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| **Research Terms of Reference**  **Infrastructure Mapping, Rohingya Refugee Camps**  **Bangladesh** | |
| **January 2018**  **Version 1** | **C:\Users\Megan\AppData\Local\Microsoft\Windows\INetCache\Content.Word\REACH logo white (for a coloured background).jpg** |

# 1. Summary

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Country of intervention** | *Bangladesh* | | | | | | |
| **Type of Emergency** |  | Natural disaster | X | Conflict | |  | Emergency | |
| **Type of Crisis** | X | Sudden onset |  | Slow onset | |  | Protracted | |
| **Mandating Body/ Agency** | *UNICEF* | | | | | | |
| **Project Code** | *-* | | | | | | |
| **REACH Pillar** | X | Planning in Emergencies | X | Displacement | |  | Building Community Resilience |
| **Research Timeframe** | January – July 2018 | | | | | | |
| **General Objective** | To support effective planning, prioritisation, and delivery of humanitarian assistance to Rohingya refugees living in Cox’s Bazar district, Bangladesh. | | | | | | |
| **Specific Objective(s)** | 1. To provide up-to-date information on service provision in all sites, with a focus on water, sanitation and hygiene (WaSH) facilities 2. To map key physical characteristics of Rohingya refugee sites | | | | | | |
| **Research Questions** | 1. What WaSH infrastructure is available in the Rohingya refugee sites and selected host communities and what is the condition of the available facilities? 2. What other infrastructure is available in the Rohingya refugee sites and selected host communities and what is the condition of the available facilities? 3. To what extent are minimum humanitarian standards for WaSH met? 4. What are the key physical characteristics (e.g. size, number of shelters, roads and terrain) of the Rohingya refugee sites and selected host communities? | | | | | | |
| **Research Type** | X | Quantitative |  | Qualitative | |  | Mixed methods |
| **Geographic Coverage** | |  |  |  |  | | --- | --- | --- | --- | | **Camp Zone** | **Grids[[1]](#footnote-1)** | **Camp Zone** | **Grids** | | Bagghona/Potibonia | 67 | Zone GG | 36 | | Balukhali MS | 19 | Zone HH | 39 | | Chakmarkul | 55 | Zone II | 71 | | Hakimpara | 88 | Zone JJ | 33 | | Jadimura | 227 | Zone KK | 35 | | Jamtoli | 145 | Zone LL | 36 | | Kutupalong MS | 97 | Zone MM | 28 | | Kutupalong RC | 55 | Zone NN | 47 | | Leda A | 61 | Zone OO | 43 | | Leda B | 53 | Zone PP | 37 | | Leda C | 25 | Zone QQ | 32 | | Leda D | 65 | Zone RR | 34 | | Leda MS | 10 | Zone SS | 35 | | Nayapara EXP | 145 | Zone TT | 40 | | Nayapara RC | 23 | Zone UU | 39 | | Shamlapur | 335 | Zone VV | 41 | | Thangkhali | 104 | Zone WW | 34 | | Unchiprang | 64 | Zone XX | 42 | | Zone AA | 20 | Zone YY | 37 | | Zone BB | 40 | Zone ZA | 34 | | Zone CC | 38 | Zone ZZ | 51 | | Zone DD | 35 | **Total Grids** | **2686** | | Zone EE | 47 |  |  | | Zone FF | 44 |  |  |  |  | | --- | | **Host Communities** | | Hajjimapara | | Kainda Vangga | | Languirbill | | Najirarthek | | Pahartoli | | Rejukhal | | | | | | | |
| **Target Population(s)** | Rohingya refugees living in Cox’s Bazar district, Bangladesh | | | | | | |
| **Data Sources** | **Secondary Data**   * UNHCR Family Count dataset * REACH Shelter and Infrastructure Mapping data (previous rounds) * IOM Needs and Population Monitoring dataset (Round 7) * ISCG Camp Zoning Divisions[[2]](#footnote-2)   **Primary Data**   * REACH Shelter and Infrastructure Infrastructure Data | | | | | | |
| **Expected Outputs** | * 6 x 45 monthly datasets (1 per month per covered zone) * 1 consolidated dataset of all collected data * 6 x 45 monthly WaSH factsheets (1 per month per covered zone) * 6 x 45 map packages (1 map package per month per covered zone) * 6 x monthly host community datasets | | | | | | |
| **Key Resources** | 1 Country Focal Point  1 Assessment Officer  1 GIS Officer  1 Field Coordinator  Enumerator Team Leaders  Enumerators | | | | | | |
| **Humanitarian Milestones** | **Milestone** | | | | **Timeframe** | | |
| x | Sector plan/strategy | | |  | | |
| x | Inter-sector plan/strategy | | |  | | |
| x | Donor plan/strategy | | |  | | |
| x | NGO plan/strategy | | |  | | |
|  | Other | | |  | | |
| **Audience** |
| **Audience type** | | | | **Specific actors** | | |
| x | Operational | | | *ISCG, Site Management Sector, WASH Sector, Shelter Sector, Protection Sector, UNICEF* | | |
| x | Programmatic | | | *ISCG, Site Management Sector, WASH Sector, Shelter Sector, Protection Sector, UNICEF* | | |
|  | Strategic | | |  | | |
|  | Other | | |  | | |
| **Access** | x | Public (available on REACH research centre and other humanitarian platforms)  Applies to:   * Factsheets * Dataset of analysed indicators * Maps of surveyed zones | | | | | |
| **Visibility** | UNICEF and REACH logos will be included in the WaSH factsheets and maps. WaSH sector (Cox’s Bazar) and Site Management sector (Cox’s Bazar) logos to be included in all appropriate products. | | | | | | |
| **Dissemination** | * Direct circulation through site managers, as well as online dissemination through Site Management existing dissemination channels * Direct circulation to local/national NGO, INGO, UN, donor and stakeholder partners through the REACH Bangladesh mailing list * Uploaded on HRP and ReliefWeb websites and REACH/IMPACT websites and social media accounts. * Hard copies shared at working group and cluster meetings and with site managers * Through sector-level presentations of final products, as well as email dissemination to Site Management and further Sector focal points | | | | | | |

