# The Rohingya refugee crisis in Bangladesh: An analysis of the involvement of local humanitarian actors

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**Abstract**

Since August 2017, more than 700000 Rohingya have sought refuge in Bangladesh from neighboring Myanmar, resulting in an unprecedented humanitarian crisis. A significant endeavor is taking place involving various humanitarian actors for the provision and overall management of the humanitarian activities in Rohingya refugee camps. The article studies the configuration and evolution of the humanitarian operations with the aim of identifying the extent of localization, i.e. involvement of the Bangladeshi actors in the management of the camps in the early stage (1-2 years) of the crisis. It employs a quantitative method by analyzing the 4W data of the United Nations Office for the Coordination of Humanitarian Affairs. Segregation of humanitarian operators by National and International Non-Governmental Organizations and a Network analysis suggest that the humanitarian operations are dominated by international actors, and localization has not been achieved at the early stage of the crisis. Additionally, the article provides a profile of the humanitarian operation along with the context and background of the crisis; as such can be utilized by both academic and non-academic audiences.

**Key Words:** Rohingya, Bangladesh, Humanitarian operations, 4W data, Localization

# Introduction

The influx of Rohingya refugees from Myanmar to neighboring Bangladesh has resulted in an unprecedented humanitarian crisis. The official estimate of managing agencies identified more than 855,000 refugees in need of humanitarian support (JRP 2020, page 42), of which more than 700000 arrived after August 2017. The extent of the crisis called for a significant endeavor from the Government of Bangladesh (GoB) and humanitarian agencies for the provision and overall management of the humanitarian activities in Rohingya refugee camps.

The article originated from the need to provide an examination the humanitarian operations to manage the crisis. As the involvement of actors are continuously evolving, the emphasis of the paper is to capture the evolution within the early stage of the crisis i.e 1-2 years. The management of Rohingya refugee crisis is relatively an understudied topic. To date, attention has been overwhelmingly focused on the issues related to repatriation and relocation. An early exception in this regard is a special issue on the Rohingya refugees in Bangladesh by the Humanitarian Exchange Magazine of the Overseas Development Institute (https://odihpn.org/) with contributions from Bowden (2018), Crisp (2018) and Wencel et al. (2018). Shevach et al. (2018) from the same issue of humanitarian exchange also covered responses within the first 100 days. Lewis (2019) covered the initial stages of operation and can be regarded as one of the first academic attempts to document the humanitarian management in response to the Rohingya refugee crisis. Cook and Foo (2019) also provided a detailed description of the organizational structures of the humanitarian responses for the crisis.

The present article is distinctive in nature with its emphasis on providing a quantitative analysis utilizing the 4W dashboard data. The 4W system is used to report the activities of humanitarian actors across the world. Utilizing the data, the article aims to examine the position of agencies from the host country in the operations, humanitarian networks and leadership, which is referred to as the localization of humanitarian operations. It is understandable that, during the initial stages of the crisis, local institutions might have lacked experience compared to that of international humanitarian bodies, hence initial involvement of local agencies is expected to be low. However, with the progress of time, they are expected to gain experience resulting in increased involvement. Therefore, one may wonder if the involvement in a humanitarian operation as severe as the Rohingya refugee crisis allowed these agencies from Bangladesh to gradually assume the leadership roles. This consideration also has the basis in the United Nations (UN) declaration 2016 (UNHCR, 2016) and has been explored in previous works (Brabant and Patel, 2018; Lewis 2019 and Cook and Foo, 2019). Our paper analyses, if any such transition has taken place within the first two years, i.e. the early stage of the crisis, and aims to provide quantitative indications supporting that. Using a mix of descriptive statistics and network analysis, the article indicates that there is no clear evidence of localization within the stated period. We regard this empirical evidence with respect to the debates around localization as the most significant contribution of the research.

In addition, the paper aims to document the humanitarian operations during the early period of crisis which can serve as a benchmark for subsequent studies. This also has been accomplished through analyzing 4W data. Naturally, the findings of the paper lead to other research questions, such as the identification of the hindrance of localization, however, such analysis has not been attempted as that will require further comprehensive research. The significance of the research and how it can inform future researchers have been elaborated on later in the article.

The research is organized as follows. In the next section, we briefly discuss the history of the Rohingya refugee crisis and provide an overview of the present situation. This is followed by a review of the literature section. The section that follows provides an overview of humanitarian management for the crisis describing the roles of GoB, and National and International Non-Governmental Organizations (NGOs). The methodology is discussed in the following sector, which proceeds to the section elaborating on the findings. Further sections discuss the significance of the findings and provide conclusion.

## History of the Rohingya refugee crisis

Though the 2017 exodus of Rohingya people from Myanmar has received attention and international media coverage, the Rohingyas have been seeking refuge in Bangladesh for the last five decades. The notable years when a major influx happened were 1978, 1992, 2012, 2016 and recently, 2017 (Bowden. 2018; Parnini 2013; Parnini et al. 2013, Anwary, 2020). The background and the history of persecution have been analyzed in a number of works, e.g. Ibrahim (2016), Wade (2017), Parnini (2013), Parnini et al. (2013), Dussish (2018), Ullah and Chattoraj (2018), and Anwary (2020). However, the unprecedented influx of 2017 surprised everybody. Wencel et al. (2018) mentioned that at one point, daily arrivals per day were up to 12,500.

The Rohingya people are an ethnic minority of the Rakhine state of Myanmar. However, Myanmar does not recognize the Rohingya as one of the ethnic groups and citizens of the country. The refugee crisis is mainly the result of the denial of citizenship rights and consistent persecution of Rohingya in Myanmar. Among the books and article covered the background and context of this crisis, Ibrahim (2016) is specifically notable for debunking ideas regarding the origin of Rohingya and establishing the existence of the Rohingya community before the British occupation of colonial Myanmar in the 18th century. Dussish (2018) very nicely provides a timeline of the historical contexts leading to the present-day crisis. As the timeline shows, in 1948 Burma (renamed Myanmar in 1989) received independence from British colonial rule. Violent conflicts broke out among various ethnic groups of Burma. This started the waves of internal displacement and exodus of various ethnic groups which have continued to the present day. This period also observed the first incidence of non- recognition of the Rohingya as one of the ethnic groups which are called the National Races of Myanmar and they were also prevented from acquiring documents for citizenship (Ibrahim, 2016). This eventually paved the way for the denial of citizenship in the future. 1962 is another turning point as Burma came under military dictatorship and

widespread persecution of the Rohingya community resulted in Rohingya diaspora to Saudi Arabia, Pakistan, United Arab Emirates, India, Thailand, Malaysia, Indonesia (Dussish, 2018) in addition to Bangladesh (then East Pakistan). They were officially made stateless in 1982 with a Citizenship Act. Under the Act, those who belong to one of the so-called 'national races' are full citizens, particularly those who lived in Myanmar prior to 1823. Rohingya were not allowed to be in this category as they were not classified as one of the national races after the independence in 1948 or in other categories in following years. The other way of achieving citizenship required providing 'conclusive evidence' of residence before independence in 1948. The Rohingya did not have that 'conclusive evidence' caused by the non-issuance of citizenship documents (Ibrahim, 2016, page 48-51) to them after the independence in 1948. Cheesman (2017) provides an interesting discussion on the evolution of the ideology of national races in Myanmar and how it came to surpass the citizenship.

In 1971 Bangladesh gained independence from Pakistan. 1978 saw the first major influx of Rohingya into Bangladesh. In February 1978, the Burmese military junta launched a large-scale operation named the 'Dragon King' (Naga-Min), leading to the expulsion of over 200,000 to Bangladesh. Many of them returned to Myanmar in subsequent years for reasons well documented in a United Nations Refugee Agency (UNHCR) report (Lindquist, 1979). Another major influx took place in 1992 when again 250,000 Rohingya came to Bangladesh. Lastly in 2012 riots broke out in Rakhine between Buddhists and Muslims, which resulted in internal displacements for both communities, and the Rohingya, as in the past, came to Bangladesh seeking refuge.

On August 25, 2017 following an alleged attack on a police check post by a militant Rohingya group, a major crackdown on the Rohingya communities took place, resulting in an unprecedented influx of Rohingya to Bangladesh. Unlike the previous influxes, which did not receive widespread attention (Gartel, 2013), the post august 2017 crisis did not escape the attention of the international media. To be noted here that the scale of the crisis makes it significantly different from the previous exodus from Myanmar. Lindquist (1979) mentioned that the influx of 1978 is comparable to that of the Vietnamese boat people to Malaysia. The exodus of the 2017 was of a far greater magnitude.

Table 1 shows that on the 24th September, 2017 new entrants since 25th August 2017 were 436,000, and by the 31st Dec. 2018 the number is 745,000. The table shows 145,33 entries per day at the beginning of the crisis, which is significantly higher than the figure reported by Wencel et al. (2018).


**{Insert Table 1 here}**


The causes of this unprecedented influx are unknown because independent verifiers have not been allowed to visit Rakhine in those early days. Those who have watched this humanitarian crisis unfold in the media and from the ground have seen smoke rising in Myanmar that was visible from the Bangladesh side of the border. The satellite images also showed evidence of the burning/destruction of Rohingya villages in the Rakhine (Human Rights Watch, 2017). Most refugees arrived in Bangladesh in extremely destitute conditions. An aid worker mentioned to the authors that the Rohingya had to travel for between 8 and 22 days to arrive in Bangladesh.

The Rohingya refugee crisis of 2017 is unparalleled in human history and will require a unique explanation within the forced migration literatures (See Piguet, 2018 for a recent survey of the literature). This paper does not attempt such an explanation but does strongly point to a need for such a study.

## Literature Review

The Rohingya refugee crisis has a long history but only started to receive the deserved global attention since the crisis of 2017. In general, interest in refugee crises has become noticeable outside of the traditional fields such as sociology, history, geography only since the Syrian refugee crisis of 2015.

There exists an extensive literature on the Rohingya refugee crisis which primarily focuses on various conditions of refugees themselves. The literature covers protection, coping mechanisms, abuse and persecution, roots of discrimination, statelessness, security and repatriation, bilateral relation (Cheung, 2012; Ullah, 2011; Ullah and Chattoraj, 2018; Kyaw; 2017, Rahman, 2010; Parnini, 2013; Parnini et al., 2013; Crabtree 2010). However, the Rohingya refugee camp management has not been addressed explicitly in pre-2017 literature. It is generally missing, though we have seen such papers in other contexts including some recent papers addressing Rohingya refugee crisis management. For example, there are papers on the management of the supply chain in a humanitarian context (Abidi et al., 2014) and organizing refugee camps (Chaux et al., 2018). A recent work, Lewis (2019) sheds and documents the responses of Government and humanitarian bodies at the initial stages of the crisis. Cook and Foo (2019) also addresses the management of the crisis through desk research and interviews.

Our current paper addresses the issue of localization. The concept of localization within the humanitarian sector is mainly understood as building the local capacity (Brabant and Patel, 2018). They specified seven dimensions of localization of which our paper addresses capacity building and coordination mechanisms. Their paper, in relation to the Rohingya refugee crisis, identified that local and national NGOs experienced attitudes of 'superiority' among international agencies. They identified that the use of 'English' instead of 'Bangla' in meetings created coordination problems. Localization may also imply involving refugees themselves in humanitarian assistance (Betts et al., 2020). Within the Rohingya refugee crisis management, the scope for involvement of the refugees is limited and our paper has not addressed that.

Localization has also been addressed in Lewis (2019) and Cook and Foo (2019). Lewis (2019) critically analyzed the responses of the citizens and local civil society members of Bangladesh right after the influxes of 2017, and noted the growing difference of those with the responses of formal aid agencies and public authorities. The paper suggested a need to evaluate the performance of humanitarian actors against a changing and sometimes contradictory set of wider political and historical factors. (Cook and Foo, 2019) identified that local NGOs were treated as sub-contractors to international agencies, instead of equal partners, despite their extensive knowledge of disaster management in Bangladesh.

Our paper also falls within the broad topic of humanitarian management, which is defined as the inter-organisational systems created to deliver relief activities by coordinating resources and information among stakeholders. Studies on humanitarian management examine issues such as logistics using quantitative modelling and inter-organisational trust using qualitative approaches (Kabra and Ramesh, 2015). A significant amount of this research examines how collaboration mechanisms such as information sharing and knowledge co-creation support coordination between the entities involved in crisis response (Loch and Terwiesch, 2009). Lewis (2019) utilized the term 'response' instead of 'management' in analyzing humanitarian activities in relation of the Rohingya refugee crisis. Beyond the very early stage, the activities of humanitarian actors are organized by centralized process hence, we regard the term management as more appropriate.

