workers are deployed in a relatively equitable manner in rural Bangladesh, albeit at a low level. NGO workers and those who are employed as part of large-scale, government supported mother and child health programs (for example MNCH &MNCS programs (3)) are generally employed in large numbers in specific areas. As a result, the overall density of community health workers in rural Bangladesh ranges from 22.5 CHWs per 10,000 people in Rangpur to 9.3 CHWs per 10,000 in Rajshahi.

With a few exceptions that are apparent largely at the upazila level, MOH&FW government health workers are deployed in an even handed manner across Bangladesh (Map A). Disparities in the density of community health workers among divisions and upazilas are generally caused by specific programs (Map B), especially the large-scale maternal and neonatal health programs run by the government in conjunction with multilateral donors, UN agencies and BRAC.

Density of permanent MOH&FW community health workers per 10,000 population (Map A)

Density of NGO community health workers per 10,000 population (Map B)

Community Health Workers Trained in Essential Newborn Care

Studies show that home based ENC can reduce neonatal mortality. In rural Bangladesh, around 67,000 community health workers are trained in ENC. As a result of NGO programs (e.g. BRAC) and government-led maternal and child health programs, 51,000 of these ENC trained health workers are concentrated mostly in Dhaka and Rangpur Divisions. Nationwide, only thirty-eight percent of CHWs in rural Bangladesh are trained in essential newborn care.

Density of All ENC trained Community Health Workers per 10000 population

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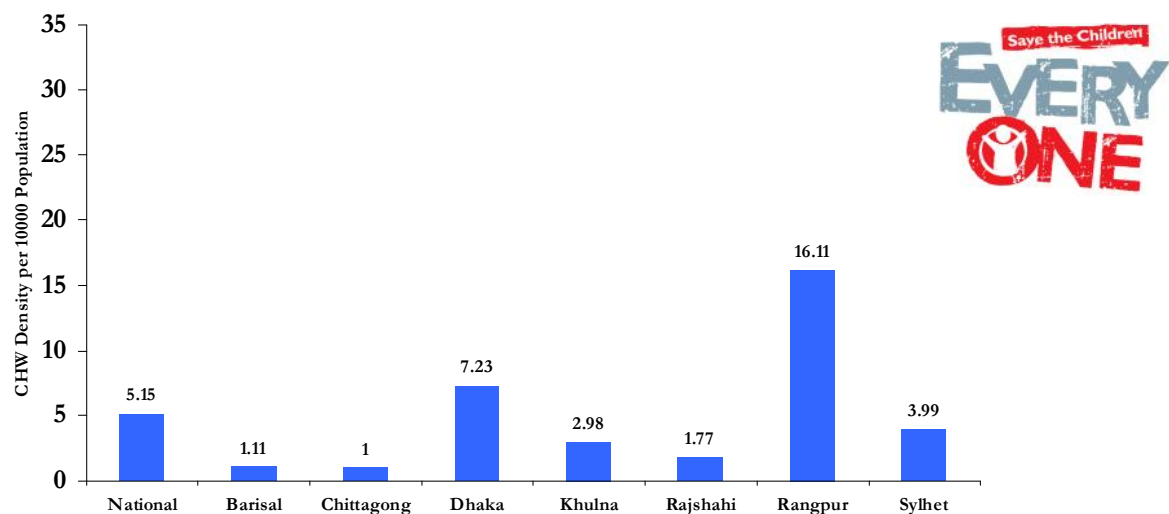
All Community Health Workers, Including Those Trained in Essential Newborn Care

