

Impact Evaluation

The Contribution of Food Assistance to Durable Solutions in Protracted Refugee Situations; its impact and role in Bangladesh: A Mixed Method Impact Evaluation

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Fact Sheet: WFP and UNHCR's Assistance to refugees in Bangladesh

The Contribution of Food Assistance to Durable Solutions in Protracted Refugee Situations: its impact and role in Bangladesh (2002 -2011): A Mixed Method Impact Evaluation



Bangladesh



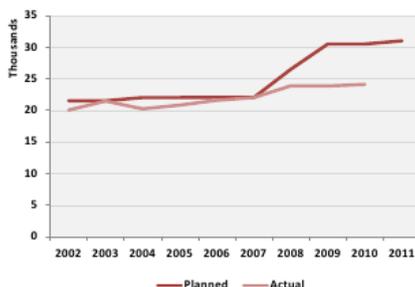
Timeline of operations

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Project	PRRO 10045.1		PRRO 10045.2		PRRO 10045.3			PRRO 10045.4		PRRO 200142

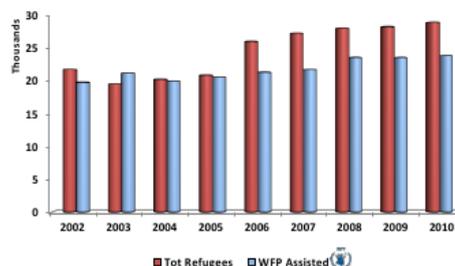
WFP Operations¹

Operation	Title	Food cost (USDm)	Tot WFP cost (USDm)	Tot received (%)
PRRO 10045.1	Assistance to the Refugees from Myanmar	2.8	4.4	82%
PRRO 10045.2	Assistance to the Refugees from Myanmar	2.9	4.5	84%
PRRO 10045.3	Assistance to the Refugees from Myanmar	6.0	8.4	89%
PRRO 10045.4	Assistance to the Refugees from Myanmar	7.1	9.8	59%
PRRO 200142	Assistance to the Refugees from Myanmar	8.0	10.8	66%

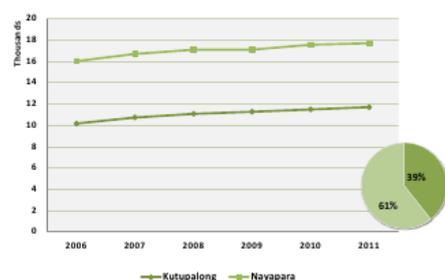
WFP Refugees assisted²



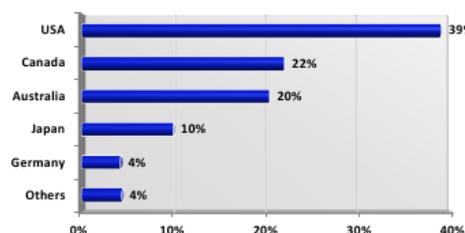
WFP Refugees assisted² vs. tot refugee figures in Bangladesh³



Refugee Population by Camp (2006-2011)⁴



Top 5 Donors (2002-2011)⁵



Partners in Bangladesh (2002-2011)⁶

Government Agencies	Ministry of Food and Disaster Management (MFDM), Ministry of Health (MoH)
UN Agencies	UNICEF, UNFPA
NGOs	Action Contre La Faim, Bangladesh Red Crescent Society, Research Training and Management International, Technical Assistance Incorporated, CONCERN, Handicap International, MSF Holland, CARITAS, IFRC, Austcare, SHED

Sources:

1) Latest SPR, Project Document, Budget Revision, Resource Situation. 2) Standard Project Reports; 3) WFP SPR, UNHCR Statistical Online Population Database. Figures do not include people in a refugee-like situation. 4) UNHCR Statistical Yearbook (2006-2009), webHIS (2010-2011). 5) Donor Contributions and Global Forecast reports (Government Donor Relations Unit). 6) WFP NGO Unit.

Map: Cox's Bazar District, Bangladesh



Executive Summary

Introduction

Evaluation Features

1. This evaluation is part of a series of impact evaluations jointly commissioned by WFP and the Office of the United Nations High Commissioner for Refugees (UNHCR) in 2011 and 2012¹ to assess the role of food assistance in, and its contribution to, self-reliance and durable solutions for the refugee and the refugee-affected populations.

2. The evaluation covers the protracted refugee situation in southeast Bangladesh, where approximately 30,000 Rohingya refugees have been assisted in two official camps for more than two decades². In addition to the registered refugees, approximately 45,000 unregistered Rohingya reside in makeshift sites and more than 150,000 reside in host communities in Cox's Bazar district.

3. The primary evaluation question was: What are the differential impacts of long-term food assistance on the different Rohingya refugee and refugee-affected populations in Bangladesh?

4. Four secondary questions were:

- i) How does food assistance affect household livelihoods and coping strategies?
- ii) What are the impacts on refugee movements?
- iii) What are the impacts on protection and the protective environment?
- iv) What are the impacts on food security and nutrition outcomes?

5. Based on a logic model developed by UNHCR and WFP that relates inputs, outputs, short- and long-term outcomes and impacts, and associated assumptions, the evaluation used a mixed-method approach combining quantitative survey data with qualitative data collection techniques. Quantitative data provided empirical evidence on the evaluation questions; qualitative data complemented and triangulated quantitative evidence for understanding the causal linkages between food assistance and the differences among different Rohingya populations.

6. To evaluate impact in the most methodologically rigorous manner for the context, a quasi-experimental design was used. Limitations³ were mitigated through appropriate sampling to ensure statistically representative samples of registered and unregistered Rohingya populations, and cluster analysis as the basis for regression models and group comparisons.

¹ The other three evaluations covered protracted situations in Chad, Ethiopia and Rwanda.

² Only 24,000 of these refugees receive food assistance.

³ The main limitations were the potential for selection bias, the difficulty in isolating the contribution of food assistance from other external assistance variables, and threats to internal validity from the non-equivalent groups.

7. The evaluation design focused primarily on three population groups: refugees living in two official refugee camps; unregistered Rohingya living in two unofficial sites, the official camps or host communities⁴; and host communities. The key quantitative comparison was between registered refugees who received food assistance and unregistered Rohingya who did not. The evaluation included a smaller sample of households from host communities to provide descriptive comparators; the sample was not statistically significant. Table 1 provides an overview of the household survey data collection and these population groups.

Table 1 – Quantitative Data Collection

Location	Target population	Households in sampling frame
Nayapara refugee camp	Registered refugees	2 681
	Unharmonized Rohingya ⁵	371
	TOTAL	3 052
Kutupalong refugee camp	Registered refugees	1 700
	Unharmonized Rohingya	209
	TOTAL	1 909
Kutupalong makeshift site	Unregistered Rohingya	4 350
Leda site	Unregistered Rohingya	2 300
Host communities	Unregistered Rohingya	n/a
Villages near Nayapara	The poorest local households, identified through participatory rural appraisal	n/a

Context

8. The Rohingya refugee situation in Bangladesh is one of the most protracted in the world, after more than 20 years of continuous camp settlement. Of the more than 200,000 Rohingya estimated to be present in Bangladesh, only approximately 24,000 are officially recognized as refugees by the Government of Bangladesh. These refugees live in two official camps, Kutupalong and Nayapara, while the remaining Rohingya population has settled in host communities in Cox’s Bazar district and in two makeshift sites close to the official camps.