# 2. Background & Rationale

Since August 2017, an estimated 655,000 Rohingya refugees have arrived in Cox’s Bazar District from Myanmar[[3]](#footnote-3), fleeing violence in Myanmar’s Rakhine state and bringing the total number of Rohingya refugees in Bangladesh to approximately 868,000. Most of the newly-arrived refugees rely on humanitarian assistance, having fled with few possessions and exhausted their financial resources during the journey.

Approximately 789,000 of the Rohingya in Bangladesh are living in refugee camps in Cox’s Bazar district. Due to the high number of recent arrivals, spontaneous settlement has taken place in and around the formal camps established by the government of Bangladesh, and the humanitarian community and government of Bangladesh are now building infrastructure and providing assistance in these informal settlements. In order to do this effectively, these actors require up-to-date information on population numbers, existing infrastructure, and service provision across both formal and spontaneous sites.

Smaller groups of refugees are living in host communities across Cox’s Bazar district which remain distinct from the refugee camps and are not managed by the humanitarian community as part of the refugee response. The influx of people has placed existing basic services in these communities, which were already strained due to lack of investment and high numbers of users, under increasing stress.

REACH will conduct a further six rounds of infrastructure mapping in refugee sites across Cox’s Bazar district, updating information gathered during the previous three rounds of mapping to provide comprehensive and accurate coverage of all zones[[4]](#footnote-4) of every site in Cox’s Bazar district on a monthly basis. Additionally, REACH will expand infrastructure mapping into out of camp settings as a pilot project. Using IOM’s NPM dataset, REACH has identified six communities which host relatively high numbers of refugees but are not managed by the humanitarian community from which the same infrastructure data will be collected using the same tools. Information from these communities will be compiled into monthly datasets and shared with relevant humanitarian and governmental partners. These communities will form a pilot group which will be used to explore the possibility of further expanding mapping into areas that are not under considered to be camp areas.