The chart below provides a summary of the density of all community health workers in Bangladesh. There are 4.3 MOH&FW CHWs per 10,000 population. Taking into account programmtic, time-bound workers, this number climbs to 9.3 CHWs per 10,000, spread unevenly across rural Bangladesh. The density of MOH&FW health workers trained in ENC, at 1.2 workers trained in ENC per 10,000 is relatively low. When factoring in time-bound, programmic health workers, this number rises to 3.9 ENC trained CHWs per 10,000.
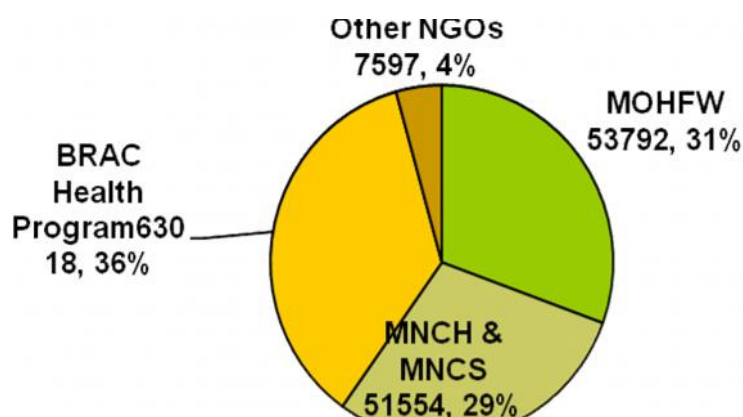
Community Health Worker Density
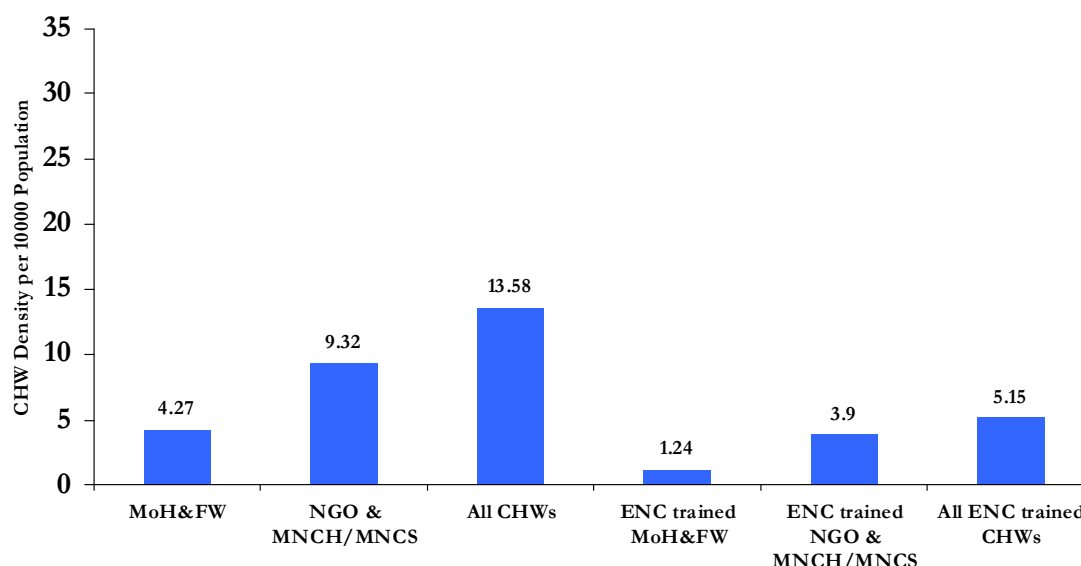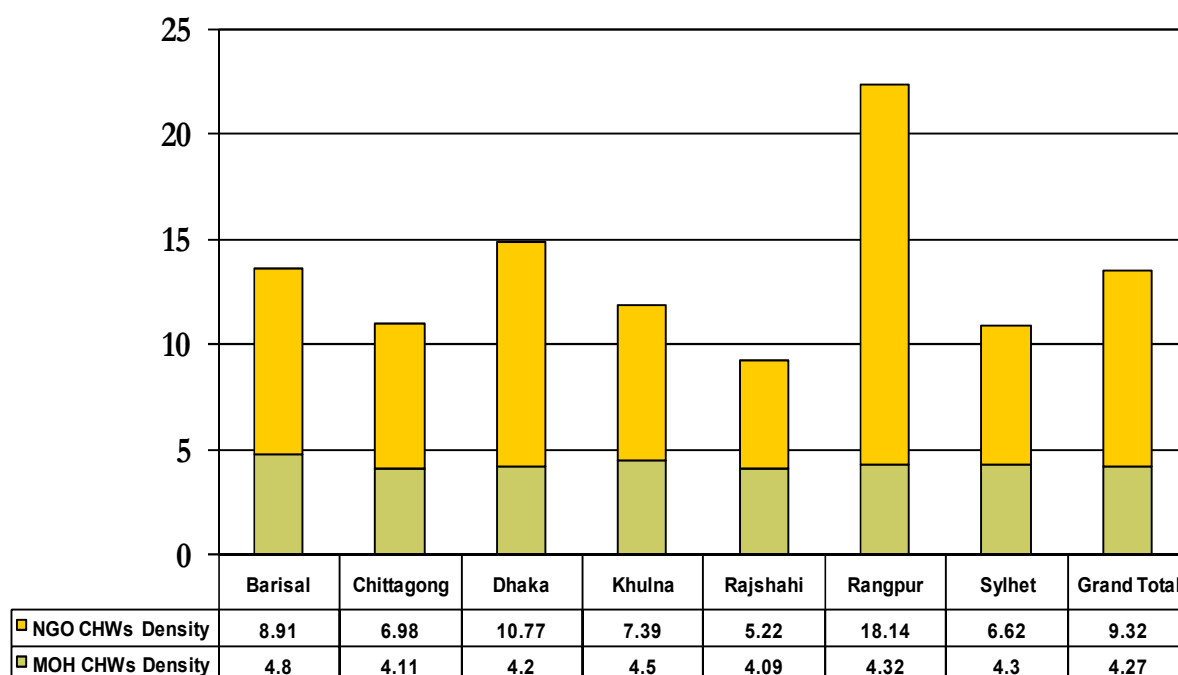