In humanitarian management, collaboration occurs via joint activities such as transport, delivery, purchasing, and evaluation. To improve this process, the UN created the cluster approach to improve coordination among humanitarian actors (United Nations, 2006). The structure aims to create groups of related organizations with a designated head or lead organization to facilitate information exchange and coordination across clusters (Eikenberry et al., 2007). These leads could exist in areas that provide responses to gaps in service provision, such as telecommunications or logistics. Other areas include traditional relief sectors such as water nutrition or health. Finally, integrated areas that link multiple clusters such as coordination or security (Jahre and Jensen, 2010).

The network analysis conducted in this research addresses the issue of coordination. Previous research has identified the roles of the cluster lead in the UN approach as a facilitator who distributes information to all participants as quickly as possible, as a broker who shares information based on relevance and as a filter by ensuring the right information gets the appropriate organization. However, there has still been confusion among stakeholders about the role and function of cluster leads (Altay and Labonte, 2011).

The research conducted in this paper is based on this context discussed above. Though our research also captures the mechanism of management and coordination, the research is significantly different because of its quantitative contents and utilization of the 4W data. Its primary focus is the involvement of humanitarian actors at the early period of the crisis (i.e. 1-2 years). In doing so, our article provides an analysis of the extent of localization along with providing a profile of humanitarian operation of that period.

## Rohingya Refugee Crisis Management Coordination Mechanisms

This section aims to generate an understanding of the basic structure of humanitarian management of the Rohingya refugee crisis. The analysis of this section originated from desk research and the visit of the authors to the Refugee camps including the surrounding areas.

Conversations with the GoB officials and NGO workers also supported the generation of understanding of the camp management[1].

The humanitarian operations of the Rohingya refugee crisis have two components. One of them is the administration and policing, and the other one is humanitarian activities. The GoB is responsible for the administration and policing, while the humanitarian activities are conducted mainly by NGOs and are coordinated by an umbrella organization called Inter Sector Coordination Group (ISCG). The supplementary Table S3 demonstrates that 172 institutions have participated in the humanitarian activities at various stages of the crisis till March 2019.

### A. Government of Bangladesh

Figures 1 and 2 illustrate the coordination mechanisms to various actors (reconstructed from a figure in JRP, 2019, page 22). The Rohingya refugee crisis management is conducted by the GoB at two levels. Level one is administered from the capital city Dhaka. The Ministries of the Government together with the UN agencies in Dhaka form the National Task Force (NTF). The Ministries of Disaster Management and Relief is mandated by the NTF to oversee the crisis-related activities. Though the Rohingya refugee camps have significantly impacted the forest and environment of the surrounding area (Hassan et al., 2018) the Ministry of Environment and Forest is not prominently featured in the management. The agenda for rehabilitation and coordination was elaborated by the Government in a meeting on the 14th September, 2017 following the visit by the Prime Minister to the camps on the 12th September 2017 (Government of Bangladesh, 2017). The meeting specifically allocated 2000 acres of land in Kutupalong for building shelters for the Rohingya families. This area has been now extended to more than 6000 acres.

The second level is the operations from Cox's Bazar, the district where the Rohingya refugee camps are located. These activities are coordinated by the Office of Refugee, Relief and Repatriation (RRRC) headed by an Additional Secretary (https://rrrc.portal.gov.bd/site/page/b6b4b598-2d29-447b-b6ce-b844ca4470d2/About-office). The office was formed in 1992 following the establishment of 20 camps and a memorandum with the UNHCR and World Food Program (WFP).

Due to security concerns and fears of deterioration of law and order, the Armed Forces Division (AFD) is involved at both the national and regional levels. AFD is supported by the Police and Border Guards. Access to camps is regulated and permissions are issued by the RRRC. Additionally, the local district and sub-district level administrations (Upajila Nirbahi Officers) are involved in this operation. RRRC appoints Camp-in-Charge (CiC) who are all mid ranked Government officers. The CiCs supported by the armed forces, police and border guards and sub-district level offices oversee the administration of camps and relief operations.

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[1] The research of the paper belongs to a wider range of studies which also employs field visit, telephone interviews, face to face interviews and field surveys. The field visits took place during July-August, 2018 and 2019. Ethical approval has been obtained from the Social Sciences & Humanities Research Ethics Panel of Bournemouth University (Ethics ID 26485). Our current paper focuses on the results of the quantitative analysis.

**{Insert Figure 1 here}**

**B.     Humanitarian actors:**

Figure 2 provides a snapshot of the humanitarian operations in relation to the Rohingya refugee crisis (JRP, 2019). As in the case of the management by the GoB, the humanitarian actors are also managed by as a two-level structure. The Strategic Executive Group in Dhaka is formed by the International Organization for Migration (Commonly known as IOM, now an UN Body with the name of UN Migration Agency), UNHCR and representatives from other UN bodies. IOM is regarded as the lead agency (Bowen, 2018). The minutes from the 14th Sep. 2017 meeting, which initiated the formal management of the post August 2017 crisis, showed an increased role for IOM in the overall humanitarian management instead of UNHCR. An analysis of the coordination between IOM and UNHCR is available in Moretti (2021).

In Cox's Bazar, the Inter Sector Coordination Group (ISCG) has been formed which works closely with the RRRC and the district level administration. Both National and International NGOs operate under the umbrella of ISCG.

**{Insert Figure 2 here}**

**C. The camp, sectors and 4W data**

The Refugee crisis related activities covers 34 camps in a number of locations (i.e. Kutupalong, Chakmarkul, Unchiprang, Shamlapur, Leda, Ali Khali, Nayapara, Jadimura, Teknaf, Ukhia) in the early period of the crisis management. Some refugees also live within the host communities (Source: Based on Situation Report, various dates). The majority of the Rohingya refugees live is a camp site commonly known as the Kutupalong camp. The population statistics of the Kutupalong camp and some other large camps of the world are given in the supplementary Table S1. As can been seen, the 2017 influx suddenly made the Kutupalong camp the most populated camp of the world.

Along with the refugees, affected host communities are included in the relief related operations. All the host community and refugee sites are highly vulnerable to rain, floods, cyclones, fire and landslides. The refugees are not allowed to participate in income generating activities, except for a limited number of day-labourer jobs offered by NGOs. The Rohingya therefore are entirely dependent on the humanitarian assistance provided by NGOs. Humanitarian activities are categories in 10 sectors within our period of study. The sector classifications and the need assessment made in the Joint Response Plan for 2019 are given in Table S2 (See supplementary materials).

The primary source of data regarding the activities of humanitarian organizations is the website managed by Humanitarian Response ( https://www.humanitarianresponse.info/en) that works under the umbrella of the United Nations Office of Coordination of Humanitarian Affairs (UNOCHA). The data are inputted through a mechanism called 4W. The 4W tool provides an inventory of reporting activities on WHO does WHAT, WHERE, WHEN that fall under the ISCG framework. The earliest reporting date for the Rohingya refugee crisis is 22nd September, 2017. At the beginning of the recent crisis, the ISCG provided weekly updates of 4W data, which later changed to monthly updates.

## Methodology of this paper

This research belongs to a wider range of studies by the authors on the management of the Rohingya refugee crisis in Bangladesh. The current paper is based on the analysis of the 4W data, which we already introduced in the previous section. The utilization of 4W data makes it different from previous studies, specifically Lewis (2019) and Cook and Foo (2019). As stated earlier, 4W is an information management toolkit utilised by UNOCHA. The ISCG office in the Cox's Bazar obtains the 4W data reports from the sector coordinators, compiles and publishes to the dashboard. The data set is freely available from the dashboard (https://www.humanitarianresponse.info/en/operations/bangladesh/iscg-4w-dashboard). We recognize that the data set utilized in the study is secondary in nature, and there are limitations into the nature of conclusions that can be drawn from the analysis. However, 4W is used worldwide to record humanitarian activities, and therefore we regard it as a reliable record of activities of humanitarian management.

The 4W data are available by activities within sectors. Some examples of activities are '25 KG Rice', 'Micronutrient powder (MNP) supplementation', 'Collecting, verifying and analyzing information and identify protection risks' and 'Distribution of hygiene kits'. The names of program partners, implementing partners, donors, sectors and locations have been identified for each listed activity. Given the reporting of activities, it is possible to identify the humanitarian actors involved in projects at the refugee camps. We therefore utilized the 4W data set to identify the evolution of humanitarian actors within the research period.

Working with the 4W data involves a significant amount of data cleaning. Notably for some activities a number of missing values are observed. For example, the name of the program partner has been included, however the names of the implementing partner and donor are not. In these cases, it is assumed that the program partner is also the implementing partner and donor. Similar problems are encountered in extracting the information about activities. We assume the sub-sector classification stated in the spreadsheet as the activity name, if the activity is not listed. Additionally, for some activities, names of donors have been jointly mentioned. For example, if the activity '25 KG Rice' has WFP and UNHCR than we assume that this activity has two donors. Extra care has been taken to identify the institutions that are known by different names.

The cleaned 4W data is first used to provide a descriptive analysis of the evolution of the leadership roles in camp management. MS Excel has been used for this analysis. Data from six reporting dates have been first compared, and later, segregated in 5 categories, and the changes across the last two dates have been compared across categories. The analysis aims to identify evidence of localization in the Rohingya refugee camp management. We also provide a detailed list of actors involved in the operation.

After the descriptive analysis, a network analysis has been conducted to identify the lead organizations in the overall humanitarian network, following an approach previously used by international agencies to examine local capacity (Kapucu, 2011). The process is explained using Figure 3 and 4.

**{Insert Figure 3 here}**

Within each stage of the camp crisis response, Organization/Activity data are obtained from 4W reports and converted into two-mode networks (Organization-Activity) using the UCINET software package. These two-mode networks were then converted into one mode networks representing organization to organization links. This approach has been employed in previous disaster management research to identify the nature of relationships among response organisations (Hu et al., 2014). UCINET was used to perform network calculations using the one-mode network data.

**{Insert Figure 4 here}**

## Findings

### A.     The list of NGOs and characteristics:

The 4W spreadsheets provide lists of the humanitarian actors and the nature of their involvement in the Rohingya refugee camps. From the spreadsheets, the research identifies the names of actors and their primary characteristics. The Table 2 shows the classification of actors by origin, and religion and 5 types of organizational involvement (the full list is available in the supplementary Table S3). The 5 types are International NGOs (INGOs), National NGOs (NNGOs), UN, GoB and others. The categories have been defined as follows:

a. GoB = The institution belongs to the Government of Bangladesh.
b. INGO =International NGO. An NGO is international, if it originated outside of Bangladesh.
c. NNGO = National NGO. An NGO is national if it originated in Bangladesh.
d. UN = United Nations.
e. Others = Other bodies such as another country.

It should be noted that some organizations classified as NNGOs may have international operations (e.g. BRAC). Similarly, INGOs are those who originated abroad, though they may have a permanent presence in Bangladesh. The UN classification implies belonging to the UN family. We have a classification as others for 2 organizations that do not fit into any other classifications. A total of 172 organizations have been identified, who have worked at camps at various stages. Of these, 91 are INGOs and 66 are NNGOs. We have included names of all the bodies available via the 4W data set. It is possible that some other organizations may also have involvement, however, not included in the 4W report. Names of organizations not available via the 4W report have not been included in our analysis. Furthermore, the differentiation between INGOs and NNGOs is not always clear cut and therefore, some classifications are likely to be open to alternative interpretations.

Table 2 also categorizes the entities by religion. This information on the religious orientation has been obtained from the webpages of the institutions. We found that many organizations are not religion-based entities and within the religion-based entities a good mix can be observed. Out of 172 bodies, 27 can be categorised as religion-based, i.e. less than 20%, and this implies that religion does not play a prominent role in humanitarian operations.


**{Insert Table 2 here}**


To our surprise, we noted that there are a higher number of Christian NGOs than Muslim NGOs, though Rohingya are predominantly Muslims. It is also interesting to see that the ratio of religious NGOs to NNGO is relatively low. Lewis (2019) noted that some 'faith-based' NGOs were accused of serving unwelcoming political interest at the beginning of the crisis. This may have deterred the entry of Muslim NGOs. The religious entities may also have no specific significance in humanitarian activities. Palmer (2011) carried out research on Islamic Relief's programs for Rohingya refugees and found no clear evidence of added value of employing Muslim aid agencies.


**B.      Evolution of humanitarian operations in 4W Data**

The 4W spreadsheets provide a good understanding of the evolution of humanitarian actors. The names of the program partners, implementing partners, donors, sectors and locations have been identified for each listed activity. The Tables 3 has been constructed using that information and sector-wise disaggregation is given in supplementary Tables S4 to S13. In the tables, the number of program partners, implementing partners, donors, sectors, activities, locations and entries are reported. Note that the number of activities and locations are not comparable across various reporting dates because of changes in the reporting procedure.