Collected data on infrastructure provision will be used monthly to generate maps and WaSH factsheets on a zone-by-zone basis. REACH will share maps and factsheets with all relevant actors to inform operational activities on the ground and decision-making at the programmatic level. Bringing significant experience of site mapping and information gathering in humanitarian emergencies, including three previous rounds of infrastructure mapping in Bangladesh’s refugee camps, REACH is well-placed to conduct this exercise.

# 3. Research Objectives

**General objective:** To support evidence-based and targeted planning for humanitarian intervention through providing detailed information on all refugee sites and selected host communities in Cox’s Bazar district, Bangladesh.

**Specific objectives:**

* To provide up-to-date information on infrastructure in each zone of each selected site in Cox’s Bazar district
* To map key characteristics of each zone of each selected site in Cox’s Bazar district
* To determine progress towards meeting minimum standards[[5]](#footnote-5) for water, sanitation and hygiene (WaSH) infrastructure in each zone of each selected site in Cox’s Bazar district

# 4. Research Questions

1. What WaSH infrastructure is available in the Rohingya refugee sites and selected host communities, and what is the condition of this infrastructure?
2. What other infrastructure is available in the Rohingya refugee sites and selected host communities, and what is the condition of this infrastructure?
3. To what extent are minimum humanitarian standards for WaSH met?
4. What are the key physical characteristics (e.g. size, number of shelters, roads) of the sites and selected host communities?

# 5. Methodology

* 1. Methodology overview

REACH enumerators will conduct primary data collection in each zone or host community using smartphones, recording the location and condition (functioning, non-functioning) of basic infrastructure in each zone of the camp or host community. Enumerators will use an updated version of the questionnaire and tool used for the previous three rounds of infrastructure mapping.

##### 5.2 **Population of interest**

Rohingya families and host communities supporting refuguees living in Cox’s Bazar district, Bangladesh.

5.3. Secondary data review

Secondary data on population will be obtained from UNHCR’s Family Count census. REACH’s Shelter Mapping and Infrastructure datasets, created during previous rounds of infrastructure mapping, will also be used to provide information on site characteristics. Additionally, REACH will use IOM’s Needs and Population Monitoring (NPM) dataset to select host communities for assessment, to triangulate population data, and to obtain further site-specific information.

* 1. Primary Data Collection

**Method**

REACH enumerators will cover the 45 camp zones and six host communities to be profiled in teams of two, supervised by Team Leaders, each of whom will be responsible for three to four pairs of enumerators. Every camp zone has been divided into grids of 100 by 100 metres, giving a total of 2686 grids. Teams will be assigned a number of grids to cover on a daily basis, and will be required to collect every relevant datapoint within their grids using smartphones, filling out questionnaires on Open Data Kit (Kobo Toolbox) which will be uploaded for cleaning on a daily basis.

In the six host communities which will be part of the pilot study teams will use an alternative methodology. These communities cannot be divided into grids because they are geocoded in the IOM dataset as single points, rather than polygons with defined boundaries. Therefore REACH’S majhee[[6]](#footnote-6) mapping methodology will be used to divide the communities into units for surveying. Each majhi will be asked to define the borders of their area of influence, and within each majhee’s area the enumerators will collect every relevant datapoint using the same tool as within each grid.

Teams will use MyMaps (Google Maps) to navigate in the field. Enumerators will be briefed every morning on issues arising from the previous day’s data collection and on the plan for the day ahead. All staff will receive training on security, evacuation plans and appropriate conduct in the field.

**Tools**

This assessment will use an updated version of the tool developed during the previous three rounds of infrastructure mapping in collaboration with key partners (ISCG, IOM, UNICEF, and representatives of the Site Management, WaSH, Protection and Shelter sectors). REACH will revise the tool to incorporate lessons learned from previous rounds and comments from the relevant partners.

5.5. Data Analysis Plan

At the end of each day, the completed questionnaires will be collected using ODK Briefcase and the Daily Tracking tool updated to record daily progress. Data will be checked and cleaned on a nightly basis as far as possible to prevent delays in releasing datasets and address data collection problems as they arise. The AO will update the Global Tracking tool on a daily basis to record cumulative progress.