REPORT FINDINGS

There are around 174,000 community health workers deployed across Bangladesh. The MOH&FW provides around 54,000 (31%) permanent healthcare workers, and another 52,000 (29%) temporary community health workers via the donor supported MNCS and MNCH programs that are implemented by UNICEF and BRAC. BRAC, by far the largest NGO working in this area, supplies around 63,000 CHWS (36%) through its routine health service program (excluding BRAC health workers deployed as part of the MNCH program), and other NGOs around 6,000 or 4%.

Community Health Workers in Rural Bangladesh

MOH&FW Community Health Workers

MOH&FW community health workers are deployed in a relatively even-handed manner across Bangladesh. The chart below shows that the GoB's Ministry of Health and Family Welfare has around 4.3 health workers per 10,000 people working in rural Bangladesh. The lowest density is in Rajshahi Division (4.1 per 10,000) and the highest density of health workers is in Barisal division (4.8 per 10,000). The unevenness in the distribution is largely a result of programmatic, time-bound community health workers, employed by NGOs and the government of Bangladesh.

|	Barisal	Chittagong	Dhaka	Khulna	Rajshahi	Rangpur	Sylhet	Grand Total
▢ NGO CHWs Density	8.91	6.98	10.77	7.39	5.22	18.14	6.62	9.32
▢ MOH CHWs Density	4.8	4.11	4.2	4.5	4.09	4.32	4.3	4.27

The table below highlights the situation of MOH&FW community health workers at the upazila level. Narayanganj Sadar in Dhaka Division has 1.9 MOH&FW health workers per 10,000. Four other upazilas: Keraniganj and Narsingdi Sadar (Dhaka Division), as well as Kachuaand Cox's Bazar (Chittagong Division) however around 2 MOH&FW health workers per 10,000. Three upazilas in Bandarban district have more than 9.8 permanent government CHWs per 10,000. One, Thanchi upazila, has more than 17 and one, Rowangchhari, has nearly 11. Higher than expected CHW density in some upazilas of Chittagong Division mainly in the hill tracts is due to a lower general population density, which results in higher proportion of health workers to population (not numbers of health workers).

MOH&FWCHW Density by Upazila							
Bottom 5 Upazilas				**Top 5 Upazilas**			
Division	**District**	**Upazila**	**Density**	**Division**	**District**	**Upazila**	**Density**
Dhaka	Narayanganj	Narayanganj Sadar	1.86	Chittagong	Bandarban	Thanchi	17.4
Dhaka	Dhaka	Keraniganj	2.09	Chittagong	Rangamati	Rangamati Sadar	11.1
Chittagong	Chandpur	Kachua	2.20	Chittagong	Bandarban	Rowangchhari	10.6
Dhaka	Narsingdhi	Narsingdi Sadar	2.24	Chittagong	Chandpur	Matlab	10.4
Chittagong	Cox's Bazar	Chakaria	2.33	Chittagong	Bandarban	Ruma	9.8