9. The Rohingya have a historical and cultural connection to the Chittagong area of southeast Bangladesh and Rakhine state of Myanmar. As well as sharing similar social, ethnic, linguistic and Islamic religious traditions, the two regions have historically interacted for centuries.

⁴ See Annex for a map of Cox’s Bazar district.

⁵ UNHCR refers to unregistered Rohingya in official refugee camps as “unharmonized Rohingya”. This evaluation distinguishes between only registered refugees and unregistered Rohingya; despite living in camps, unharmonized Rohingya do not receive food assistance.

10. After the denial of Myanmar citizenship in 1974, approximately 200,000 Rohingya fled to Bangladesh in 1978. Bilateral government agreements forced many to return in 1979–1980. Following failed Myanmar elections in 1990, and a subsequent military crackdown especially in northern Rakhine state, approximately 250,000 Rohingya fled to Bangladesh in 1991–1992. In the following decade, most of these refugees were repatriated to northern Myanmar, but many Rohingya continue to come or return to Bangladesh. No Rohingya coming to Bangladesh after 1992 have been recognized as refugees by the Government of Bangladesh.

11. There are reports of marginalization and discrimination of Rohingya in Bangladesh and of sporadic conflict with host communities. The lack of refugee status leaves unregistered Rohingya with no legal recourse for protection. As a result they are often confronted with violence, abuse, arrest and detention; women and girls are particularly exposed. Some of the hostility towards Rohingya can be explained by the widespread poverty of Cox’s Bazar, which reports some of the lowest social and economic indicators nationwide. Cox’s Bazar district is also prone to landslides, floods and cyclones, and the population density puts extreme pressure on existing socio-economic systems and scarce natural resources.

12. This complex environment amplifies the challenges faced by humanitarian organizations in restoring refugees’ livelihoods and satisfying the humanitarian and development needs of populations of Bangladesh in the region.

WFP and UNHCR Support to Refugees

13. WFP and UNHCR have been assisting registered refugees in Bangladesh since 1992. WFP is responsible for food assistance for approximately 24,000 refugees, providing basic food commodities, school feeding with fortified biscuits, and supplementary foods for targeted groups. Food distribution is carried out by the Bangladesh Red Crescent Society. Planning and distribution of food assistance are undertaken jointly with government actors. UNHCR provides non-food items, shelter, health services, a potable water supply, sanitation, primary education, vocational training and other basic services.

14. Between 2002 and 2010, WFP reported expenditure of approximately US\$20 million on food assistance for registered Rohingya refugees in Bangladesh, through twice-monthly general food distribution; school feeding; supplementary feeding and mother-and-child health programmes; and food for work/training. These interventions supported other forms of assistance, such as health clinics, schools and vocational programmes.

Evaluation Findings

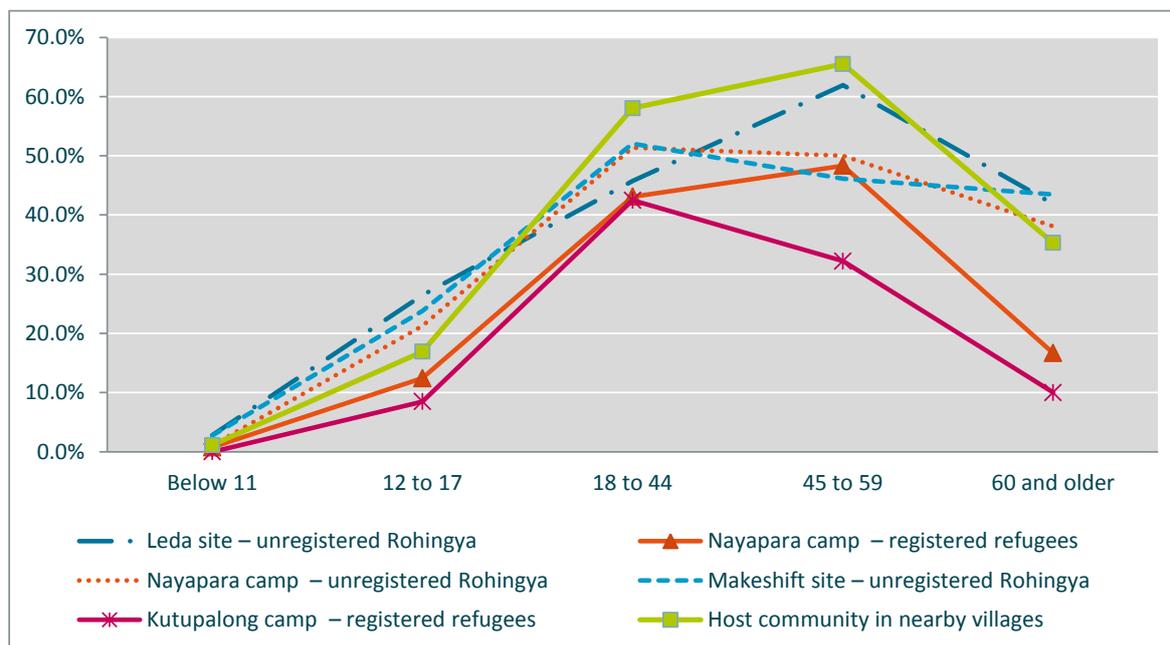
15. The evaluation findings are organized according to the four evaluation secondary questions: livelihoods and coping strategies; movements; protection and the protective environment; and food security and nutrition.

Livelihoods and Coping Strategies

16. In assessing the impact of food assistance on livelihoods and coping strategies the evaluation found that all Rohingya, regardless of refugee status, were economically active to some extent. Food assistance and other external interventions did not reduce the need for registered refugees to seek supplementary income, while unregistered Rohingya without assistance had to work to meet their basic needs, despite the legal restrictions, and their implications, for both groups.

17. Comparisons among different groups of Rohingya revealed significant differences in economic activities. Figure 1 presents the percentages of individuals, disaggregated by age and household group, engaged in economic activities. The evaluation found that unregistered Rohingya began working earlier than registered refugees; more than 20 percent of unregistered Rohingya under 17 years of age worked, compared with 10 percent of registered refugees. Unregistered Rohingya were also more economically active for longer periods. Child labour and youth employment were therefore significantly more frequent among unregistered Rohingya than registered refugees. Host communities followed a similar trend to that of the unregistered Rohingya.