**{Insert Table 3 here}**


The Table 3 shows the evolution of the involvement of organizations over 6 report dates from 22nd Sep., 2017 to 5th March, 2019. The number of program partners reported in 22nd September was only 22, which increase to 98 in 5th March 2019. A similar rate of increase can be observed for the implementing partners which rose from 34 to 118. However, the number of donors has increased at a much faster rate, from 37 to 219. The table indicates that at the beginning, the same organization acted as both donor and implementing partner for the same activity. This apparently has changed, though not a great extent in the later period. The statistics for locations and activities are not comparable as the reports have used different methods of classifications at different dates. However significant change can be observed for the number of entries for activities, from 913 to 13372 (an increase of approximately 14.6 times). The number of implementing partners has multiplied by 3.5 over the same period. This shows an expansion of activities for a small number of institutions.

To facilitate a comparison of the expansion of activities, we also look at them by sector (Tables S3 to S13). Note that Protection and Site Management have not been reported as separate sectors in the initial period. As we have observed in Table 3, there was an expansion in the number of entries compared to the numbers of partners and donors. For the Child Protection Sector, the number of program partners, implementing partners and donors have increased respectively from 5, 7 and 7 to 11, 15 and 20. The entries has increase from 128 to 1184. It shows that the sector has experienced a substantial expansion of activities compared to the number of actors involved in the sector. The Education sector similarly has observed an expansion of entries from 136 to 4195. The number of program partners, implementing partners and donors has increased respectively to 17, 23 and 63. Hence the sector has experienced a higher rate of increase of entries compared to the increase of actors. For Food sector only fivefold increase on the number of entries can be observed which is from 43 to 235. Similarly, the number of actors remained smaller. The Gender Based Violence sector also observes a small increase in the number of program partners, implementing partners and donor. The number of entries has gone up from 101 to 988.

The Health sector interestingly is showing a declined in the number of entries. However, the sector has observed about threefold increase in the number of program partners, implementing partners and donors which is higher than some other sectors. The NFI/Shelter sector also shows about two to fourfold increase in the number of program partners, implementing partners and donors. The sector however experienced a very high increase in

the number of entries, i.e. from 35 to 1006. Interestingly, the sector reported 2195 and 4013 entries in previous reporting date, which is far higher than the last reported one. The Nutrition sector shows about two to fourfold increase in the number of actors, The sector started with small number of actors which was 4, 3 and 3 respectively for program partners, implementing partners and donors. The sector experienced less than a twofold increase in the number of entries from 294 to 507. The Protection sector also started with a small number of actors and still operating with a small number which is respectively 4, 8 and 5 for program partners, implementing partners and donors. It experienced a fivefold increase in the number of entries.

The Site Management sector was first reported on the 10th November, 2017. In the last reporting date on 5$^{th}$ March 2019, the sector only had 2 program partners, compared to 10 on the first reporting date. Similarly, the number of donors has also decreased to 2, though the number implementing partners has gone up to 46. The number of entries has gone up from 40 to 539. The Wash sector experienced the largest expansion of entries from 16 to 4251. The sector also has experienced a higher rate of increase in the number of program partners, implementing partners and donors. The number of donors has increase more than tenfold from 9 to 104.

The data hence shows that except for the Health sector, all sectors have experienced an increase in the number of entries. The rate of expansion of activities is higher than the rate of increase of the number of program partners, implementing partners and donors. The result therefore shows concentration of activities in small number of actors.

A further analysis has been conducted with the aim to compare the involvement of INGOs and NNGOs across various reporting dates. We specifically looked at two reporting dates, i.e. 22th September 2017 and 5$^{th}$ March 2019. For these two reporting dates, program and implementing partners have been segregated according to the categories identified in Table 2. The results have been presented in Figures 5 and supplementary Figures S1 to S10.

In Figure 5, all sectors are combined. In supplementary figures the data has been segregated sector-wise. Figure 5 shows that the number and ratio (as a proportion of the total) of both national and international NGOs have gone up. For program partnership, INGOs have gone up from 13 to 61 and NNGOs have gone up from 3 to 27. Therefore the participation of INGOs has increased from 59% to 62%. For NNGOs it shows an increase from 14% to 28%. In the case of implementation, the percentage of INGOs and NNGOs have gone up respectively from 35% to 41% and from 38% to 47%. Interestingly the involvement of the UN has gone down as a percentage of the organizations involved. This implies that at the beginning, the international actors were more involved than national actors in humanitarian activities and UN played a greater role. Even the GoB performed a leading role in implementation at the beginning. However, the NNGOs have caught up over time, though the INGOs are still leading in activities and are dominant at the end of research period in consideration.

**{Insert Figure 5 here}**

The relatively higher rate of increase in the number of NNGOs is not a general pattern and variations across sectors is possible as can be seen in Figures S1 to S10. In case of the Child protection Sector NNGOs have demonstrated a greater rate of increase from 0 to 3 for program partners. However for implementation, the proportion of NNGOs has decreased and the involvement of both INGOs and UN bodies has shown a greater rate of increase. For the Education sector, a greater role of NNGOs is clearly demonstrated. The sector has experienced a high rate of new entrants i.e. from 3 to 18 for program partners and from 7 to 21 for implementing partners. This increase is due to the increase in the number of both INGOs and NNGOs, where INGOs take the lead by 10 new entries for program partnership. For implementation, the NNGOs has higher involvement with the increase from 3 to 14.

The Food Security sector also has seen an increase in the number of organizations. It is however due to the increased involvement of INGOs rather than the NNGOs. For program partnership number of NNGOs has drop from 2 to 0. INGOs has increased from 5 to 8. For implementing partnership, the involvement of INGOs also shows a greater rate of increase. The Gender Based Violence sector experienced the increase of both INGOs and NNGOs, though the rate of increase is higher for NNGOs. Initially only the INGOs and UN bodies were involved as program partners. However, the report from 5th March shows 2 NNGOs as program partners. The number of NNGOs also have gone up substantially as implementing partners. The Health sector shows a greater involvement of INGOs. The number of both program partners and implementing partners has gone up due to the entry of INGOs. For program partners, the INGOs has gone up from 4 to 20. For implementing partners, the number of INGOs has gone up from 4 to 18. Though the number of NNGOs has also gone up, the sector clearly shows a greater involvement of INGOs. The NFI/Shelter sector has also seen an increase in both program and implementing partners. The involvement of both INGOs and NNGOs has gone up almost at the same proportion. This sector is also dominated by INGOs with 16 in operation as program partners, where the number of NNGOs is 10.

The Nutrition sector shows increased participation of both INGOs and NNGOs as program and implementing partners, though this sector is clearly dominated by INGOs in program partnership. For program partnership, the number of INGOs has gone up from 1 to 6. For implementing partnership, this number has increased from 2 to 6. This sector has no NNGO acting as a program partner. For the Protection sector, the number of organizations involved in this sector is very low. For program partners, the total number of NGOs is only 2 (excluding UN Bodies). For the implementing partners, there are 8 organizations out of which 5 are NNGOs. The Site Management sector demonstrates opposite trends in the numbers of program and implementing partners. The number of program partners has gone down from 10 to 2, however the number of implementing partners has gone up from 10 to 46. We observe increased involvement of both INGOs and NNGOs in implementation. For program partnership, only UN bodies are involved. In the Wash sector the number has gone up for both program and implementing partners. The total number of program partners has gone up from 9 to 56 in which the involvement of the INGOs has gone up from 4 to 37. It shows the program partnership is dominated by INGOs. In the case of implementing, the NNGOs have a dominant role with the number increased from 4 to 30 within the two reporting dates.

To summarize, we observe a mixed picture of the involvement of INGOs and NNGOs in the humanitarian activities at the early stage. In some sectors, we do see increased

involvement of NNGOs however, in other sectors the involvement of INGOs has gone up. Returning to the question of localization, there is no clear overall evidence of increased involvement of NNGOs in the activities related to the Rohingya refugee crisis management. Though the issue of localization can be addressed in different ways, such as by looking at the proportion of activities managed by different types of NGOs, employment, coverage of areas, diversification of activities and other issues, the analysis of the paper shows that localization of humanitarian operations has not been achieved in the context to the Rohingya refugee crisis within the research period in consideration.

## C.     Evaluation of networks

In this section the question of localization is further analyzed using network analysis. Following the methodology described previously, the core-periphery structure of networks in the Rohingya crisis management has been examined to identify the composition of lead actors. The results have been presented in Tables S14 and S15. The analysis indicates a high correlation with Everett and Borgatti's (1999) metric, suggesting that there was a dense core-periphery network. The network core changes from an initial pre-existing Dyad of two members at the initial stage of the crisis to an integrated core with multiple firms at the last stage. As the crisis persisted, the network evolved to incorporate an increase in the scale of activities and types of organizations. The lead authority exchanged across successive stages and resulted in a core cluster of multiple organizations or an integrated core structure. Researchers have theorised that crisis networks will demonstrate a change in the size and composition in the core group (Nowell et al., 2018). This was empirically validated in this case as the core group grew in both size and complexity, adapting authority to a changing context.  At each stage of the crisis, the core actors changed to reflect the priorities over time.

At the final stage, the network core consisted of a combination of government organizations and international organizations. Unlike many other emergency scenarios, there was a pre-existing stable network governed by IOM and Médecins Sans Frontières (MSF). In the network at the subsequent convergence stage, which occurred after the initial influx of refugees, new core organizations emerged comprised of national and international NGOs. These lead organisations were able to attract resources and new members into the network. Subsequent reporting of the 4W data depicts exchanges in authority from INGOs to an integrated INGO-NNGO team without disruption to the network. While the membership of the core and periphery changed over time, the overall network structure was maintained. This structure has been hypothesized as having the capability to adapt and absorb new members without disruption which has been validated empirically in this study. The findings suggest that an exchange dynamic exists where emergency response networks adapt core members to align the governance structure to the scenario requirements. The analysis is consistent with the finding of the descriptive statistics. Though the entry of NGOs can be observed in the periphery, the leadership role seems to be concentrated on the government actors and INGOs.

# Further discussion and significance of the findings

The distinctive nature of the analysis of the preceding sections is its quantitative underpinning which used the 4W data used to evaluate the extent of localization of humanitarian operations in Rohingya refugee camps. The extent of localization is often a much-discussed topic among the people involved in the management of the crisis (Dhaka Tribune, 2020; Business Standard, 2020 and 2021). Our study aims to provide a reliable statistical analysis of the context of such a discussion. Methodologically, therefore, the article makes a significant contribution to the research on the management of Rohingya refugee crisis. It also shows clearly that the transition to localization has not taken place within the subject period of time (1-2 years).

In this context the importance of localization needs to be further emphasized. Refugee crises are a reality of recent times, and in many countries resulting in political tensions. Greater involvement of local institutions may provide a voice for the host communities, thereby reducing tensions and allowing for peaceful cohabitation for both refugees and hosts. The importance of the involvement of local stakeholders in humanitarian management cannot be ignored.

In addition, involving local institutions has the potential to benefit the host countries in the form of human capital development. Providing humanitarian services is a specialist skill that requires training and experience. International humanitarian bodies have acquired these capabilities through decades long exposure to various crises at an international level. Increased involvement of local institutions can help to transfer such skills of managing an international crisis to local institutions. This view does not imply that the local institutions are not capable in taking the leading roles. We imply that, though they are capable, management of an international crisis requires a different set of skills which local institutions may not immediately possess, that needs some degree of actual exposure to leadership.

The findings of the article suggests that as localization was not achieved within the period of study, the voice of dissent reported previously by various outlets has some strong basis. Additionally, the benefit of skill transfer in managing an international crisis has not been also realized as the NNGOs lag behind the INGOs in participation.

The analysis also provides a sector-level indication of localization. The involvement of NNGOs has increased over time, but most sector also observed concurrent increase of the number of INGOs. Specifically, the involvement of NNGOs as program partners has relatively a low rate of increase compared to that of INGOs. On the other hand, the role of NNGOs as implementing partner has increased at a much greater rate. It shows that the leadership roles of activities are dominated by INGOs where the NNGOs are increasingly getting involved at implementation. One may therefore want to investigate the reasons for such sector level differences of involvement of NNGOs and INGOs at program and implementing levels.

The research therefore leads to additional questions, which we do not attempt to answer as the paper is already dense with the analysis of tables and figures. However, it directs to further research capable of providing policy level guidelines. The findings also call

for further investigation on localization at the medium term (e.g 2-5 years), which also requires a separate study.

The paper did not aim to develop a framework or theoretical understanding of localization[2] though such a model will be very useful at the policy level. Within the paper, we relied on data analysis to provide us the understanding of localization. This analysis provides the basis to build up a theoretical framework, which coupled with further empirical investigation, will be useful for generating the understanding of factors preventing the localization and taking necessary measures. It should be noted that some previous papers already have identified some reasons which we discussed in the literature review (Brabant and Patel, 2018: Lewis, 2019; Cook and Foo, 2019). They stated that the local NGOs are not considered as equals, the existence of the attitude of supremacy and the use of English in meetings. The wider political and historical factors to be also considered in understanding the performance of humanitarian actors.

Additionally, our article profiles humanitarian operations along with the context and history of the crisis, in a manner that can be utilized by general people, media and policy along with the future researchers. The paper therefore makes contribution with the view to inform the academic and non-academic audiences for positive changes to the management of the Rohingya refugee crisis.