Save the Children

Density of NGO Community Health Workers by Division & Upazila

Many of the community health workers in rural Bangladesh are deployed as part of time-bound programs that were developed in response to specific needs. They are often affiliated with NGOs or are part of the Government supported MNCH and MNCS programs. Nationally, on average, there are around 9.3 of these programmatic community health workers (CHWs) per 10,000 people but these are highly concentrated in certain divisions. With five (5.2) community health workers per 10,000, Rajshahi Division has the fewest NGO&MNCH, MNCS community health workers per capita and Rangpur Division, with around 18 CHWs per 10,000 population has the highest density.
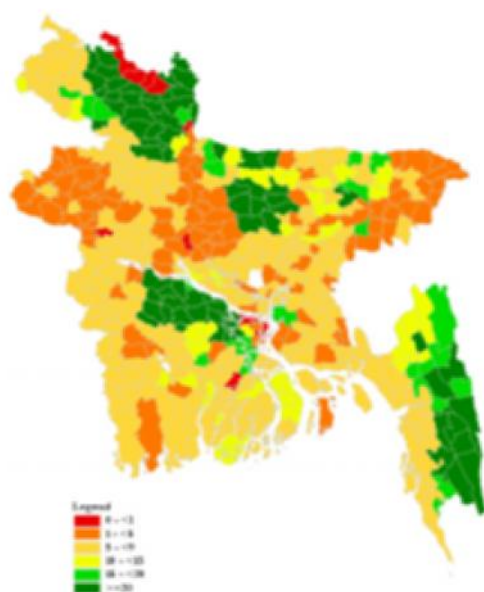
This map shows the project-driven deployment of health workers in Bangladesh. The NGO community health worker average density across Bangladesh is 9.3 CHWs per 10,000. As the map shows, their deployment across Bangladesh is uneven as these workers are deployed as part of specific programs. While the upazilas with the most NGO community health workers are largely clustered in the western portion of the Chittagong Division and in Rangpur Division, it is worth noting that Bagatipara upazila in Rajshahi Division has a CHW density of 0 as does Char Rajibpur (Rangpur Division) and Jhalakathi Sadar (Barisal Division). Two upazilas in Lalmonirhat District in Rangpur Division, Aditmari and Patgram with densities of 0.4 and 0.5 respectively, round out the bottom five.
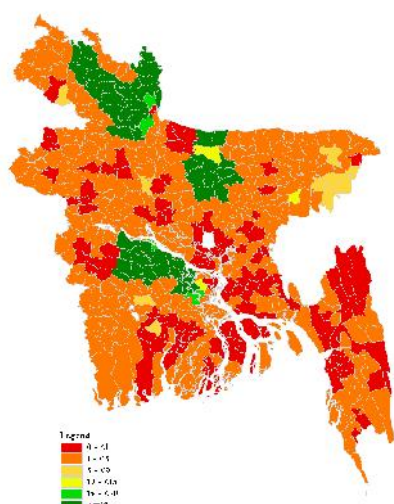
NGO Community Health Workers

Bottom 5 Upazilas				Top 5 Upazilas			
Division	**District**	**Upazila**	**Density**	**Division**	**District**	**Upazila**	**Density**
Rajshahi	Natore	Bagatipara	0.0	Chittagong	Rangamati	Rangamati Sadar	63.8
Rangpur	Kurigram	Char Rajibpur	0.0	Chittagong	Bandarban	Thanchi	39.3
Barisal	Jhalakati	Jhalakathi Sadar	0.0	Chittagong	Bandarban	Bandarban Sadar	37.6
Rangpur	Lalmonirhat	Aditmari	0.4	Chittagong	Bandarban	Rowangchhari	33.4
Rangpur	Lalmonirhat	Patgram	0.5	Rangpur	Rangpur	Rangpur Sadar	31.5

ENC TRAINED COMMUNITY HEALTH WORKERS
Community health workers, especially those trained in essential newborn care (ENC) can save the lives of children. A Joint Declaration of WHO and UNICEF in 2009 supports the need for health workers trained in essential newborn care and calls for home visits by trained health workers in the first week of a baby's life to improve newborn survival.

The national average of ENC trained community health workers in Bangladesh is around 5 per 10000population. With one (1) community health worker per 10,000 trained in essential newborn care, Chittagong Division has the fewest CHWs per 10000 population,and Rangpur Division, with 16 ENC trained workers per 10,000 has the most.

[Caption]This map shows the situation of all CHWs trained in ENC in Bangladesh. Much of the disparity among the divisions can be traced to the fact there are no or very few comprehensive maternal newborn and child health projects area in Barisal, Chittagong and Rajshahi Divisions. Much

of the MNCS and MNCH program work is concentrated in northern Bangladesh, which explains the relatively high density of community health workers in Rangpur Division. Government MOH&FW health workers trained in ENC are relatively evenly spread across Bangladesh, albeit at a low level.

The table below highlights those upazilas which have the most and fewest CHWs trained in ENC per 10,000. The bottom five upazilas are Biral (Rangpur Division), Laksam (Chittagong Division), and Delduar, Narayanganj Sadar and Bandar (Dhaka Division). They all have a density of MOH&FW ENC trained CHWs below 0.2 per 10,000. Four of the five upazilas with the most ENC trained health workers are in Rangpur Division.