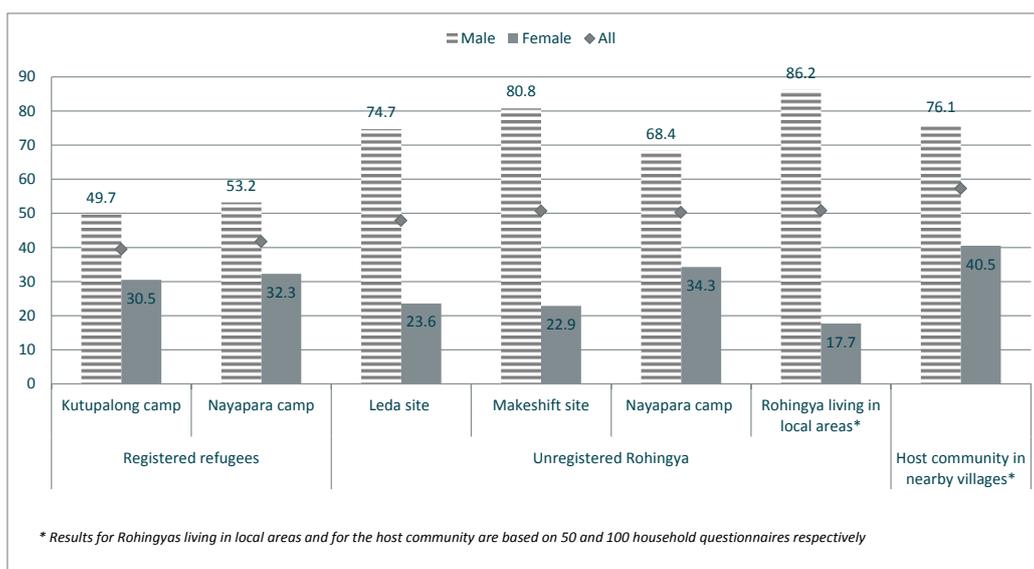
Figure 1: Percentages of Respondents with Economic Activity, by Age and Household Group



Source: DARA quantitative household survey May–June 2012.

18. The evaluation found that refugees were significantly less economically active and overall earned less income than unregistered Rohingya, who were found to play a significant role in the region’s labour market. Among men and boys, unregistered Rohingya living in the makeshift site were more economically active than registered refugees in the official camps. This trend was reversed for women and girls (see Figure 2).

Figure 2: Prevalence of Economic Activity (%)

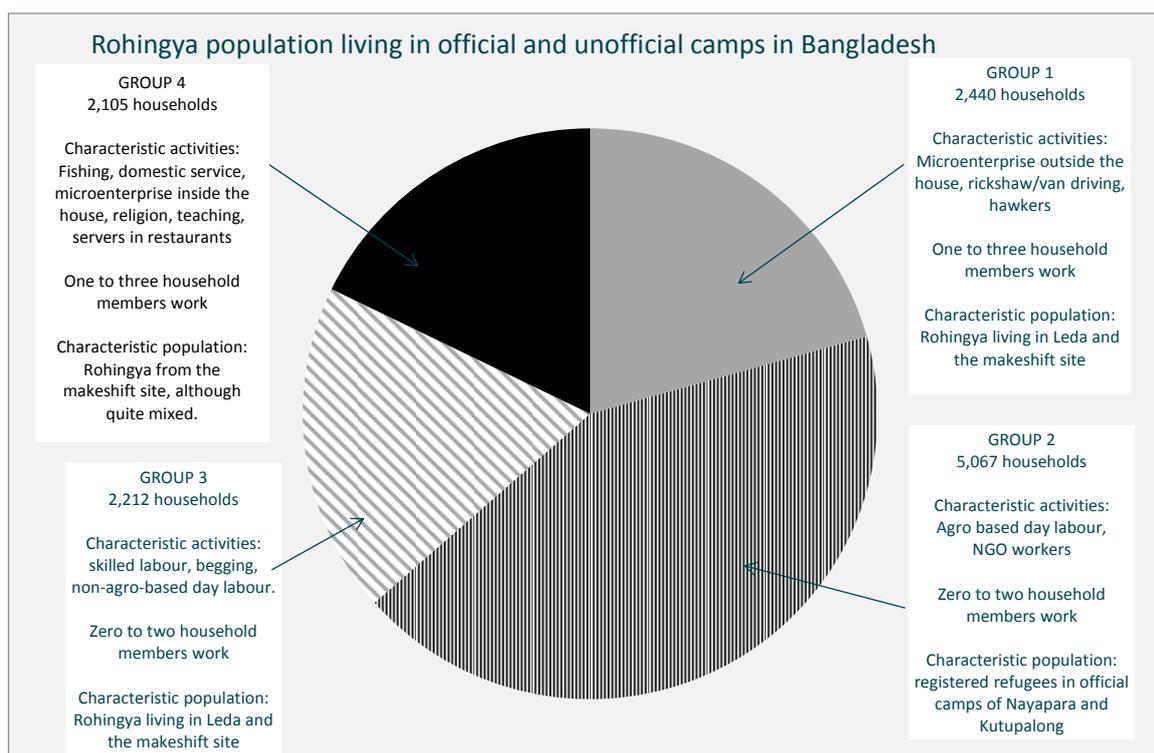


Source: DARA quantitative household survey, May–June 2012.

19. The evaluation found that registered refugees engaged in better and more skilled jobs than unregistered Rohingya, who were considered less skilled and generally found jobs considered to be of far higher risk, such as high-sea fishing and unloading of ships. These jobs were also found to be the least favoured by host communities and registered refugees. Other economic activities were labour-intensive, such as work in salt production, agriculture, or construction in urban areas such as Cox’s Bazaar. The evaluation found clear evidence that unregistered Rohingya played an important role in the local labour market, often supplanting labour from the local population of Bangladesh, because they worked for lower wages in riskier employment without recourse to legal protection. However, this role was not quantified in the evaluation.

20. Regarding economic activities and coping strategies, clear differences emerged between what appeared to be very similar household groups, which fell into four distinct clusters (see groups 1 to 4 in Figure 3).

Figure 3: Household Clusters, by Economic Activity



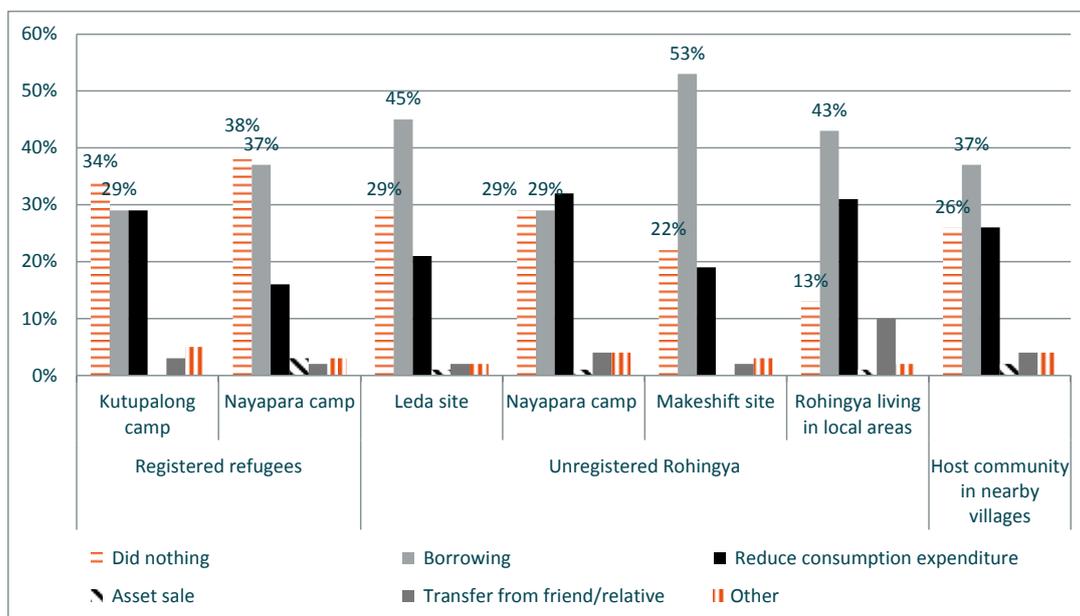
Source: DARA quantitative household survey, May–June 2012.