## Conclusion

The Rohingya refugee crisis is one of the largest humanitarian crisis to unfold in the last 5 years. Though the crisis itself has received international media coverage and the attention of academics, the involvement of humanitarian agencies in the crisis management is understudied, though some recent papers have attempted to address this gap. Our current paper provided a quantitative analysis of the involvement of humanitarian actors in relation to the management of activities. The article addressed the early period of operation (1-2 years) and provided a profile of organizations. The question of localization has been addressed by examining the evolution of the number of local humanitarian bodies in the 4W data.

The analysis of data suggests that the humanitarian operations in relation to the Rohingya refugee crisis at the early period did not achive localization as local organizations were still to assume leadership roles in the management of humanitarian activities. Our analysis supports what has been identified in previous research papers and is often reported in media.

This article also provided a comprehensive review of the history, context and profiles of humanitarian actors in relation to the Rohingya refugee crisis and as such, provides a point of departure for future research. The names of institutions and the evolution of humanitarian

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[2] It has been stated by several referees. The authors are thankful to them for providing this direction for future research.

activities have been documented. We expect that future research and related practices will find our endeavor useful in the management and understanding of humanitarian crises.

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<p style="text-align:center"><strong><u>Tables</u></strong></p>

<p style="text-align:center"><strong>Table 1: Entry of Rohingya refugees Aug. 2017-Dec. 2018</strong></p>

| Date | Population |
|---|---|
| 24th September, 2017 | 436,000 |
| 15th October, 2017 | 537,000 |
| 26th November, 2017 | 624,000 |
| 30th July, 2018 | 706,000 |
| 12th Nov. 2018 | 733,415 |
| 31st Dec. 2018 | 745,000 |

Source: Compiled from Situation reports (Various dates)

<p style="text-align:center"><strong>Table 2: Humanitarian actors by type and religion</strong></p>

| Type | No | Religious orientation | Religion type |
|---|---|---|---|
| INGOs | 91 | 22 | Christian = 13, Muslim =9 |
| NNGOs | 66 | 5 | Christian=1, Muslim=2, Hindu=1, Sikhs=1 |
| UN | 8 | 0 | - |
| GoB | 5 | 0 | - |
| Others/Consortium | 2 | 0 | - |
| **Total** | **172** | **27** | **Christian =14, Muslim=11, Hindu=1, Sikhs=1** |

<p style="text-align:center"><strong>Table 3: All sectors</strong></p>

| All sectors | 22/09/2017 | 06/10/2017 | 10/11/2017 | 29/12/2017 | 18/06/2018 | 05/03/2019 |
|---|---|---|---|---|---|---|
| **Program Partners** | 22 | 37 | 53 | 65 | 86 | 98 |
| **Implementing partner** | 34 | 56 | 66 | 80 | 92 | 118 |
| **Donors** | 37 | 67 | 95 | 116 | 158 | 219 |
| **Sectors** | 8 | 9 | 10 | 10 | 10 | 10 |
| **Activities** | 147 | 195 | 207 | 310 | 268 | 220 |
| **Locations** | 60 | 109 | 97 | 88 | 88 | 109 |
| **No. of entries** | 913 | 2171 | 3732 | 6096 | 9864 | 13372 |

**Figures**

**Figure 1: Management structure of the Government of Bangladesh**
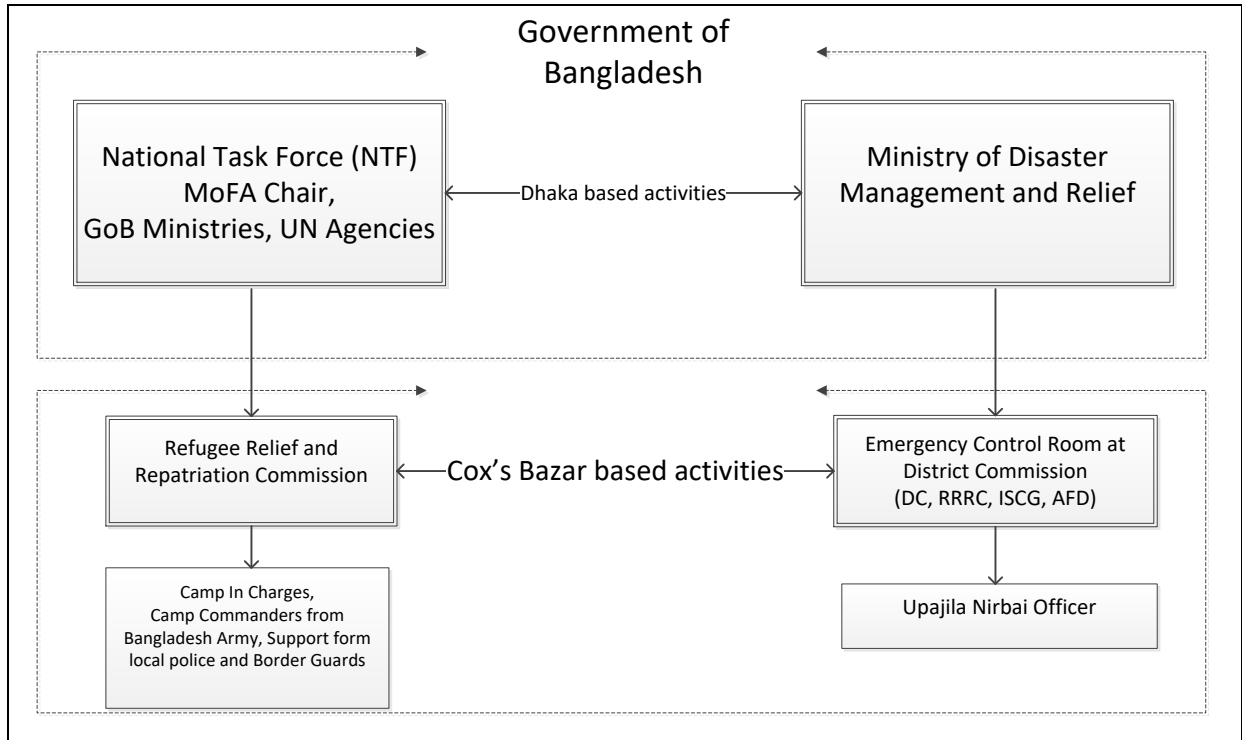


Source: JRP 2019, Reconstructed by Authors.

**Figure 2: Management structure of the humanitarian actors**
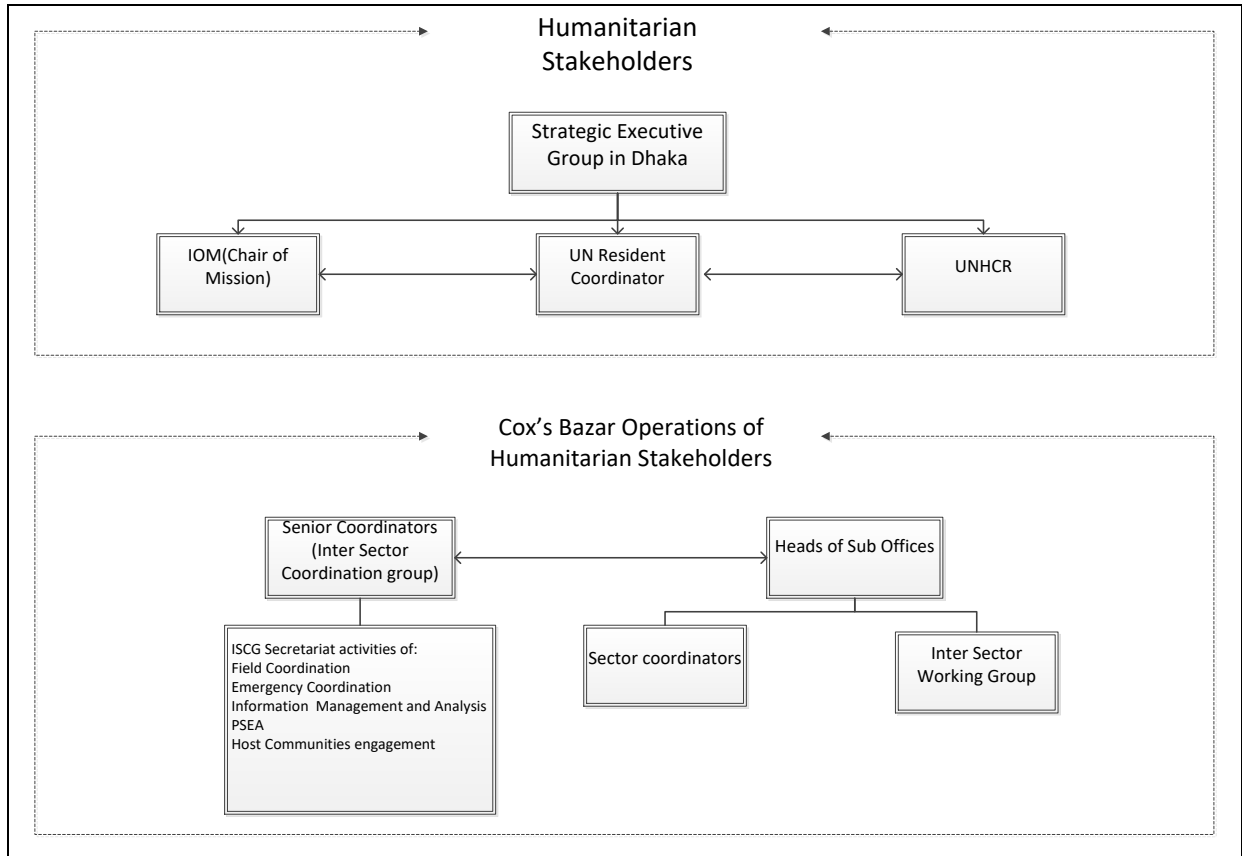


Source: JRP 2019, reconstructed by Authors.

**Figure 3: Process of the network analysis**

| Clean and Process 4W data | → | Identify firm-activity collaboration data at stage points | → | Firm-Activity 2 mode networks | → | One mode projection | → | Calculate Core/Periphery network statistics to identify emergent lead organizations | → | Classification of INGOs and NNGOs participation by sector |
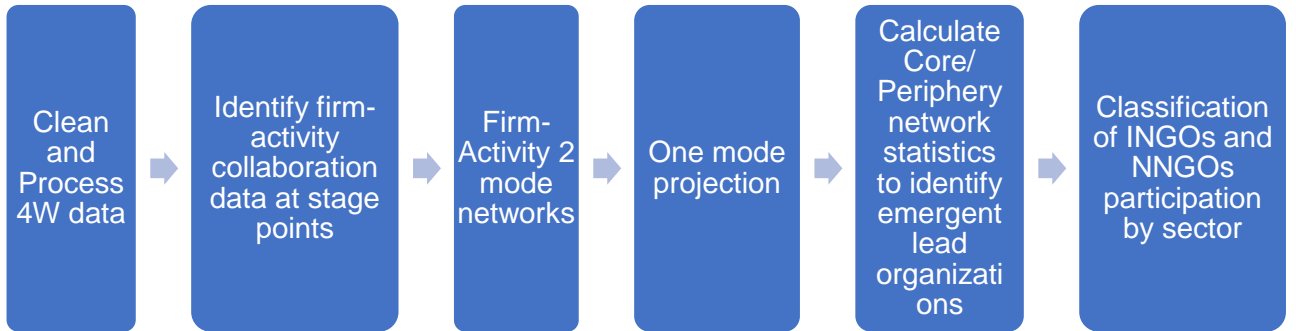
**Figure 4: Conversion to one mode data**

Firm 1

Firm 2

Activity

Network Tie among NGOs used for subsequent analysis
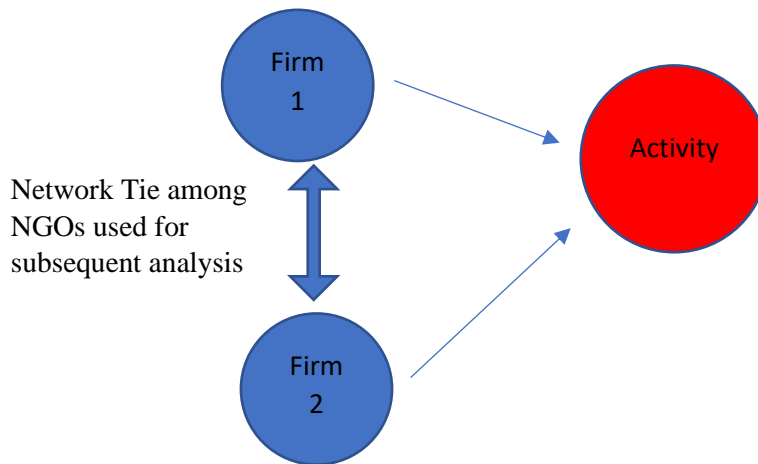
**Figure 5: Evolution of partners (All Sectors)**