Data for the WaSH factsheets will be analysed on an ongoing basis and at the end of each data collection cycle. The final dataset will be reviewed by REACH HQ before publication and sharing.

# 6. Product Typology

Table 2: Type and number of products required

|  |  |  |
| --- | --- | --- |
| **Type of Product** | **Number of Product(s)** | **Additional information** |
| Datasets | 277 | One dataset per camp zone per month (6 x 45), six monthly host community datasets, and one dataset containing all collected data which can be disaggregated by camp zone vs. host community |
| WaSH Factsheets | 270 | One factsheet per camp zone covered per month (6 x 45) |
| Map Packages | 270 | One map package per camp zone per month (6 x 45) |

# 7. Management arrangements and work plan

##### 7.1. Roles and Responsibilities, Organogram

Table 3: Description of roles and responsibilities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task Description** | **Responsible** | **Accountable** | **Consulted** | **Informed** |
| Developing questionnaire, indicators, and ToR | Assessment Officer | Country Focal Point | GIS Officer | Cluster Coordinator/UNICEF Focal point |
| Supervising enumerators in the field | REACH Team Leaders | Country Focal Point | GIS Officer | Assessment Manager/UNICEF Focal point |
| Daily cleaning and delivery of datasets | Assessment Officer | Country Focal Point | GIS Officer | Cluster Coordinator/UNICEF Focal point |
| Finalising the outputs | Assessment Officer | Country Focal Point | GIS Officer | Assessment Manager/UNICEF Focal point |
| Output dissemination | Assessment Officer | Country Focal Point | GIS Officer | Cluster Coordinator/UNICEF Focal point/Assessment Manager |

***Responsible:*** *the person(s) who execute the task*

***Accountable:*** *the person who validate the completion of the task and is accountable of the final output or milestone*

***Consulted:*** *the person(s) who must be consulted when the task is implemented*

***Informed:*** *the person(s) who need to be informed when the task is completed*

* 1. Resources: HR, Logistic and Financial

##### Resource Mobilisation

* Enumerators will be hired on temporary weekly contracts in accordance with data collection timeline
* Enumerators will use smartphones already owned by the programme

##### Work plan

Each cycle is approximately three weeks long and follows the schedule below, with Weeks 1 and 2 only relevant in the first cycle of the project.

Table 5: Work Cycle

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 |
| ToR Validation and/or changes to validated ToR version |  |  |  |  |  |
| Tool Development/Adjustments to methodology |  |  |  |  |  |
| Data Collection Training/Refresher training |  |  |  |  |  |
| Pilot |  |  |  |  |  |
| Data Collection |  |  |  |  |  |
| Data Cleaning |  |  |  |  |  |
| Product Development (maps and factsheets) |  |  |  |  |  |
| Dissemination |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  | Weeks 3, 4, and 5 to be repeated 6 times | | |

# 8. Risks & Assumptions

Table 6: List of risks and mitigating actions

|  |  |
| --- | --- |
| **Risk** | **Mitigation Measure** |
| **Disclosure of sensitive personal information of respondents** | No household-level or individual data collected |
| **Enumerators unable to navigate effectively** | Comprehensive training, use of MyMaps application |