21. The following are the main findings on economic activities across the four groups:

- Groups 1 and 4 had higher earnings per household member because they worked longer hours than groups 2 and 3 and were more likely to have a member under 14 years of age working – 59 and 57 percent of households in groups 1 and 4, compared with 25 percent in groups 2 and 3.
- Groups 2 and 3 were less economically active, but based on types of economic activity group 3 was slightly more vulnerable than group 2. Households in group 3 were characteristically engaged in farming, non-agriculture-based day labour, begging and some skilled labour; group 2 households were characteristically engaged in farming, agriculture-based day labour and work with non-governmental organizations (NGOs).
- Group 2 represented an important part of the overall Rohingya population (42.9 percent), composed of households that were less economically active and, based on the activities they undertook, slightly less vulnerable. Most registered refugees – 60.6 percent – were in this group.
- Across all groups, registered refugees were wealthier than their unregistered counterparts. The evaluation determined that this was primarily because of the difference in accumulated assets.

22. The coping strategy index was applied to develop an empirical understanding of what households do in case of idiosyncratic or co-variant shocks. The evaluation found significant evidence that registered refugee households employed coping strategies in different ways (see Figure 4) from unregistered Rohingya, and overall resorted less to negative coping strategies (see Figure 5).

Figure 4: Frequency of Adoption of Coping Strategies (%)



Source: DARA quantitative household survey, May–June 2012.

23. The option of “doing nothing” was found significantly more frequently among registered refugees, and evaluation evidence indicated that reliance on external assistance – housing, food, health care, etc. – in the event of shocks was an important coping mechanism for this group. Unregistered Rohingya reported this coping strategy far less frequently.

24. Reliance on loans was generally more prevalent among unregistered Rohingya, and reduced consumption was found across all groups. Among unregistered Rohingya, the evaluation found qualitative evidence of persistent reliance on negative coping strategies such as transactional sex and begging, especially among women, either as heads of household or when their husbands had migrated for work.

25. Food exchange and sale (see Table 2) and mortgaging of refugee documents – family books⁶– were other very common coping strategies for registered refugees. The evaluation found that approximately 50 percent of these households shared, exchanged or sold food rations, mainly to diversify diets, finance non-food items and repay loans.

⁶ ‘Family books’ are refugee identification documents used by the Government of Bangladesh and United Nations partners for determination of food ration entitlement.

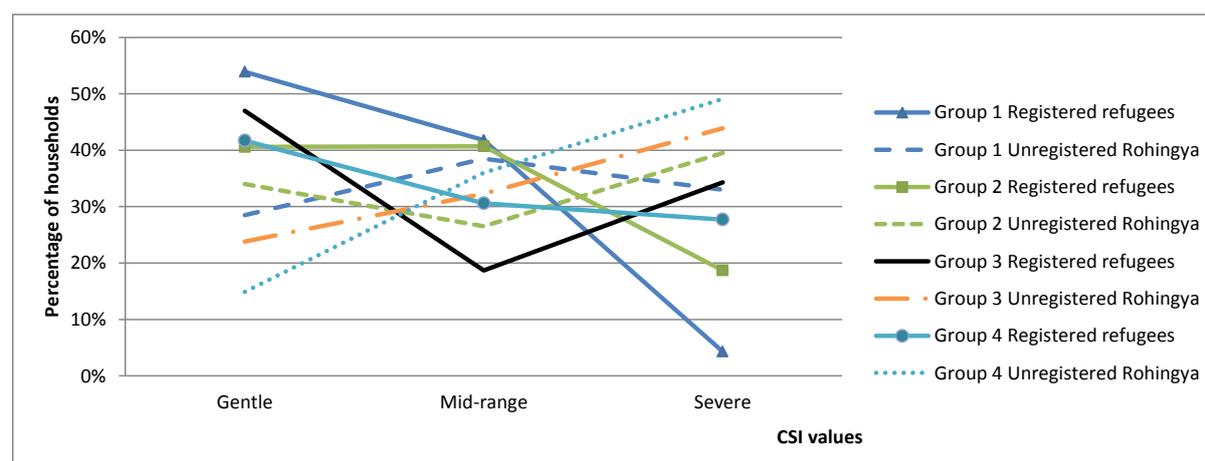
Table 2 – Refugees’ use of Food Rations

Camp	Households sharing part of their rations	Households selling part of their rations	Households exchanging part of their rations	Households consuming all their food assistance
Nayapara	1.7	37.1	15.4	44.0
Kutupalong	13.8	18.4	19.5	51.1

Source: DARA quantitative household survey, May–June 2012.

26. Regression models revealed that across the four groups, the unregistered Rohingya adopted more severe coping strategies (see Figure 5). The adoption of negative coping strategies was found to depend on several factors, including the household’s registration status, wealth score, size, earnings and economic activity, and the marital status and education level of the household head. It was also correlated with external assistance to registered refugees; the reduced reliance on severe coping strategies among registered refugees was positively correlated to the provision of external assistance, including food rations.

Figure 5: Coping Strategy Index, by Household Group and Registration Status



Source: DARA quantitative household survey, May–June 2012.

27. The evaluation concludes that along with other forms of external assistance, food assistance was a contributing factor in households’ choice of economic activity and adoption of specific coping strategies. Compared with their unregistered Rohingya counterparts, registered refugees engaged in significantly different economic activities, including higher-skilled and less risky employment for overall higher wage rates. They also had significantly better wealth status based on asset accumulation. Food assistance was an integral component of their livelihoods, used mainly for consumption and as collateral and a value transfer for loans and mortgages. The value transfer of all external assistance in the camps enabled refugees to work less and to rely on this external assistance in times of crisis.

28. Despite these differences, all refugee and unregistered Rohingya groups relied on economic activity to support their livelihoods. Unregistered Rohingya employed a

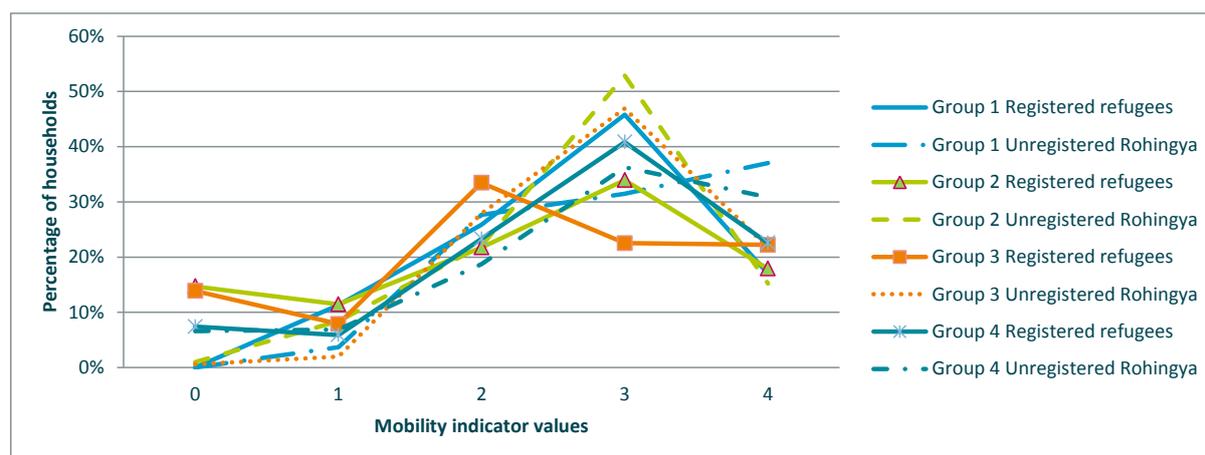
wider range of coping mechanisms, both positive and negative, and were a significant part of the region’s labour market.