**Program partners**

| | 22/09/2017 | 05/03/2019 |
|------|-----------|-----------|
| GoB | 1 | 2 |
| INGO | 13 | 61 |
| NNGO | 3 | 27 |
| Others | 0 | 1 |
| UN | 5 | 7 |
| Total | 22 | 98 |

**Implementing partners**

| | 22/09/2017 | 05/03/2019 |
|------|-----------|-----------|
| GoB | 4 | 7 |
| INGO | 12 | 48 |
| NNGO | 13 | 55 |
| Others | 0 | 2 |
| UN | 5 | 6 |
| Total | 34 | 118 |
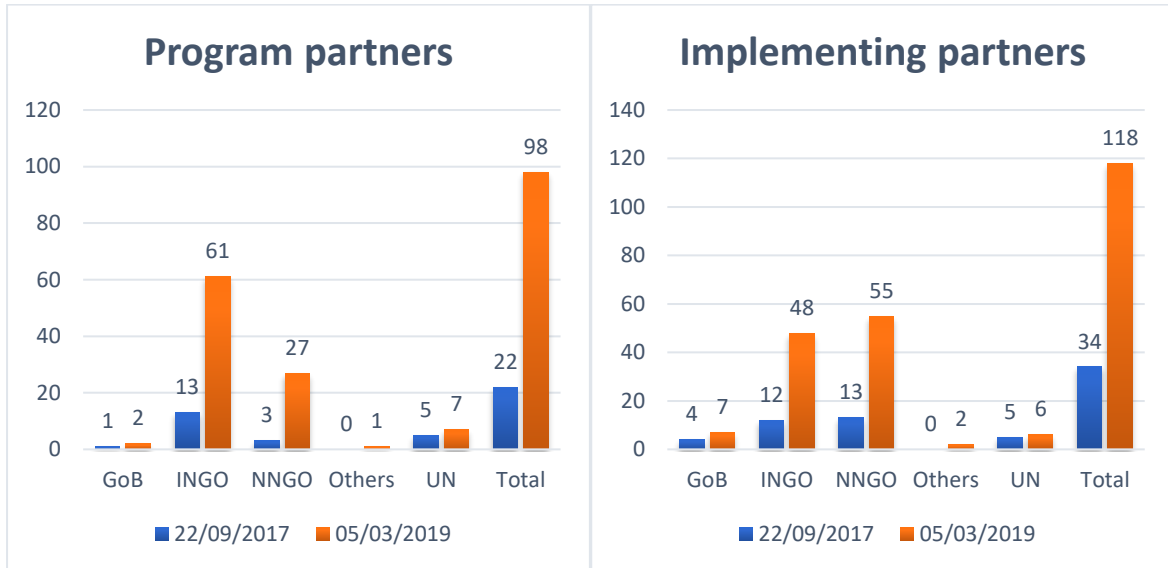
**Tables**

### Table S1: Refugee camps population around the world

| Camp name | Country | Population* |
|---|---|---|
| Kutupalong | Bangladesh | 625,428 |
| Bidi Bidi | Uganda | 223,088 |
| Palorinya | Uganda | 118,404 |
| Kayanwali | Uganda | 76,717 |
| Dadaab | Kenya | 208,550 |
| Kakuma | Kenya | 186,001 |
| Nyarugusu | Tanzania | 134,696 |
| Katumba | Tanzania | 66416 |
| Zaatari | Jordan | 78,357 |
| Pugnido | Ethiopia | 66,429 |
| Yida | Sudan | 54684 |
| Dzaleka | Malawi | 34,000 |

*Data from 2015 to 2018, Source: UNHCR country pages. Note that some countries like Lebanon, Turkey and Pakistan lave large refuge population however they are not confined in a small number of refugee camps.

### Table S2: Sector-wise estimates of funding required in 2019

| Sectors | Fund required ($, in Million) |
|---|---|
| **Food security** | 255 |
| **Wash** | 136.7 |
| **Shelter** | 128.8 |
| **Site Management** | 98.7 |
| **Health** | 88.7 |
| **Protection (Child Protection and Gender based violence** | 85.9 |
| **Education** | 59.5 |
| **Nutrition** | 48.1 |
| **Communication with Communities*** | 11 |
| **Coordination*** | 4.2 |
| **Logistics*** | 2.8 |
| **Emergency (Tele communications)*** | 1.1 |
| **Total** | 920.5 |

Source: JRP (2019). Star marked are not sectors of operation.

## Table S3: List of agencies involved in humanitarian operations

| SL No. | Full name | Type | Religion based entity (Yes/No) | Which religion |
|---|---|---|---|---|
| 1 | Action Aid Bangladesh | NNGO | No | |
| 2 | Association for Aid and Relief | INGO | No | |
| 3 | Action Contre La Faim/Action Against Hunger | INGO | No | |
| 4 | Agency for Technical Cooperation and Development | INGO | No | |
| 5 | ACT Alliance | INGO | Yes | Christian |
| 6 | Adventist Development and Relief Agency | INGO | Yes | Christian |
| 7 | Association of Training and Development Support | NNGO | No | |
| 8 | Allama Fazlulla Foundation | NNGO | No | |
| 9 | Agrajattra | NNGO | No | |
| 10 | Almanahill | NNGO | No | |
| 11 | AMURT Disaster Relief - Development Cooperation | NNGO | No | |
| 12 | ANANDO | NNGO | No | |
| 13 | An Organization for Socio-Economic Development | INGO | No | |
| 14 | Asia Pacific Developemnt Center for Disability | INGO | No | |
| 15 | Association for Socio Economic Advancement in Bangladesh | NNGO | No | |
| 16 | AWO International | INGO | No | |
| 17 | Initiative for People's Self Development | NNGO | No | |
| 18 | Bangladesh Development Research Center | NNGO | No | |
| 19 | Bangladesh Red Crescent Society | NNGO | No | |
| 20 | Bangla German Sempreeti | NNGO | No | |
| 21 | Bangladesh Institute of Theatre Arts | NNGO | No | |
| 22 | Bangla Mission | NNGO | No | |
| 23 | Bank Negara Malaysia | INGO | No | |
| 24 | Bangladesh National Woman Lawyers Association | NNGO | No | |
| 25 | BRAC | NNGO | No | |
| 26 | British Red Cross | INGO | No | |
| 27 | Christian Aid | INGO | No | Christian |
| 28 | Care Bangladesh | NNGO | No | |
| 29 | Caritas | INGO | Yes | Christian |

| 30 | Christian Blind Mission | INGO | Yes | Christian |
|----|-------------------------|------|-----|-----------|
| 31 | Christian Commission for the Development of Bangladesh | NNGO | Yes | Christian |
| 32 | Center for Disability in Development | INGO | No | |
| 33 | Center for Natural Resource Studies | NNGO | No | |
| 34 | Coastal Association for Social Transformation Trust | NNGO | No | |
| 35 | CODEC | NNGO | No | |
| 36 | Compassion International | INGO | Yes | Christian |
| 37 | COTE | INGO | No | |
| 38 | Common Pipeline | INGO | No | |
| 39 | Community Partners International | INGO | No | |
| 40 | Child Right Connect | INGO | No | |
| 41 | Concern Worldwide | INGO | No | |
| 42 | Center for Zakat Management | NNGO | Yes | Muslim |
| 43 | Dalit – Hope for the Oppressed | NNGO | No | |
| 44 | Dhaka Ahsania Misson | NNGO | Yes | Muslim |
| 45 | DanChurchAid | INGO | Yes | Christian |
| 46 | Dhaka Community Hospital Trust | NNGO | No | |
| 47 | Dortmunder helfen Kurden | INGO | No | |
| 48 | DLANAT | INGO | No | |
| 49 | Department of Agricultural Extension | GoB | No | |
| 50 | Department of Fisheries | GoB | No | |
| 51 | DoPeace | INGO | No | |
| 52 | Department of Public Health Engineering | GoB | No | |
| 53 | Danish Refugee Council | INGO | No | |
| 54 | Development Support Center | INGO | No | |
| 55 | Dushtha Shasthya Kendra | NNGO | No | |
| 56 | Embassy of the Sultanate of Oman | Others | No | |
| 57 | Eco Social Development Organization | NNGO | No | |
| 58 | Food and Agriculture Organization | UN | No | |
| 59 | Finn Church Aid | INGO | Yes | Christian |
| 60 | Family Development Services Research | NNGO | No | |
| 61 | Food for the Hungry | NNGO | No | |
| 62 | Field Hospital Malaysia | INGO | No | |
| 63 | Friends in Village Development Bangladesh | NNGO | No | |
| 64 | Friendship | INGO | No | |
| 65 | Global Action for Children | INGO | No | |
| 66 | Give2Asia | INGO | No | |

| 67 | Gonoshasthaya Kendra | NNGO | No | |
|---|---|---|---|---|
| 68 | GlobalOne | NNGO | No | |
| 69 | Gender Resource Centre | NNGO | No | |
| 70 | Gana Unnayan Kendra | NNGO | No | |
| 71 | GUSS | NNGO | No | |
| 72 | Health and Education for All | INGO | No | |
| 73 | Health and Education for the Less Privileged People | NNGO | | |
| 74 | Help - Hilfe zur Selbsthilfe | INGO | No | |
| 75 | HelpAge International | INGO | No | |
| 76 | Hope Foundation | INGO | No | |
| 77 | Helping Hand for Relief and Development | INGO | Yes | Muslim |
| 78 | Handicap International | INGO | No | |
| 79 | Hindu Family | NNGO | Yes | Hindu |
| 80 | HOPE Foundation for Woman and Children of Bangladesh | NNGO | No | |
| 81 | HELVETAS | INGO | No | |
| 82 | Humaniterra International | INGO | No | |
| 83 | HYSAWA Project | NNGO | No | |
| 84 | Interchurch Organisation for Development Cooperation | INGO | Yes | Christian |
| 85 | ICNA Relief Canada | INGO | Yes | Muslim |
| 86 | International Committee of the Red Cross | INGO | No | |
| 87 | Integrated Development Foundation | INGO | No | |
| 88 | International Federation of Red Cross and Red Crescent Societies | INGO | No | |
| 89 | Indonesian Humanitarian Alliance | INGO | Yes | Muslim |
| 90 | Humanitarian Relief Foundation | INGO | Yes | Muslim |
| 91 | Infinity | INGO | No | |
| 92 | International Organization for Migration | UN | No | |
| 93 | International Rescue Committee | INGO | No | |
| 94 | Integrated Social Development Effort Bangladesh | NNGO | No | |
| 95 | International Union for Conservation of Nature | INGO | No | |
| 96 | International Volunteers of Yamagata | INGO | No | |
| 97 | Jagorani Charkra Foundation | NNGO | No | |
| 98 | Japanese Red Cross Society | INGO | No | |
| 99 | Kindernothilfe | INGO | Yes | Christian |
| 100 | KUWAIT SOCIETY FOR RELIEF | INGO | Yes | Muslim |
| 101 | Marcy Without Limit | INGO | No | |

| 102 | Médecins du Monde | INGO | No | |
|-----|-------------------|------|-----|-----|
| 103 | Medair | INGO | Yes | Christian |
| 104 | MedGlobal | INGO | No | |
| 105 | Mercy Malaysia | INGO | Yes | Muslim |
| 106 | Muslim Hands International | INGO | Yes | Muslim |
| 107 | Malteser International | INGO | No | |
| 108 | Migrant Offshore Aid Station | INGO | No | |
| 109 | Ministry of Disaster Management and Relief | GoB | No | |
| 110 | Médecins Sans Frontières | INGO | No | |
| 111 | Medical Teams International | INGO | No | |
| 112 | Mukti Cox's Bazar | NNGO | No | |
| 113 | National Association | NNGO | No | |
| 114 | NF Enterprise | NNGO | No | |
| 115 | Nobolok | NNGO | No | |
| 116 | NGO Forum for Public Health | NNGO | No | |
| 117 | OBAT Helpers | INGO | No | |
| 118 | One Nation | INGO | No | |
| 119 | Oxfam | INGO | No | |
| 120 | Practical Action | NNGO | | |
| 121 | Programme for Helpless and Lagged Societies | NNGO | No | |
| 122 | Partners in Health Development | INGO | No | |
| 123 | People in Need | INGO | No | |
| 124 | Plan | INGO | No | |
| 125 | Prantic | NNGO | No | |
| 126 | Prottyashi | NNGO | No | |
| 127 | Première Urgence Internationale | INGO | No | |
| 128 | PULSE Bangladesh | NNGO | No | |
| 129 | Peace Winds Japan | INGO | No | |
| 130 | Qatar Charity | INGO | No | |
| 131 | Qatar Red Crescent | INGO | No | |
| 132 | Reach Initiative | INGO | No | |
| 133 | Refugee Health Unit | GoB | No | |
| 134 | Relief International | INGO | No | |
| 135 | Resource Integration Centre | NNGO | No | |
| 136 | RISDA Bangladesh | NNGO | No | |
| 137 | Research, Training & Management International | NNGO | No | |
| 138 | SALT Financial Literacy International | NNGO | No | |
| 139 | Syrian American Medical Society | INGO | No | |
| 140 | Social Assistance and Rehabilitation for Physically Vulnerable | NNGO | No | |
| 141 | Save the Children | INGO | No | |