ENC density for all CHWs by upazila							
Bottom 5				**Top 5**			
Division	**District**	**Upazila**	**Density**	**Division**	**District**	**Upazila**	**Density**
Rangpur	Dinajpur	Biral	0.0	Rangpur	Rangpur	Rangpur Sadar	32.5
Chittagong	Comilla	Laksam	0.1	Rangpur	Gaibandha	Gaibandha Sadar	31.8
Dhaka	Tangail	Delduar	0.2	Dhaka	Faridpur	Alfadanga	31.5
Dhaka	Narayanganj	Narayanganj Sadar	0.2	Rangpur	Rangpur	Pirganj	29.6
Dhaka	Narayanganj	Bandar	0.2	Rangpur	Kurigram	Kurigram Sadar	29.1

MOH&FWHealth Workers Trained in Essential Newborn Care
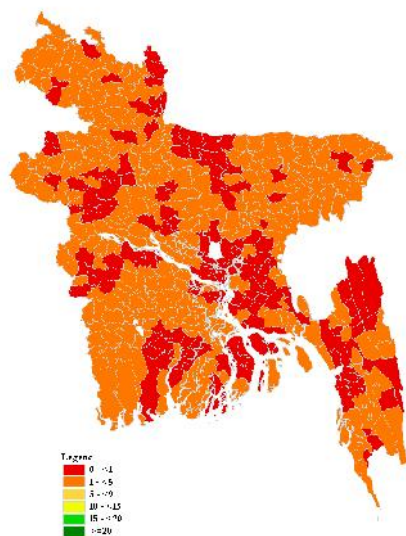
Few MOH&FW health workers are trained in essential newborn care. Government levels of trained ENC workers per 10,000 population are relatively even across Bangladesh, but remain at a low national level of 1.2 per 10,000 nationally.

[Caption] MOH&FW health workers trained in ENC

The spread from division to division is quite marked. Chittagong Division has fewer than 1 community health worker per 10,000 population trained in essential newborn care. Barisal, Dhaka, Khulna, Rajshahi and Rangpur Divisions have between 1 and 1.4 permanent government community health workers per 10,000population trained in ENC. Sylhet is notable in that it has around 2.4 community health workers per 10,000 trained in essential newborn care. As the table below shows, this disparity is also reflected at the upazila level. The upazilas with the fewest trained CHW workers in ENC are clustered in Chittagong and
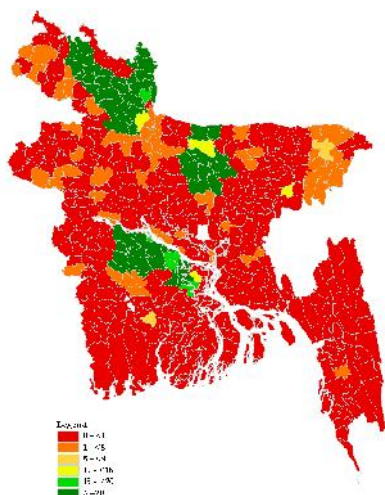
Dhaka Divisions.

Table: ENC density per 10000 population for MOH&FW Health Workers by Upazila							
Bottom 5				**top 5**			
Division	**District**	**Upazila**	**Density**	**Division**	**District**	**Upazila**	**Density**
Rangpur	Dinajpur	Biral	0.00	Chittagong	Bandarban	Rowangchhari	4.17
Dhaka	Dhaka	Keraniganj	0.12	Dhaka	Faridpur	Madhukhali	3.88
Dhaka	Narayanganj	Bandar	0.13	Rajshahi	Nawabganj	Sadar	3.28
Chittagong	Comilla	Laksam	0.14	Sylhet	Sunamganj	Bishwambarpur	3.21
Dhaka	Munshiganj	Munshiganj Sadar	0.15	Chittagong	Rangamati	Rangamati Sadar	3.18

ENC Trained NGO Health Workers

At the division level, the impact of the NGO and government maternal and child health programs not only in Rangpur but also in Dhaka Division are apparent. The national average density for ENC Trained NGO (including MNCH&MNCS) community health workers is 3.9 per 10,000 with Rangpur (14.9) and Dhaka Division (6.1) leading the way.

As the map shows, MNCS and MNCH programs are largely concentrated in Dhaka and Rangpur Divisions. Barisal Division has virtually no ENC-trained NGO community health workers. Rangpur Division has four upazilas in the top five, all with more than 28 ENC trained NGO (including MNCH and MNCS) community health workers per 10,000.