Movements

29. Despite restrictions on movements, all refugees and unregistered Rohingya were found to be highly mobile, not only locally and close to the camps, but also within Cox’s Bazar district and other areas of Bangladesh. These movements were closely linked to the search for income opportunities. However, the evaluation found important differences in movements between unregistered Rohingya and registered refugees.

30. Figure 6 summarizes findings from the mobility indicator⁷. There was evidence that 40 to 50 percent of registered refugees in groups 1 and 4 moved as far as Cox’s Bazar town. Unregistered Rohingya in the same groups travelled further, with more than 30 percent – and nearly 40 percent in group 1 – travelling to other parts of Bangladesh. Registered refugees in groups 2 and 3 concentrated their movements between Teknaf and Cox’s Bazar, largely depending on the placement of their camp.

Figure 6: Mobility, by Household Group and Registration Status



Source: DARA quantitative household survey, May–June 2012.

31. Regression analysis found that household mobility could be explained by the household’s registration status, wealth score and earnings; the sex, marital status and education level of the household head; and certain economic activities. In all groups there was a tendency for unregistered Rohingya to travel further than registered refugees. Evaluation evidence indicated that the search for economic employment was the main driving factor and that external assistance, including food assistance, mitigated registered refugees’ need for this employment, reducing their movements away from the camps. The evaluation also found that unregistered Rohingya felt safer, and reportedly could earn more, if they moved further away from

⁷ The mobility indicator is a simple proxy for movement. The higher the indicator the more frequent and the further the movements: households scored 0 if no members left the camp/site, 1 if at least one member visited nearby areas, 2 if at least one member visited Teknaf, 3 if at least one member visited Cox’s Bazar, and 4 if at least one member visited other parts of Bangladesh.

the camps and makeshift sites; there was thus a pull factor away from the insecurity of local areas to places where employment opportunities were better.

32. The evaluation found significant differences in survey respondents' period of residency in Bangladesh. As summarized in Table 3, most registered refugees were either born in the camps or had lived there for more than 20 years. Unregistered Rohingya had spent less time in Bangladesh. Through additional data collection, the evaluation determined that period of residency reflected the general pattern of mobility and the search for income generating opportunities; unregistered Rohingya spent less time in the vicinity of Cox's Bazar district as they moved into other parts of Bangladesh.

Table 3 – Years Spent in Bangladesh by Rohingya Households (%)

Period in Bangladesh	Registered refugees		Unregistered Rohingya		
	Kutupalong camp	Nayapara camp	Leda site	Kutupalong makeshift site	Nayapara camp
Born in Bangladesh	62.6	62.5	49.8	36.7	56.5
< 5 years	0.1	0.0	0.2	10.1	0.3
5–9 years	0.0	0.7	9.5	33.7	3.2
10–14 years	0.2	0.9	17.5	9.8	8.4
15–19 years	1.5	2.2	14.8	6.0	15.3
≥ 20 years	35.6	33.8	8.2	3.6	16.3
TOTAL	100.0	100.0	100.0	100.0	100.0

Source: DARA quantitative household survey, May–June 2012.

Protection and the Protective Environment

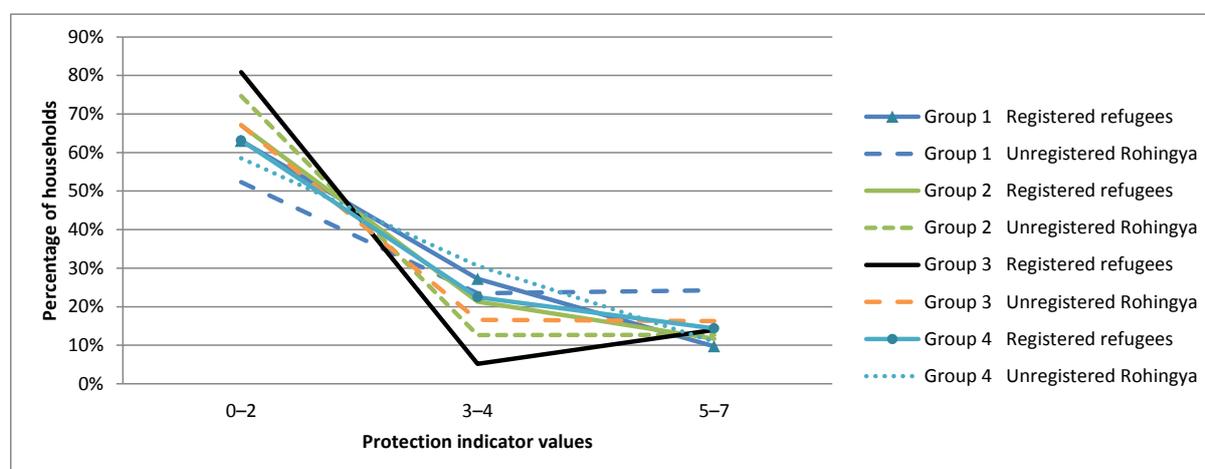
33. The evaluation found that all Rohingya, regardless of refugee status, had significant protection concerns. Figure 7 summarizes the evidence from the composite indicator for protection⁸. Registered refugees had the same perceptions of protection and the protective environment as unregistered Rohingya, despite living in very different conditions and circumstances.

34. However, specific protection issues differed substantially. While unregistered Rohingya were found to be particularly exposed to physical protection issues, registered refugees experienced protection issues related to food distribution and camp management, including lack of complaint mechanisms and perceived discrimination by service providers. Unregistered Rohingya, especially those in makeshift sites, were far more vulnerable than registered refugees because sites are

⁸ The composite indicator is based on questions about safety, interaction with local authorities and communities, ability to meet basic needs, and perceptions of refugees. The indicator ranges from 0 to 7, with 0 being negative and 7 positive on all aspects. See the Statistical Annex of the full evaluation report for more detail.

unprotected. Movement to and from these sites often exposed unregistered Rohingya to violence, harassment, abuse or arrest.

Figure 7: Protection Indicator, by Household Group and Registration Status



Source: DARA quantitative household survey, May–June 2012.

35. The evaluation found evidence of a widespread informal system of protection, with various networks – including some based on patronage – operating throughout Cox’s Bazar district forming the core protective environment for most refugees when outside the camps and for unregistered Rohingya. These networks comprised local elite groups, community leaders, imams and local authorities. The evaluation found repeated instances of payment for access to transportation, jobs, natural resources, etc. for refugees and unregistered Rohingya. Not all of these arrangements were perceived to be negative or exploitive; the evaluation found evidence that unregistered Rohingya living in local villages were often warned by local leaders and imams when authorities were near.