| 142 | Society for Health Extension and Development | NNGO | No | |
|---|---|---|---|---|
| 143 | Solidarités International | INGO | No | |
| 144 | Secours Islamique France | INGO | Yes | Muslim |
| 145 | Small Kindness Bangladesh | NNGO | No | |
| 146 | Samaj Kallyan O Unnayan Shangstha | NNGO | No | |
| 147 | Site Management Engineering Project | Consortium/Others | No | |
| 148 | Sheba Manab Kallyan Kendra | NNGO | No | |
| 149 | Samaritan's Purse | INGO | Yes | Christian |
| 150 | Society for People's Actions in Change and Equity | NNGO | No | |
| 151 | Swiss Red Cross | INGO | No | |
| 152 | Sushilan | NNGO | No | |
| 153 | Technical Assistance Inc. | NNGO | No | |
| 154 | Terre des Hommes | INGO | No | |
| 155 | Tearfund | INGO | Yes | Christian |
| 156 | Tanzania Red Cross Society | INGO | No | |
| 157 | United Nations Development Programme | UN | No | |
| 158 | United Nations Population Fund | UN | No | |
| 159 | United Nations High Commission for Refugees | UN | No | |
| 160 | UNICEF | UN | No | |
| 161 | United Sikhs | NNGO | Yes | Sikhs |
| 162 | UNWOMEN | UN | No | |
| 163 | United Purpose | INGO | No | |
| 164 | Ummah Welfare Trust | INGO | Yes | Muslim |
| 165 | Village Education Resource Center | NNGO | No | |
| 166 | Voluntary Service Overseas | INGO | No | |
| 167 | Water Aid | INGO | No | |
| 168 | World Concern | INGO | No | |
| 169 | United Nations World Food Programme | UN | No | |
| 170 | Welthungerhilfe (WHH) | INGO | No | |
| 171 | World Vision International | INGO | Yes | Christian |
| 172 | Young Power in Social Action | NNGO | No | |

Source: 4W dashboard of UNOCHA. Information on religion is obtained from the webpages of organizations

## Table S4: Child Centred Care/Child Protection

| Child Centred Care/Child Protection | 22/09/2017 | 06/10/2017 | 10/11/2017 | 29/12/2017 | 18/06/2018 | 05/03/2019 |
|---|---|---|---|---|---|---|
| Program Partner | 5 | 5 | 6 | 8 | 14 | 11 |
| Implementing partner | 7 | 9 | 6 | 8 | 25 | 15 |
| Donors | 7 | 8 | 5 | 8 | 16 | 20 |
| Activities | 22 | 38 | 14 | 16 | 14 | 29 |
| Locations | 23 | 142 | 16 | 15 | 34 | 39 |
| No of entries | 128 | 167 | 291 | 506 | 625 | 1184 |

## Table S5: Education

| Education | 22/09/2017 | 06/10/2017 | 10/11/2017 | 29/12/2017 | 18/06/2018 | 05/03/2019 |
|---|---|---|---|---|---|---|
| Program Partner | 3 | 5 | 3 | 8 | 4 | 17 |
| Implementing partner | 7 | 9 | 6 | 10 | 6 | 23 |
| Donors | 6 | 10 | 6 | 7 | 12 | 63 |
| Activities | 22 | 33 | 20 | 14 | 14 | 26 |
| Locations | 12 | 17 | 18 | 30 | 38 | 47 |
| No of entries | 136 | 160 | 157 | 213 | 903 | 4195 |

## Table S6: Food Security

| Food Security | 22/09/2017 | 06/10/2017 | 10/11/2017 | 29/12/2017 | 18/06/2018 | 05/03/2019 |
|---|---|---|---|---|---|---|
| Program Partner | 9 | 13 | 19 | 25 | 22 | 11 |
| Implementing partner | 9 | 15 | 23 | 29 | 24 | 19 |
| Donors | 9 | 14 | 36 | 45 | 20 | 13 |
| Activities | 8 | 25 | 50 | 80 | 11 | 2 |
| Locations | 18 | 23 | 26 | 31 | 30 | 30 |
| No of entries | 43 | 108 | 528 | 805 | 114 | 235 |

## Table S7: Gender Based Violence (GBV)

| Gender Based Violence (GBV) | 22/09/2017 | 06/10/2017 | 10/11/2017 | 29/12/2017 | 18/06/2018 | 05/03/2019 |
|---|---|---|---|---|---|---|
| Program Partner | 8 | 9 | 11 | 7 | 8 | 14 |
| Implementing partner | 9 | 10 | 13 | 7 | 11 | 17 |
| Donors | 11 | 12 | 15 | 8 | 18 | 20 |
| Activities | 9 | 13 | 24 | 9 | 13 | 9 |
| Locations | 28 | 27 | 27 | 12 | 28 | 43 |
| No of entries | 101 | 121 | 241 | 81 | 335 | 988 |

**Table S8: Health**

| Health | 22/09/2017 | 06/10/2017 | 10/11/2017 | 29/12/2017 | 18/06/2018 | 05/03/2019 |
|---|---|---|---|---|---|---|
| Program Partner | 9 | 16 | 21 | 18 | 22 | 31 |
| Implementing partner | 9 | 16 | 22 | 27 | 19 | 30 |
| Donors | 9 | 12 | 23 | 23 | 36 | 30 |
| Activities | 28 | 27 | 38 | 92 | 87 | 46 |
| Locations | 17 | 20 | 27 | 25 | 37 | 36 |
| No of entries | 294 | 776 | 989 | 618 | 424 | 227 |

**Table S9: NFI/Shelter**

| NFI/Shelter | 22/09/2017 | 06/10/2017 | 10/11/2017 | 29/12/2017 | 18/06/2018 | 05/03/2019 |
|---|---|---|---|---|---|---|
| Program Partner | 9 | 12 | 23 | 24 | 33 | 31 |
| Implementing partner | 11 | 12 | 23 | 23 | 39 | 25 |
| Donors | 9 | 17 | 33 | 39 | 65 | 37 |
| Activities | 6 | 11 | 1 | 24 | 1 | 28 |
| Locations | 14 | 13 | 35 | 42 | 51 | 35 |
| No of entries | 35 | 44 | 555 | 2195 | 4013 | 1006 |

**Table S10: Nutrition**

| Nutrition | 22/09/2017 | 06/10/2017 | 10/11/2017 | 29/12/2017 | 18/06/2018 | 05/03/2019 |
|---|---|---|---|---|---|---|
| Program Partner | 4 | 5 | 6 | 10 | 15 | 8 |
| Implementing partner | 4 | 6 | 7 | 11 | 17 | 10 |
| Donors | 3 | 7 | 6 | 9 | 13 | 13 |
| Activities | 36 | 33 | 21 | 22 | 19 | 21 |
| Locations | 26 | 29 | 19 | 21 | 45 | 46 |
| No of entries | 294 | 363 | 332 | 448 | 431 | 507 |

**Table S11: Protection**

| Protection | 22/09/2017 | 06/10/2017 | 10/11/2017 | 29/12/2017 | 18/06/2018 | 05/03/2019 |
|---|---|---|---|---|---|---|
| Program partner | N/A | 2 | 2 | 5 | 6 | 4 |
| Implementing partner | N/A | 2 | 2 | 6 | 6 | 8 |
| Donor | N/A | 2 | 4 | 6 | 6 | 5 |
| Activities | N/A | 9 | 13 | 12 | 9 | 10 |
| Locations | N/A | 9 | 6 | 29 | 19 | 31 |
| No of entries | N/A | 49 | 50 | 76 | 177 | 240 |

**Table S12: Site Management**

| Site Management | 22/09/2017 | 06/10/2017 | 10/11/2017 | 29/12/2017 | 18/06/2018 | 05/03/2019 |
|---|---|---|---|---|---|---|
| Program Partner | N/A | N/A | 10 | 11 | 6 | 2 |
| Implementing partner | N/A | N/A | 10 | 10 | 6 | 46 |
| Donors | N/A | N/A | 10 | 9 | 6 | 2 |
| Activities | N/A | N/A | 1 | 10 | 5 | 7 |
| Locations | N/A | N/A | 14 | 34 | 33 | 34 |
| No of entries | N/A | N/A | 40 | 102 | 239 | 539 |

**Table S13: WASH**

| Wash | 22/09/2017 | 06/10/2017 | 10/11/2017 | 29/12/2017 | 18/06/2018 | 05/03/2019 |
|---|---|---|---|---|---|---|
| Program Partner | 9 | 20 | 30 | 36 | 42 | 55 |
| Implementing partner | 11 | 24 | 33 | 37 | 42 | 54 |
| Donors | 9 | 27 | 41 | 47 | 75 | 104 |
| Activities | 16 | 11 | 25 | 31 | 63 | 42 |
| Locations | 34 | 71 | 53 | 34 | 63 | 94 |
| No of entries | 16 | 381 | 549 | 1050 | 2603 | 4251 |

**Table S14: Sector leads and partners**

| Sector | Sector Lead Agency | Partners |
|---|---|---|
| Education | 1. Government of Bangladesh: Directorate of Primary Education 2. Sector Co-Lead Agencies: UNICEF/ Save the Children | ACF, AMURT, BRAC, COAST, CODEC, DAM, DCA, DoPeace, Friendship, ISDEBD, MHI, Mukti, OBAT, Plan, SCI, UNHCR, UNICEF, VSO, YPSA |
| Food Security | 1. Government of Bangladesh: RRRC, District Food Controller, Department of Agricultural Extension 2. Sector Lead Agency: WFP | AAB, ACF, DoAE, DoF, FAO, GUK, ICCO, Mukti, Oxfam, RIC, SCI, Sushilan, UNWOMEN, WFP, WVI, YPSA |
| Health | Sector Lead: Civil Surgeon (Ministry of Health) Sector Lead Agency: WHO | ACF, Agrajattra, ASEAB, BDRCS, BRAC, CA, CBM, CDD, COAST, CPI, CZM, Dalit, DAM, DCHT, DoPeace, DSK, FDSR, FH, FHM, Friendship, GK, HAEFA, HelpAge, HF, HI, Hope, ICRC, IFRC, IHA, IOM, IRC, ISDEBD, JRCS, MDM, Medair, MedGlobal, Mercy Malaysia, MHI, MI, MOAS, MSF, MTI, N.A, PHD, Prottyashi, PULSE, PWJ, RI, RIC, RTMI, SALT, SAMS, SCI, SKB, SP, SRC, TdH, UNFPA, UNHCR, UNICEF, WC, WVI, YPSA |

| Sector | Sector Lead Agency | Partners |
|---|---|---|
| **NFI/Shelter** | Sector Lead: RRRC office<br>Co-Lead Agencies: IOM / Caritas | AAB, AAR, ACF, ADRA, AFAD, Agrajattra, Almanahill, AWO, Bastob, BDRC, BDRCS, BNM, BRAC, CA, CARE, Caritas, CCDB, COAST, CP, CPI, CWW, DCA, DLANAT, DoPeace, DRC, EmbassyofOman, FAO, FIVDB, GlobalOne, GRC, GUK, GUSS, HELP e.V., HI, Hindu Family, ICRC, IFRC, IHH, IOM, ISDEBD, KSR, Marcy Without Limit, MEDAIR, MHI, Mukti, NF-E, OBAT, One Nation, Oxfam, PIN, PULSE, RISDA, SCI, SI, SKB, Tearfund, UNHCR, United Sikhs, UNWOMEN, VERC, WC, WVI, YPSA |
| **Nutrition** | Sector lead: Civil Surgeon (Ministry of Health)<br>Co-lead: UNICEF | ACF, BRAC, CWW, GK, MI, SARPV, SCI, SHED, TdH, UNHCR, UNICEF, WC, WFP, WVI |
| **Protection** | Government: RRRC, MoWCA, District OCC<br>2.Sector Lead Agency:<br>**Protection**: UNHCR<br>**Child Protection**: UNICEF<br>**GBV**: UNFPA | BRAC, IOM, PULSE, RI, SI, UNHCR |
| **Child Protection** | | IOM, Plan, RI, TdH, UNHCR, UNICEF |
| **GBV** | | BNWLA, BRAC, CARE, COAST, IOM, Mukti, PULSE, RI, RTMI, TAI, UNFPA, UNHCR, YPSA |
| **Site Management** | Sector Lead: RRRC office<br>Co-Lead Agencies: IOM / DRC | AAB, ACF, ACTED, ADRA, BRAC, CA, CARE, DRC, IOM, PUI, UNDP, UNHCR, WFP, WVI |
| **WASH** | Sector lead: DPHECo-Lead Agencies: UNICEF / ACF | AAB, ACF, Agrajattra, ANANDO, AOSED, Bastob, BDRCS, BGS, BRAC, BRC, CA, CARE, Caritas, CCDB, COAST, COTE, DAM, DPHE, DSK, Friendship, G2A, GRC, GUK, HELP e.V., HHRD, HSI, HYSAWA, ICCO, ICNA RC, IFRC, IHH, IOM, KNH, MHI, MoDMR, MSF, Mukti, NGOF, OBAT, Oxfam, PA, PHALS, Plan, Prottyashi, QRC, RIC, SCI, SHED, SI, SKB, SMKK, SPACE, TdH, Tearfund, TRCS, UNFPA, UNHCR, UNICEF, UP, VERC, WaterAid, WHH, WVI, YPSA |

\* Abbreviated names have been reported in the table. The detail list is available from the 4W dashboard.