# 9. Monitoring and Evaluation

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IMPACT Objective** | **External M&E Indicator** | **Internal M&E Indicator** | **Methodology** | **Focal point** | **Tool** | **Research-specific information** |
| **Humanitarian stakeholders are accessing IMPACT products** | Number of humanitarian organisations accessing IMPACT services/products  Number of individuals accessing IMPACT services/products | # of downloads of x product from Resource Center | User monitoring | Country request to HQ | User\_log | *Y* |
| # of downloads of x product from Relief Web | Country request to HQ | Y |
| # of downloads of x product from Country level platforms | Country team | Y |
| # of page clicks on x product from REACH global newsletter | Country request to HQ | Y |
| # of page clicks on x product from country newsletter, sendingBlue, bit.ly | Country team | Y |
| # of visits to x webmap/x dashboard | Country request to HQ | N/A |
| **IMPACT activities contribute to better program implementation and coordination of the humanitarian response** | Number of humanitarian organisations utilizing IMPACT services/products | # references in HPC documents (HNO, SRP, Flash appeals, Cluster/sector strategies) | Reference monitoring | Country team | Reference\_log |  |
| # references in single agency documents |  |
| **Humanitarian stakeholders are using IMPACT products** | Humanitarian actors use IMPACT evidence/products as a basis for decision making, aid planning and delivery  Number of humanitarian documents (HNO, HRP, cluster/agency strategic plans, etc.) directly informed by IMPACT products | Perceived relevance of IMPACTcountry-programs | Usage M&E | Country team | Usage\_Feedback *and* Usage\_Survey templaye |  |
| Perceived usefulness and influence of IMPACT outputs |  |
| Recommendations to strengthen IMPACT programs |  |
| Perceived capacity of IMPACT staff |  |
| Perceived quality of outputs/programs |  |
| Recommendations to strengthen IMPACT programs |  |
| **Humanitarian stakeholders are engaged in IMPACT programs throughout the research cycle** | Number and/or percentage of humanitarian organizations directly contributing to IMPACT programs *(providing resources, participating to presentations, etc.)* | # of organisations providing resources (i.e.staff, vehicles, meeting space, budget, etc.) for activity implementation | Engagement Monitoring | Country team | Engagement\_log |  |
| # of organisations/clusters inputting in research design and joint analysis |  |
| # of organisations/clusters attending briefings on findings; |  |

# 10. Documentation Plan

Documentsthat should be archived at the end of the research:

* + Raw and clean data, data cleaning log, sampling overview
  + Questionnaire Tool
  + Indicator List
  + Terms of Reference
  + WaSH Factsheets

# 11. Annexes

1. Data Analysis Framework
2. Data Management Plan
3. Questionnaire(s) / Tool(s)

# Annex A: Data Analysis Framework

Data cleaning

Data will be collected by the Administrative Assistant on a nightly basis using ODK Briefcase, tracking the number of surveys collected and recording this number using a tracking tool. The Assessment Officer will then spotcheck the data to ensure the correct number of surveys are added to the raw dataset, avoiding data loss throughout the process. Data will be downloaded from ODK Briefcase and cleaned by the REACH Assessment team on a daily basis.

During data cleaning, the Assessment Officer and GIS Officer will:

* Delete datapoints with GPS readings that are insufficiently precise
* Harmonise spellings of implementing partner names
* Check that records in the ‘Other’ category cannot be incorporated into any existing categories
* Check that infrastructure is recorded under the correct category
* Ensure that infrastructure functionality is correctly recorded
* Check that infrastructure figures are realistically possible

Based on data cleaning, the assessment team will carry out continuous training of enumerators during daily team briefings and ad-hoc training sessions.

Analysis tools

Analysis of indicators will be carried out using Microsoft Excel.