36. The evaluation concludes that protection concerns were a major problem for all Rohingya groups and had effects on refugees’ movements, livelihoods and coping strategies. However, there was evidence that unregistered Rohingya were more vulnerable than refugees because they lacked legal status and relevant documentation. Although this distinction was significant, it was muted by the prevalence of refugees’ economic activities and movement outside the camps, neither of which is legally permitted.

37. The evaluation found that food assistance was a secondary contributing factor to perceptions of refugees’ insecurity and vulnerability. Food and other external assistance contributed to the higher wealth status of refugees and therefore to widespread resentment from those not receiving assistance – unregistered Rohingya and local households throughout the region.

38. Within the camps, the evaluation heard direct testimony of inappropriate or illicit practices during food distribution, and respondents felt there were few effective complaint mechanisms. It was commonly found that refugees feared retaliation from

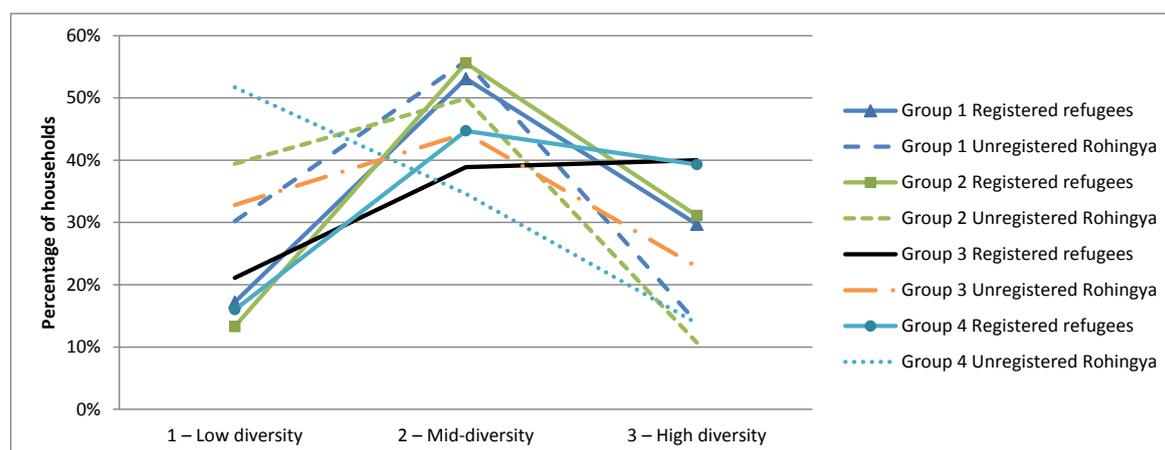
official and unofficial authorities for making complaints, and cases of violence and imprisonment were reported. Refugees within the camps felt that oversight by UNHCR and WFP was not adequate to address these issues.

Food Security and Nutrition

39. Food assistance has been provided regularly to registered refugees since they arrived and were registered in the early 1990s. The food basket met minimal international standards, with 2,100 kcal per adult per day, but was incomplete in terms of proteins and micronutrients. The household dietary diversity score (HDDS) was found to be poor for all sampled groups: the local host population, unregistered Rohingya, and refugees receiving food assistance.

40. As shown in Figure 8, across all groups the HDDS was lower for unregistered Rohingya. Regression models indicated that for registered refugees the lack of economic activity in a household did not correlate to a decrease in the HDDS, while it did for unregistered Rohingya.

Figure 8: HDDS, by Household Group and Registration Status⁹



Source: DARA quantitative household survey, May–June 2012.

41. Table 4 summarizes the HDDS results and shows that although registered refugees had, as expected, higher HDDS than unregistered Rohingya, their scores were still lower than those of the poorest local households, including the Rohingya living in local communities. While findings from these latter two groups are only indicative – because of limited sample size – the result revealed that Rohingya who had assimilated with local populations managed to diversify their diets more than registered refugees benefiting from food rations. Almost twice as many Rohingya living in local communities had four or more food groups in their diets than did unregistered Rohingya in makeshift sites.

⁹ Low, mid- and high diversity are only comparative within the range of HDDS found by the survey (see Table 4). They do not indicate low, mid- or high dietary diversity overall.

Table 4 – HDDS Survey Results

Survey results May 2012	No.	Mean HDDS	% households with at least 4 food groups in day prior to survey	Weekly food expenditure /person
Rohingya in local communities	50	5.58	96.0	296
Host community	100	5.24	93.0	260
Kutupalong camp, registered refugees	174	5.00	91.4	114
Nayapara camp, registered refugees	175	4.91	80.0	93
Leda site, unregistered Rohingya	262	4.43	67.5	196
Nayapara camp, unregistered Rohingya	132	4.01	65.5	143
Kutupalong makeshift site, unregistered Rohingya	150	3.90	58.1	189
TOTAL	1 069	n/a	n/a	n/a

Source: DARA quantitative household survey, May–June 2012.

42. The HDDS findings complemented available secondary nutrition data. Since the early 1990s, the prevalence of global acute malnutrition (GAM) in the camps has stabilized at about 15 percent, the World Health Organization (WHO) threshold for a critical situation. Recent surveys¹⁰ found that unregistered Rohingya at the Kutupalong makeshift site had the highest malnutrition rates. The evaluation did not collect data on nutrition status, but stakeholders in Bangladesh noted the persistent and critical GAM rates.

43. Evaluation findings on food security revealed that registered refugees could diversify their diets significantly more than unregistered Rohingya living at the unofficial sites. Food assistance contributed directly to this dietary diversity, because rations could be sold, shared or exchanged. The value transfer of the ration was also found to be important in obtaining loans. Analysis revealed that the HDDS of registered refugees did not depend on having an income stream – so refugees were able to absorb shocks, changes in the labour market, etc. – whereas that of unregistered Rohingya was directly dependent on their economic activity. It must be noted that across all groups covered by the evaluation, including the local populations of Cox’s Bazar district, HDDS were within a narrow range, reflecting the generally high levels of poverty and food insecurity across the district.

Explanatory Factors of Impact

External Factors

44. The Rohingya are not legally authorized to engage in economic activities in Bangladesh, and refugees can send their children to school until only grade 4. They are also not allowed to leave refugee camps without authorization. These restrictions,

¹⁰ *Action contre la faim (ACF)*, 2011.

imposed on registered refugees and Rohingya in general, leave them with fewer opportunities – and only “illegal” options – for pursuing more secure and long-term livelihood opportunities. Although restrictions have not prevented Rohingya households from engaging in local economic activities, they constitute serious protection risks if authorities decide to react.

45. Kinship, community support and patronage are important external factors that enable unregistered Rohingya to cope. The evaluation found that unregistered Rohingya benefited from support in the form of food and shelter provided by Bangladeshi relatives through marriage or by community members, who also provided employment opportunities and physical protection. Established Rohingya – refugees or unregistered Rohingya who had been in Bangladesh for a long time – provided support to new migrants. Patronage relationships were also found to be common, with local elite groups, community leaders and authorities providing tacit approval for various Rohingya livelihood activities. In the Cox’s Bazar area Rohingya are integral to the labour market.

46. Cox’s Bazar is among the poorest areas of Bangladesh and this local context limits the Rohingya population’s opportunities for developing self-reliance. Local poverty and limited resources mean that the Rohingya are competing with the poorest quintiles of the local population for jobs. This creates friction with communities, especially as it was found that Rohingya would accept jobs at lower wage rates. The scarce resources in the area also meant that both refugees and unregistered Rohingya competed with the local population for access to farmland, fishing areas and fuelwood.