**Table S15 : Evolution of the network Leadership**

| | September 2017 | October 2017 | April 2018 | March 2019 |
|---|---|---|---|---|
| Network Core | IOM (International organisation for Migration) MSF (Medicines sans Frontieres) | Mukti CXB (Mukti Cox's Bazaar) RIC (Resource Integration Centre) SHED (Society for health extension and development) WFP (World Food Program) | IOM UNHCR | ACF (Action against hunger) BDRC (Bangladesh Development Research Centre) BRAC SCI (Save the Children) |
| Peripheral | AAB ACF BDRCS BRAC Brac CA CCDB COAST Trust CODEC CWW Caritas DAM DPHE FACT HEALTH HELP Cox's Bazar HI ICRC IFRC MoHFW Mukti Mukti CXB NGO-F NGO-F & BGS RIC SCI SHED Teknaf UEO UNFPA UNHCR UNICEF Ukhiya UEO VERC WFP WVI YPSA | ACF ADRA AMJ Action Aid BDRCS BGS BRAC Bastob CA CARE CCDB CCDB, Mukti, DAM CDP COAST CODEC CODEC/MUKTI CWW Caritas Christian Aid Concern DGHS (CS Office Cox's Bazar) DPHE DSK DSK/GUK/CA Friendship GUK HELP CXB HI HYSAWA Hindu Family ICRC IOM MEDAIR MODMR MSF MUKTI MoHFW NGOF OBAT Brothers Oxfam PULSE Plan BD RI SARPV SCI SI TAI TIKA Tdh UNHCR UNITED SIKHS VERC WHO | AAB AAR ACF ACT Alliance AMURT ASEAB AWO Agrajattra BDRCS BRAC Bastob CA CAID CARE CBM CCDB CPI CW CZM Caritas DAM DCA DFID DPHE DRC DRCS DSK DoPeace FAO FDSR FH FHM Friendship G2A GRC GUSS Global One HAEFA HELP e.V. HELVETAS HF HI HelpAge ICCO ICRC IFRC IHA IHH IRC MDM MHI MI MOAS MSF Medglobal Mercy Malaysia NRC OBAT Oxfam PHALS PIN PWJ Plan RI SALT SAMS SCI SHED SI SKB SP SPACE TAI TdH Tearfund UNFPA UNICEF UP United Sikhs VSO WC- | AAB ACTED ADRA AFAD AMURT ANANDO AOSED ASEAB Agrajattra Almanahill BDRCS BGS BNM BNWLA Bastob CA CARE CCDB CDD COAST CODEC CP CWW CZM Caritas DAM DCA DCHT DLANAT DPHE DRC DSK Dalit DoAE DoF FDSR FH FHM FIVDB Friendship GK GUK GUSS GlobalOne HAEFA HI HYSAWA Hindu Family Hope ICCO ICRC IFRC IHA IOM IRC ISDEBD JRCS KSR MEDAIR MHI MOAS MSF Marcy Without Limit MedGlobal Medair MoDMR Mukti NF-E NGOF OBAT One Nation Oxfam PA PHALS PHD PUI PULSE Plan Prottyashi RI RIC RISDA RTMI SALT SARPV SHED SI SKB SMKK SP SPACE Sushilan TAI |

| | | | | |
|---|---|---|---|---|
| | | WVI WaterAid YPSA | MEDAIR WFP WHH WVI WaterAid | TdH UNDP UNFPA UNHCR UNITED SIKHS UP VERC VSO WC WFP WVI WaterAid YPSA |

* Abbreviated names have been reported in the table. The detail list is available from the 4W dashboard. Also refer to the Table S3.

## Figure S1: Evolution of partners (Child Protection)



**Program partners**

| | INGO | NNGO | UN | Total |
|---|---|---|---|---|
| 22/09/2017 | 2 | 0 | 3 | 5 |
| 05/03/2019 | 6 | 3 | 2 | 11 |

**Implementing partners**

| | INGO | NNGO | UN | Total |
|---|---|---|---|---|
| 22/09/2017 | 3 | 4 | 0 | 7 |
| 05/03/2019 | 7 | 7 | 1 | 15 |
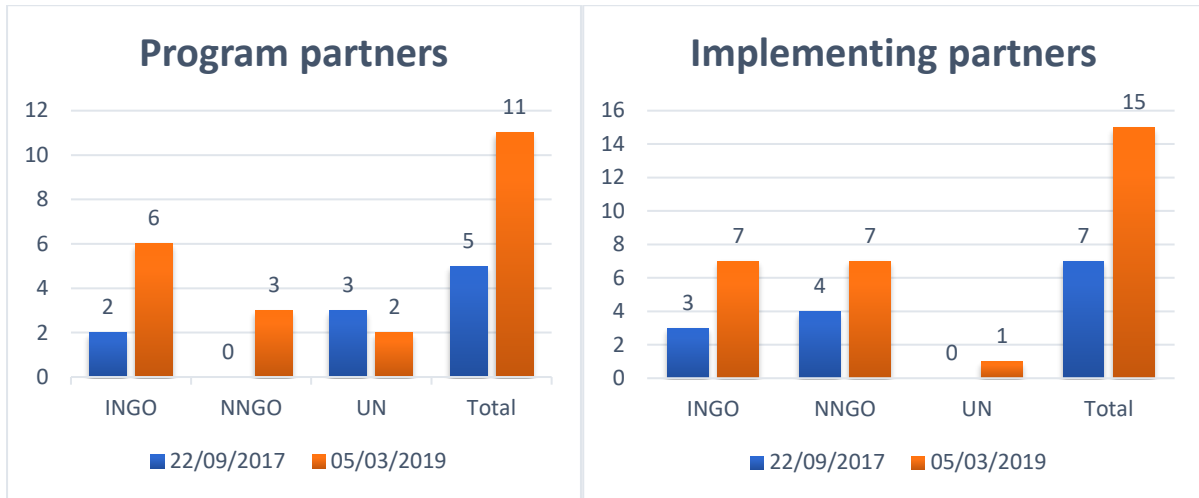
## Figure S2: Evolution of partners (Education)



**Program partners**

| | INGO | NNGO | UN | Total |
|---|---|---|---|---|
| 22/09/2017 | 0 | 0 | 3 | 3 |
| 05/03/2019 | 10 | 6 | 2 | 18 |

**Implementing partners**

| | GoB | INGO | NNGO | UN | Total |
|---|---|---|---|---|---|
| 22/09/2017 | 2 | 1 | 3 | 1 | 7 |
| 05/03/2019 | 0 | 5 | 14 | 2 | 21 |
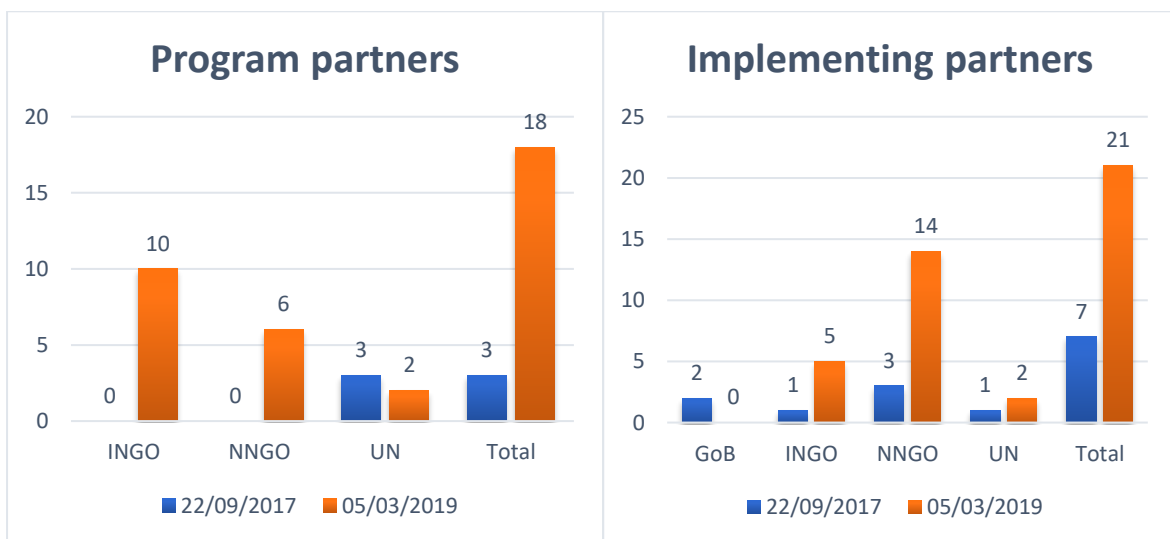
**Figure S3: Evolution of partners (Food Security)**



**Program partners**

INGO: 5 (22/09/2017), 8 (05/03/2019)
NNGO: 2 (22/09/2017), 0 (05/03/2019)
UN: 2 (22/09/2017), 3 (05/03/2019)
Total: 9 (22/09/2017), 11 (05/03/2019)

■ 22/09/2017  ■ 05/03/2019

**Implementing partners**

GoB: 0 (22/09/2017), 1 (05/03/2019)
INGO: 1 (22/09/2017), 7 (05/03/2019)
NNGO: 7 (22/09/2017), 8 (05/03/2019)
UN: 1 (22/09/2017), 1 (05/03/2019)
Total: 9 (22/09/2017), 17 (05/03/2019)

■ 22/09/2017  ■ 05/03/2019
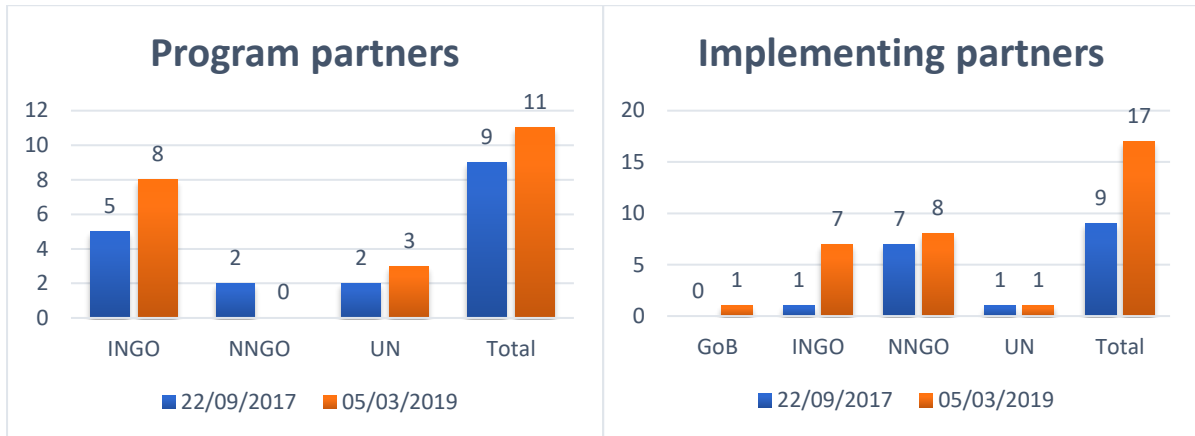
**Figure S4: Evolution of partners (Gender Based Violence)**



**Program partners**

INGO: 6 (22/09/2017), 7 (05/03/2019)
NNGO: 0 (22/09/2017), 2 (05/03/2019)
UN: 2 (22/09/2017), 5 (05/03/2019)
Total: 8 (22/09/2017), 14 (05/03/2019)

■ 22/09/2017  ■ 05/03/2019

**Implementing partners**

INGO: 4 (22/09/2017), 6 (05/03/2019)
NNGO: 3 (22/09/2017), 10 (05/03/2019)
UN: 2 (22/09/2017), 1 (05/03/2019)
Total: 9 (22/09/2017), 17 (05/03/2019)