Indicators

|  |  |  |  |
| --- | --- | --- | --- |
| **Research Question** | **Sector** | **Ind #** | **Indicator** |
| What WaSH infrastructure is available in the Rohingya refugee sites and selected host communities and what is the condition of the available facilities? | WaSH | 1.1 | # and type of water points in the surveyed zone |
| What WaSH infrastructure is available in the Rohingya refugee sites and selected host communities and what is the condition of the available facilities? | WaSH | 1.2 | # and condition of latrines in the surveyed zone |
| What WaSH infrastructure is available in the Rohingya refugee sites and selected host communities and what is the condition of the available facilities? | WaSH | 1.3 | # and condition of washrooms in the surveyed zone |
| What WaSH infrastructure is available in the Rohingya refugee sites and selected host communities and what is the condition of the available facilities? | WaSH | 1.4 | # and condition of other sanitation facilities in the surveyed zone |
| What WaSH infrastructure is available in the Rohingya refugee sites and selected host communities and what is the condition of the available facilities? | WaSH | 1.5 | # and type of solid waste disposal facilities in the surveyed zone |
| What other infrastructure is available in the Rohingya refugee sites and selected host communities and what is the condition of the available facilities? | Protection | 2.1 | # of friendly spaces in the surveyed zone |
| What other infrastructure is available in the Rohingya refugee sites and selected host communities and what is the condition of the available facilities? | Education | 2.2 | # and type of education facilities in the surveyed zone |
| What other infrastructure is available in the Rohingya refugee sites and selected host communities and what is the condition of the available facilities? | Education | 2.3 | # and type of WaSH facilities within the surveyed education facilities |
| What other infrastructure is available in the Rohingya refugee sites and selected host communities and what is the condition of the available facilities? | Health | 2.3 | # and type of health facilities in the surveyed zone |
| What other infrastructure is available in the Rohingya refugee sites and selected host communities and what is the condition of the available facilities? | Communications/Logistics | 2.4 | # and type of comms/logs facilities in the surveyed zone |
| What other infrastructure is available in the Rohingya refugee sites and selected host communities and what is the condition of the available facilities? | Communications/Logistics | 2.4 | # and type of bridges in the surveyed zone |
| What other infrastructure is available in the Rohingya refugee sites and selected host communities and what is the condition of the available facilities? | Protection | 2.5 | # and type of community spaces in the surveyed zone |
| What other infrastructure is available in the Rohingya refugee sites and selected host communities and what is the condition of the available facilities? | Food Security | 2.6 | # and type of shops available in the surveyed zone |
| To what extent are the minimum standards for WaSH infrastructure met? | WaSH | 3.1 | % of shelters within 50 metres of a latrine |
| To what extent are the minimum standards for WaSH infrastructure met? | WaSH | 3.2 | % of shelters within 200m of a tubewell |
| To what extent are the minimum standards for WaSH infrastructure met? | WaSH | 3.3 | % of tubewells at least 10 metres from the nearest latrine |