Implementing Factors

47. This evaluation did not examine operational factors of UNHCR or WFP food assistance interventions; in the evaluation design, food assistance as it had been implemented was considered as the intervention variable.

48. However, the evaluation noted that WFP food assistance operations were relatively well funded for at least the last decade, the target population was relatively stable, and no significant pipeline breaks were noted by stakeholders.

Conclusions

49. The evaluation found several significant differences between registered refugee households, which received food assistance, and unregistered Rohingya households, which did not. A cluster analysis demonstrated that household economic activity was the key determinant variable in households’ livelihoods, coping strategies, mobility, protection and food security. Food assistance contributed to these factors through its impact on the economic activity of recipient households.

50. The logic model of the evaluation postulated that food assistance would provide short-, medium- and long-term outcomes leading to self-reliance. Comparisons with

unregistered Rohingya groups at the Kutupalong makeshift and Leda sites provided evidence that food assistance contributed to short-term outcomes, primarily through improved dietary diversity and reduced frequency of negative coping strategies for refugees in the official Nayapara and Kutupalong camps. However, these positive impacts were less apparent when the refugee groups were compared with unregistered Rohingya living in host communities.

51. Empirical evidence from the evaluation indicated that the search for income opportunities was the main driving factor behind differences among Rohingya groups and that external assistance, including food assistance, slightly mitigated registered refugees' need for this income, thereby reducing their movement away from the camps. Unregistered Rohingya were found to be more mobile, as their search for income-generating opportunities led them to spend less time in or near Cox's Bazar district and to move more frequently into other parts of Bangladesh. There were indications that registered refugees had become dependent on camp assistance and that this safety net mitigated their search for livelihood opportunities elsewhere.

52. The evaluation found that food assistance was a secondary contributing factor to the perception of refugees' insecurity and vulnerability. Food and other external assistance contributed to the greater wealth status of refugees, leading to widespread resentment from those not receiving assistance. However, protection was a significant concern for all Rohingya groups, and the protection provided by refugee status was muted by the prevalence of refugees' economic activities and movements outside the camps, neither of which was legally permitted.

53. A significant evaluation finding was that unregistered Rohingya living outside the makeshift sites – who constitute the majority of Rohingya in Cox's Bazar district – appeared to have better food security and access to informal protection systems. They also utilized a greater range of coping strategies and had higher mobility scores. They were the group that came closest to the goal of self-reliance, although they have no legal status in the country. In contrast, the approximately 45,000 unregistered Rohingya residing in makeshift sites were found to be the most food-insecure and the most vulnerable in terms of protection. A consistent evaluation finding was that this exposure was linked to the highly concentrated numbers of unregistered Rohingya in a small area, where they outnumbered local populations. Deterioration of the nearby natural environment – through deforestation, fishing and the pollution of water sources, for example – was also noted as a source of conflict.

54. The Leda and Kutupalong sites were found to constitute a safety net, especially for women and children, by providing protection and some services; unregistered Rohingya remain at these sites in the hope of becoming eligible for legal refugee status and associated external assistance. Further analysis is needed to determine whether or not large-scale food assistance was a pull factor, but there were indications that its provision within the official camps may have contributed to maintaining the makeshift sites in an area where concentrated populations were

more food-insecure and vulnerable than unregistered Rohingya who were assimilated/integrated into local communities.

55. The evaluation found that external factors – primarily restrictions on unregistered Rohingya resulting from their lack of legal status, and the widespread poverty and low levels of socio-economic development in Cox’s Bazar District – had very important effects on the potential for self-reliance of Rohingya households. Food assistance was found to contribute to short-term outcomes for recipient households, but its provision within a package of external assistance over a long period and to a select group of households created dependency for these households.

56. The evaluation concludes that the logic of the current food assistance interventions, based on the model supporting the evaluation, will not lead to self-reliance for targeted households in Bangladesh in the absence of a supportive external environment and in the local context of widespread poverty. The evaluation found empirical evidence on the role of economic activities and the protective environment in the livelihoods of all Rohingya in Cox’s Bazar district.

57. To achieve self-reliance, alternative solutions that provide better protection to Rohingya and better services for all vulnerable groups – thereby reducing the need to resort to negative coping strategies – would be more appropriate. Temporary status and recognition would improve the protective environment, enable all Rohingya to engage in the local labour market with fewer entry barriers, and mitigate adoption of many of the more severe negative coping strategies.

58. Food assistance provides specific short-term food security outcomes, but needs to adapt to the protracted context, within an overall transition strategy, and to move beyond the current emergency modality that has persisted for more than two decades. Recovery and livelihood interventions using a range of food assistance modalities should address not only vulnerable refugees, but also local vulnerable groups, to avoid disfavoursing those in greatest need among the host population. These options will need further study.

59. The historical, cultural and religious kinship ties between Rohingya and communities of Bangladesh are an untapped opportunity for reaching more acceptable solutions. However, the evaluation concludes that this opportunity will not be realized without political support from the Government of Bangladesh and the international community. The evaluation also calls on the international community to maintain pressure on Myanmar to improve the conditions and legal recognition of the Rohingya in Myanmar.

Recommendations

60. Based on the evaluation findings and conclusions, four recommendations are directed to key stakeholders. These recommendations are strategic and intended to address the complex linkages among food security, economic activities and the

protective environment in the livelihoods of all Rohingya in Cox's Bazar district. They should be operationalized in cooperation with the Government of Bangladesh:

61. **Recommendation 1:** Develop a transition strategy for providing unregistered Rohingya in Cox's Bazar with temporary status and recognition, pending durable solutions in Myanmar, to ensure that they have protection, opportunities to contribute to the economy, and access to basic services.

62. **Recommendation 2:** Jointly develop an alternative strategy for current food assistance and introduce options that continue to target: a) registered refugees; and b) increasingly, the most food-insecure, unregistered Rohingya and local population groups in Cox's Bazar.

63. **Recommendation 3:** Identify strategies for ensuring that all vulnerable Rohingya and local populations in Cox's Bazar are targeted for support interventions including health, education and services for preventing malnutrition.

64. **Recommendation 4:** Within the framework of a transition strategy and alternative food assistance options, develop strategies for gradually reducing the large concentrations of refugees in camps and of unregistered refugees at unofficial sites to mitigate conflict over natural resources and the significant protection problems at these locations.

Introduction

Evaluation Features

1. During 2011 and 2012, the WFP (World Food Programme) and UNHCR (Office of the United Nations High Commissioner for Refugees) jointly implemented four impact evaluations¹¹ on food assistance to refugees in protracted situations. The current evaluation covers the protracted refugee situation in southern Bangladesh where approximately 30,000 Rohingya refugees have been assisted in two official refugee camps for more than two decades. In addition to the registered refugees, approximately 45,000 unregistered Rohingya reside in makeshift sites and over 150,000 unregistered Rohingya reside in host communities in Cox's Bazar District.

2. The goal of the evaluation was to assess the role and contribution of food assistance to self-reliance and durable solutions of the affected refugee populations. The main objectives of the evaluation were:

- to evaluate the outcomes and impact of food assistance interventions within the protracted Rohingya refugee settlements of Bangladesh; and
- to identify changes needed to improve the food assistance interventions such that they contribute to the attainment of self-reliance and/or durable solutions for the Rohingya refugee populations.