■ 22/09/2017  ■ 05/03/2019
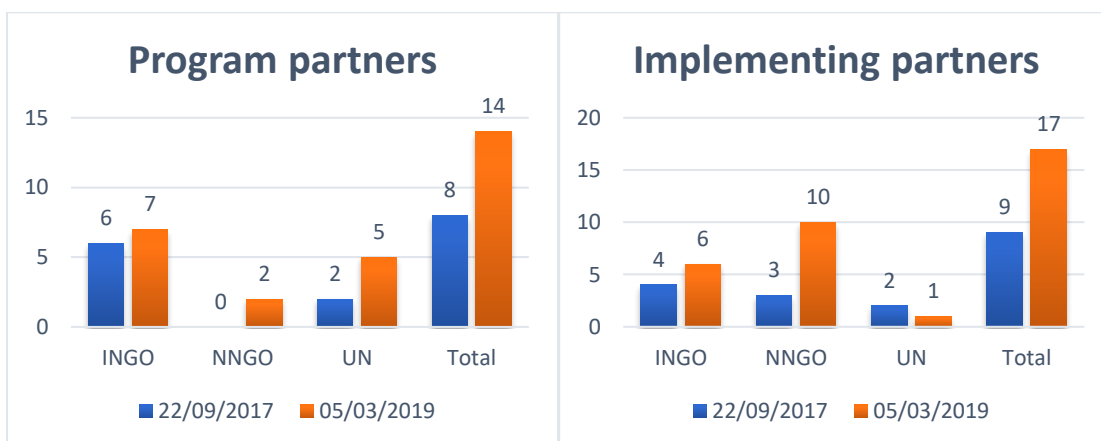
**Figure S5: Evolution of partners (Health)**



**Program partners**

| | INGO | NNGO | UN | Total |
|---|---|---|---|---|
| 22/09/2017 | 4 | 0 | 4 | 8 |
| 05/03/2019 | 20 | 7 | 4 | 31 |

**Implementing partners**

| | GoB | INGO | NNGO | UN | Total |
|---|---|---|---|---|---|
| 22/09/2017 | 0 | 4 | 1 | 4 | 9 |
| 05/03/2019 | 1 | 18 | 9 | 1 | 29 |

■ 22/09/2017  ■ 05/03/2019
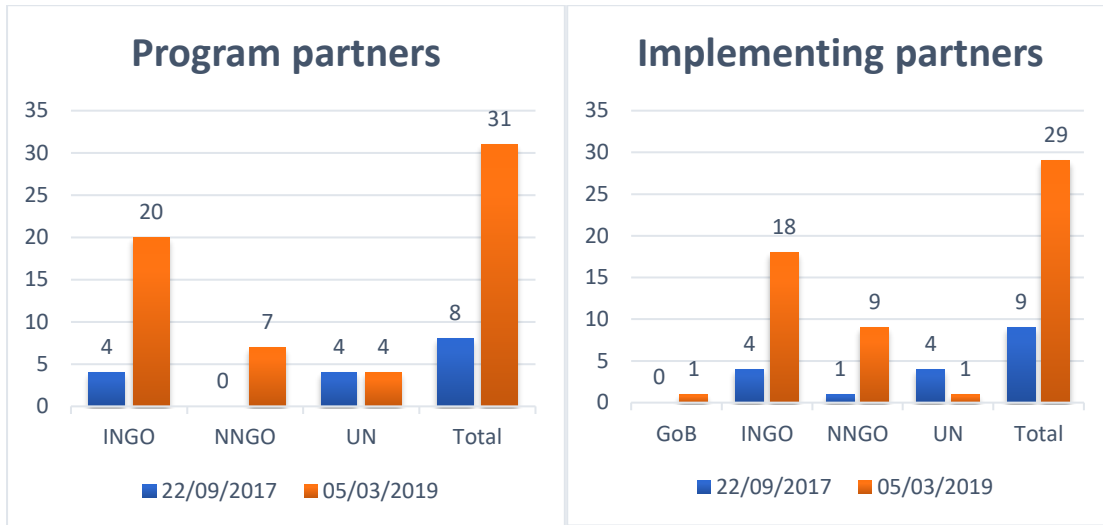
**Figure S6: Evolution of partners (NFI/Shelter)**



**Program partners**

| | INGO | NNGO | Others | UN | Total |
|---|---|---|---|---|---|
| 22/09/2017 | 5 | 2 | 0 | 2 | 9 |
| 05/03/2019 | 16 | 10 | 1 | 3 | 30 |

**Implementing partners**

| | GoB | INGO | NNGO | Others | UN | Total |
|---|---|---|---|---|---|---|
| 22/09/2017 | 1 | 5 | 5 | 0 | 2 | 13 |
| 05/03/2019 | 0 | 11 | 11 | 1 | 2 | 25 |

■ 22/09/2017  ■ 05/03/2019

**Figure S7: Evolution of partners (Nutrition Sector)**
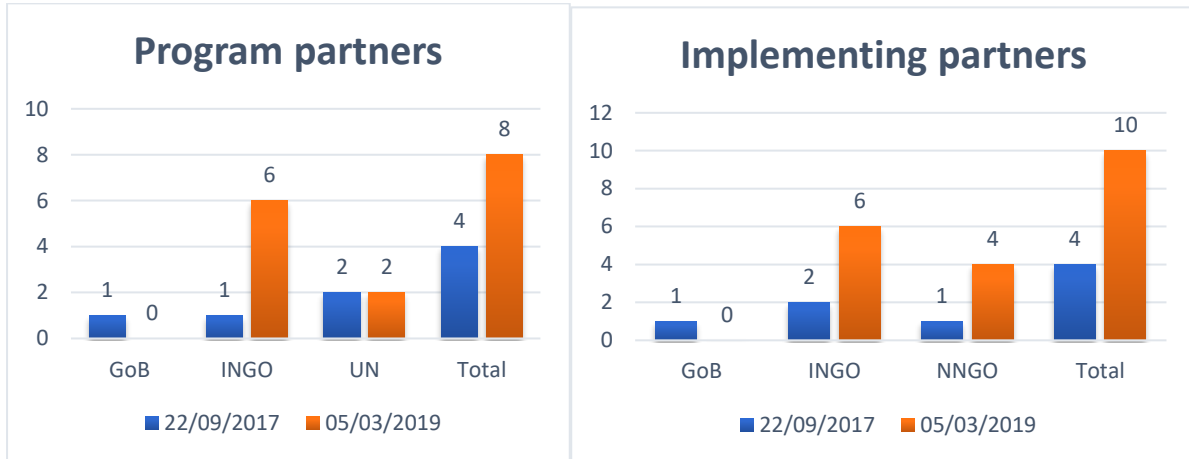


**Figure S8: Evolution of partners (Protection)**
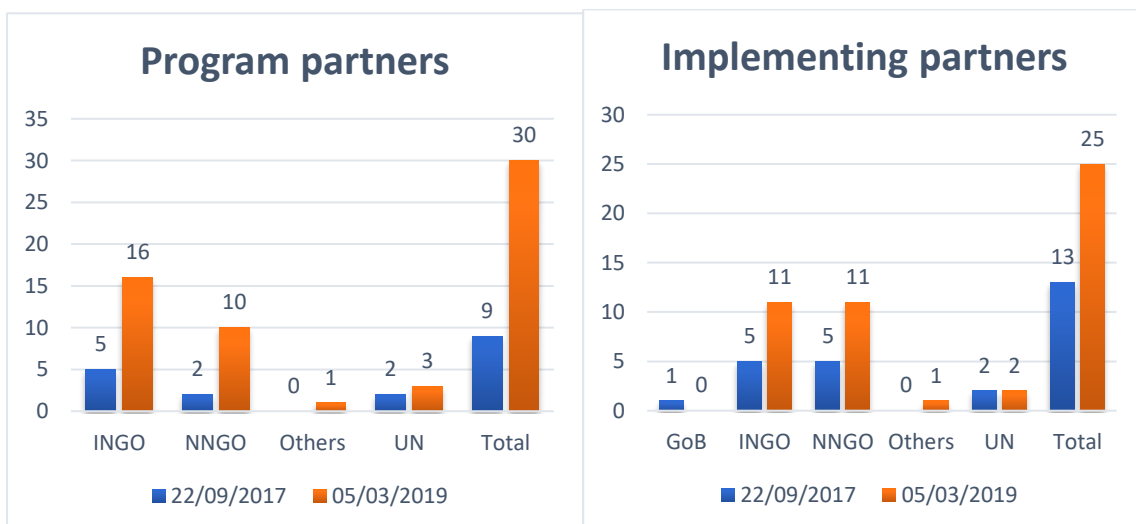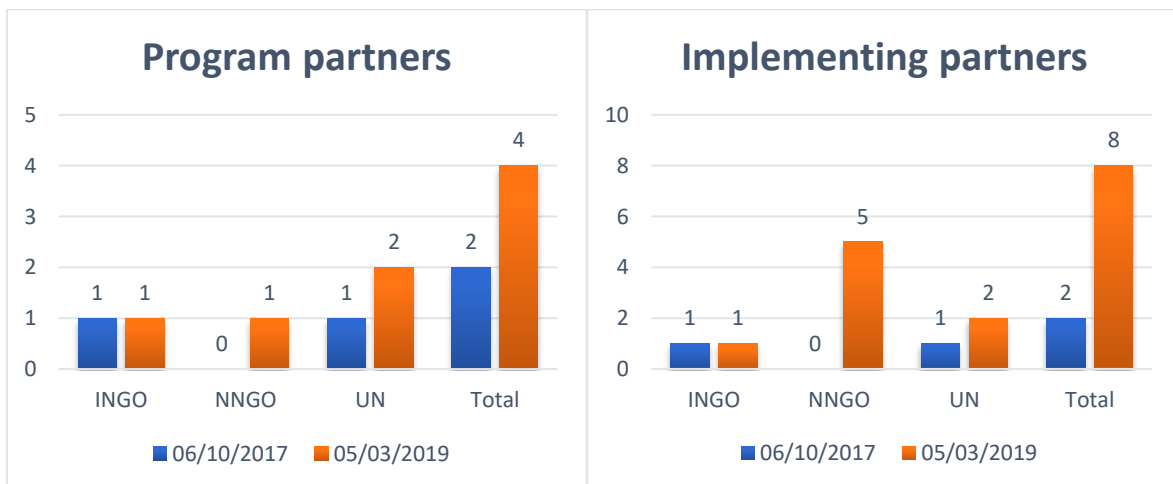
# Figure S9: Evolution of partners (Site Management)



**Program partners**

| | INGO | NNGO | UN | Total |
|---|---|---|---|---|
| 10/11/2017 | 7 | 1 | 2 | 10 |
| 05/03/2019 | 0 | 0 | 2 | 2 |

**Implementing partners**

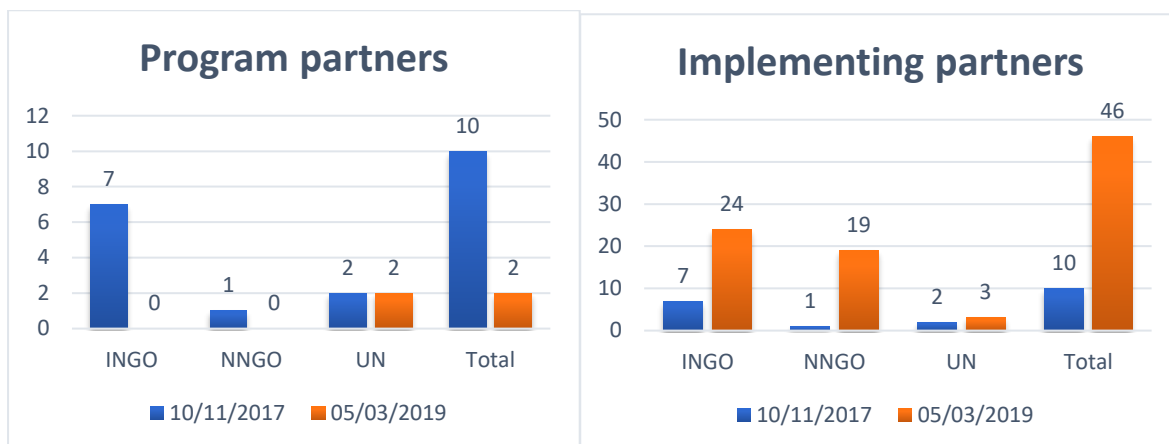| | INGO | NNGO | UN | Total |
|---|---|---|---|---|
| 10/11/2017 | 7 | 1 | 2 | 10 |
| 05/03/2019 | 24 | 19 | 3 | 46 |

# Figure S10: Evolution of partners (Wash)



**Program partners**

| | GoB | INGO | NNGO | UN | Total |
|---|---|---|---|---|---|
| 22/09/2017 | 0 | 4 | 2 | 3 | 9 |
| 05/03/2019 | 1 | 37 | 14 | 4 | 56 |

**Implementing partners**

| | GoB | INGO | NNGO | UN | Total |
|---|---|---|---|---|---|
| 22/09/2017 | 1 | 4 | 4 | 2 | 11 |
| 05/03/2019 | 2 | 19 | 30 | 1 | 52 |