Table: ENC Trained NGO community health workers by Upazila							
Bottom 5				**Top 5**			
Division	**District**	**Upazila**	**Density**	**Division**	**District**	**Upazila**	**Density**
Barisal	Barguna	Amtali	0.0	Rangpur	Rangpur	Rangpur Sadar	31.5
Barisal	Barguna	Bamna	0.0	Rangpur	Gaibandha	Gaibandha Sadar	30.6
Barisal	Barguna	Betagi	0.0	Dhaka	Faridpur	Alfadanga	29.0
Barisal	Barguna	Patharghata	0.0	Rangpur	Kurigram	Kurigram Sadar	28.4
Barisal	Barisal	Agailjhara	0.0	Rangpur	Rangpur	Pirganj	28.2

Recommendations

The Status of Community Based Health Workers in Rural Bangladesh constitutes an initial attempt to quantify the availability of community based health workers in Bangladesh. It provides only a snap shot of the current status of health worker deployments; as programs change over time the practical value of these data will diminish. Based on the findings of this report, Save the Children makes the following recommendations to take immediate action, and to make future analyses more meaningful.

To move the issue of community based health workers forward, the Government should take a leadership role, in collaboration with stakeholders, to:
- Ensure that the commitments made by the government to provide ENC and other community based services are operationalized as part of implementation of HPNSPD
- Routinely track the availability of community based health workers (Government and NGO), by supporting future health worker mapping and integrating CHWs into other mapping exercises conducted in Bangladesh
- Develop operational definitions/categories of CHWs, with respect to capacity and services provided, so that future analyses and geographic comparisons are more meaningful
- Develop a standard optimal coverage of HWs per population, and set targets for HW availability
- Develop guidance/strategy for equitable, needs-based deployment of HWs to achieve equity of health outcomes throughout Bangladesh
- Conduct similar mapping exercises for other sectors (e.g. nutrition)

Immediate actions for Government and Development Partners:
- Conduct a needs assessment of lowest density upazilas, and target the poorest performing for immediate deployment of CHWs in partnership with NGOs in coordination with MOH&FW
- Prioritize lowest density upazilas for future comprehensive maternal newborn child health program implementation and resources allocation.
- Review HW job descriptions and terms of reference to ensure adequate performance of home based ENC, ANC/PNC
- Plan for ENC in-service training for existing untrained health workers
- Ensure ENC is integrated into pre-service for new HWs

Future health worker mapping should include:
- Urban analysis
- Distinction between health positions and actual deployments on the ground
- Gender distribution among health workers

Notes to the executive summary
This report has been prepared as part of Save the Children's Saving Newborn Lives (SNL) program together with Save the Children's EVERY ONE campaign. Save the Children's SNL program has provided healthcare professionals with cutting-edge research that has led to lifesaving interventions. The EVERY ONE campaign is advocating globally and in Bangladesh for more trained health workers to save the lives of children dying from treatable illnesses and diseases. As part of the research efforts of SNL and together with the EVERY ONE campaign, the ultimate goal of this report is to provide solid data that will serve as a useful tool for the Bangladeshi Government and development funders when they make decisions about the funding, the training and the deployment of community health workers across Bangladesh.

The data presented here is disaggregated by different types of community health workers: government, NGOs and those working for NGO and government supported maternal and child health programs. The analysis also qualifies those community health workers who are trained in essential newborn care. In order to provide an overview of the density of the community health workers in

specific areas, and in order to compare their density across Bangladesh, a proportion of CHWs per 10,000 people was used to generate maps. These maps show the geographic coverage and density of community health workers by population. The type of health workers includes family welfare assistants (FWAs), health assistants (HAs), SS, SK, CSP and other NGO community health workers as well as government supported MNCH/MNCS promoters.

Save the Children relied on partners, including the DGHS, DGFP, BRAC, UNICEF, SSFP, Plan, JICA and CARE (among others) to supply the data. The Government, the Director Primary Health Care of DGHS, endorsed the analysis.

Footnotes

(1) 2010 Bangladesh Maternal Mortality and Health Care Survey
(2) http://whqlibdoc.who.int/hq/2009/WHO_FCH_CAH_09.02_eng.pdf
(3) The**MNCS Program** is formally titled "An Integrated Package of Maternal, Neonatal and Child Survival (MNCS) Interventions". The **MNCH Program** is formally titled "Improving Maternal, Neonatal and Child Survival: A partnership Approach to Achieve Millennium Development Goals in Bangladesh".