# Annex B: Data Management Plan

|  |  |
| --- | --- |
| **Administrative Data** | |
| Project Name | UNICEF WaSH Mapping Cox’s Bazaar |
| Project Code |  |
| Donor | UNICEF |
| Project partners | HELVETAS |
| Project Description | This project aims to support evidence-based and targeted planning through providing detailed information on sites. It will achieve this aim through mapping infrastructure and functionality in the selected sites, with a focus on WaSH infrastructure. |
| Project Data Contacts | Thomas Stork ([thomas.stork@reach-initiative.org](mailto:thomas.stork@reach-initiative.org)) |
| DMP Version | 1.0 |
| Related Policies | n/a |
| **Data Collection** | |
| What data will you collect or create? | This research contains two stages of data collection:   1. Secondary data review: REACH will request to use all relevant currently available data sources to identify site characteristics 2. Primary data collection: Primary data will be collected by REACH enumerators conducting infrastructure mapping. The primary data will be collected using ODK forms and the processed data will be shared with all stakeholders. |
| How will the data be collected or created? | REACH will deploy teams of enumerators to selected sites. In conjunction with the Administrative Assistant, the REACH Assessment Officer and GIS Officer will review and clean incoming data for potential errors on a daily basis. Any possible errors will be verified with the Team Leaders and enumerators. At the conclusion of each data collection cycle, datasets for all assessed zones will be analyzed and findings are compiled into a single output dataset to be used in factsheet creation and mapping. |
| **Documentation and Metadata** | |
| What documentation and metadata will accompany the data? | For better understanding and reuse of this assessment result as secondary data by stakeholders, REACH will produce a package of data, which contains cleaned databases and sets of WaSH factsheets. REACH will also add meta-data in the data-set of this assessment which contain: 1. Methodology of the assessment 2. Limitations of the methodology 3. Year of the survey 4. Geographical coverage of the survey 5. Tag of sectors/thematic covered by the assessment 6. Description of any composite variables created 7. Data cleaning log. |
| **Ethics and Legal Compliance** | |
| How will you manage any ethical issues?  Note: Informed consent, anonymization, striking records, aggregation… | This project does not collect individual or household-level data. However, in accordance with the Code of Ethics and Conduct, REACH will ensure that every person from whom data is gathered for the purposes of research consents freely to the process on the basis of adequate information. They will also be able, during the data gathering phase, to withdraw freely or modify their consent and to ask for the destruction of all or part of the data that they have contributed.  Throughout training of assessment teams, it will be emphasized that participants are not obliged to provide information they feel poses a risk to their well-being or if they feel this may cause a threat to their personal safety. Through constant feedback, such instances are reported to inform continuous improvements to training. All data will be aggregated to a zone or community and no family identifiers will be collected.  REACH will work closely with relevant sectors to ensure assessment methodologies, indicators and analysis is sensitive to gender concerns and wider protection issues. |
| How will you manage copyright and Intellectual Property Rights (IPR) issues? | The dataset aggregated at the site-level will be uploaded on the OCHA HDX web portal under open data license. Any anonymized secondary data that is incorporated in datasets uploaded on the OCHA HDX web portal will be fully referenced acknowledging the original data source. |
| **Storage and Backup** | |
| How will the data be stored and backed up during the research? | Primary data collected on smartphones is uploaded to ODK Briefcase on a daily basis. In addition, both raw and clean datasets are uploaded to the REACH Bangladesh subsection of the REACH MENA Dropbox on a daily basis. |
| How will you manage access and security?  Note: Password protection, limited access, collaborator access (ONA), KOBO security features/encryption | The Family Count dataset provided by the UNHCR and used for population estimates will not be shared or stored on any online platform. The dataset will not be shared with any partners, agencies or individuals outside REACH and each REACH staff member with access to the dataset will be clearly briefed on the sensitivity of this data. Finally, computers with this database are required to be password protected, such that files cannot be accessed by outsiders if the machine is lost or stolen.  Access to IMPACT’s in-house server is restricted to IMPACT staff only.  Both the server and Dropbox are password protected, and Dropbox encrypts all  files using 256-bit Advanced Encryption Standard (AES). Physical access to  offices in which data are stored is secured, and requires key to enter. |
| **Selection and Preservation** | |
| Which data should be retained, shared, and/or preserved?  Note: What to do with raw data set with sensitive fields? | The original data, both in raw and clean versions, should be preserved on the REACH MENA Dropbox along with a detailed cleaning log. An aggregated version of the final dataset will be shared on the REACH Resource Centre and HDX. |
| What is the long-term preservation plan for the dataset? | The dataset will be stored in the Bangladesh folder of the REACH MENA Dropbox. |
| **Data Sharing** | |
| How will you share the data? | An aggregated version of the dataset will be shared on HDX. |
| Are any restrictions on  data sharing required? | No personal data, including family codes, scanned family barcodes and geolocations will be collected, and therefore sharing will not be restricted. |
| **Responsibilities** | |
| Who will be responsible for data management? | Responsibility for data management lies with the Country Focal Point |
|  |  |

Adapted from:

DCC. (2013). Checklist for a Data Management Plan. v.4.0. Edinburgh: Digital Curation

Centre. Available online: <http://www.dcc.ac.uk/resources/data-management-plans>

# Annex C: Questionnaire(s) / Tool(s)

1. Grids are 100 x 100 m squares overlaid in a mesh over a map of camp zones, allowing REACH to assign a set of grids to each team for surveying. [↑](#footnote-ref-1)
2. [Outline of Camps/Refugee Sites in Cox’s Bazar, ISCG, December 2017](https://data.humdata.org/dataset/outline-of-camps-sites-of-rohingya-refugees-in-cox-s-bazar-bangladesh) [↑](#footnote-ref-2)
3. [Situation Report: Rohingya Refugee Crisis, ISCG (14 January 2018)](https://reliefweb.int/sites/reliefweb.int/files/resources/180115_weekly_iscg_sitrep_draft.pdf) [↑](#footnote-ref-3)
4. Each site has been divided into zones with delineated borders by the Inter-Sector Coordination Group, which is responsible for coordination of the crisis response. [↑](#footnote-ref-4)
5. Minimum standards are derived from SPHERE Standards for WaSH, WaSH Sector Standard Indicators, and Department of Public Health and Environment Minimum Standards. [↑](#footnote-ref-5)
6. Majhis are community leaders responsible for specific zones of communities. [↑](#footnote-ref-6)