3. To cover these objectives, the evaluation was guided by the following evaluation questions:

- The primary evaluation question was: What are the differential impacts of long-term food assistance on the different Rohingya refugee and refugee-affected populations in Bangladesh?
- Four secondary questions were: (i) How does food assistance affect household livelihoods and coping strategies? (ii) What are the impacts on refugee movement? (iii) What are the impacts on protection and the protective environment? (iv) What are the impacts on food security and nutrition outcomes?

4. Intended users of the evaluation are WFP and UNHCR staff at headquarter, country and sub-office levels, as well as government and non-government partners in Bangladesh. The impact evaluation is first and foremost an exercise that will provide evidence to inform both organizations' efforts to identify strategic alternatives in protracted refugee situations. The evaluation is therefore not an operational or formative evaluation and will only cover specific UNHCR or WFP operational issues if they are relevant to the broader evaluation questions on impact.¹² An overview of stakeholders and their interests is presented in Annex 3: Stakeholder Matrix.

5. The situation concerning the Rohingya population in Bangladesh is sensitive on many fronts, and the team, with support from WFP and UNHCR, has made efforts since the inception stage to ensure that all parties are well informed about the evaluation's purpose, objectives and target group. The team's independence and the

¹¹ The four country studies covered Ethiopia, Rwanda, Chad and Bangladesh.

¹² During a briefing in Rome it was decided to focus fieldwork on issues that are more related to livelihoods of the refugee population, and less on nutrition and health-related issues, as these have been thoroughly documented in recent years.

purpose of the evaluation have therefore been emphasised throughout the evaluation process.

6. During the inception phase, the evaluation team had consultations with UNHCR and WFP representations in Dhaka and Cox's Bazar, the Refugee Relief and Repatriation Commissioner (RRRC) in Cox's Bazar, camp management in refugee camps, as well as international NGOs operating within the camps or in close adjacent areas. Bangladeshi authorities in Dhaka were informed about the evaluation through written communication at the inception stage and were debriefed on the findings and recommendations at the end of the evaluation process. Local communities in Cox's Bazar, both Bangladeshi and areas populated by Rohingyas, as well as refugees in official camps, were included in this first consultation process using Participatory Rural Appraisal (PRA) techniques (see Annex 7: Example of PRA techniques used during consultation process).

7. In order to avoid some of the potential risks related to carrying out an evaluation like this in a sensitive environment like the one surrounding the Rohingyas in Bangladesh (see also Inception Report), the team exercised a careful approach of building understanding and acceptance of the evaluation through stakeholder consultations. Bangladeshi team members were essential in terms of building trust with local communities and Rohingyas in general.

Country Context: Food Aid to Rohingya Refugees, Bangladesh

Historical Background

8. The Rohingya Muslims originate from the impoverished and isolated northern Rakhine state of Myanmar where they have been concentrated for centuries. The Rohingyas are religiously, ethnically and linguistically distinct from the predominantly Buddhist population of the Rakhine state. Differences between the minority Rohingyas and other groups precipitated a long history of civil conflict, which was interrupted by the British colonial administration of the region, beginning with the conquest in 1824. However, since the Second World War and subsequent Burmese independence in 1948, the Rohingya population has been ostracized and denied citizenship by the Government of Myanmar until the present day. The military occupation of the Rakhine state, followed by the 1982 citizenship law, essentially left the Rohingyas stateless. As "illegal" residents, the group suffered human rights violations and lacked access to many basic services, such as education, healthcare and employment (Irish Centre for Human Rights 2010 & Haque 2011). Consequently, the Rohingyas sought refuge in surrounding countries, with the majority seeking protection in Bangladesh.

9. The Rohingyas have a historical and cultural connection to the Chittagong hill area of southern Bangladesh. Along with sharing similar social, ethnic, linguistic and Islamic religious traditions, the two regions have historically interacted (UNHCR 2011). Indeed, prior to the British colonial occupation, ethnic conflict forced many Rohingyas to settle in this area for long periods of time, only moving back to the Rakhine state in the last two centuries. With the denial of citizenship starting in 1974 and ensuing persecution of non-citizens, approximately 200,000 Rohingyas fled to Bangladesh in 1978. After bilateral government agreements, many were forced to return in 1979-80. Following failed democratic elections in 1990, and a subsequent military crackdown, especially in the northern Rakhine state, approximately 250,000 Rohingyas fled to Bangladesh in 1991-92. In the following decade, the majority of

these refugees were involuntarily repatriated to northern Myanmar. Still, due to the tenuous situation in Myanmar, many Rohingyas come (or continue to return) to Bangladesh on their own as unofficial refugees (Haque 2011). No Rohingyas coming to Bangladesh after 1992 have been recognised as refugees by the Government of Bangladesh.

Current Rohingya population in Bangladesh

10. Today, the Rohingya refugee situation in Bangladesh is one of the most protracted in the world, with more than twenty years of continuous camp settlements. Integration of Rohingyas has been challenged, on the one side, by politization of the refugee situation and, on the other side, the poor socio-economic conditions of the host communities in Cox's Bazar area, one of Bangladesh's poorest districts. These conditions have added to the challenges over time of identifying 'durable solutions' for the Rohingyas in Cox's Bazar.

11. Exact figures are difficult to obtain, but most sources estimate that there are approximately 200,000 undocumented Rohingyas in Bangladesh (UNHCR 2007, UNHCR 2011, Refugees International 2011), despite official repatriation of 236,000 after the main influx in 1992 (Foundation House et. al. 2007, UNICEF 2009, UNHCR 2007)¹³. According to the Bangladesh Bureau for Statistics, the population in Cox's Bazar was about 1.8m (2001 figures). Out of the estimated 200,000, only a limited number of Rohingyas, approximately 24,000 are officially recognised as refugees by the Bangladeshi Government. This distinction between registered and unregistered Rohingyas is important as it is only the first group – registered refugees – that are entitled to food assistance and other external support.

12. These registered refugees live in two official camps, Kutupalong and Nayapara (see Map), while the remaining Rohingya population have settled in makeshift sites in proximity to the official camps or within host communities. It is estimated that around 36,000 unregistered Rohingyas have settled in the makeshift camps and another 200,000 can be found in host communities (UNHCR 2011). An exception to this sharp distinction between those registered refugees living in camps and those unregistered Rohingyas that are outside official camps, is the group of unregistered Rohingyas that are now living in the Leda Camp. This group receive support in terms of water, sanitation, health and nutrition from international NGOs – but are not entitled to food assistance, on decision from the Bangladeshi Government¹⁴.

13. While the majority of registered refugees live in two official camps, Kutupalong and Nayapara, reports provide evidence that most Rohingyas (registered and unregistered) are itinerant and, despite considerable risks (e.g. of punishments, arrests or losing rations cards/family books), they have been able to move around within Cox's Bazar and other districts in search of livelihood opportunities (Lewa 2008). Their ability to move depends on the political climate and intensity of controls along roads in Cox's Bazar. According to Lewa, movements were restricted in recent years (2008-2010), affecting Rohingyas' search for livelihood opportunities (Lewa 2010).

14. Rohingya in Bangladesh are reported to experience marginalisation and discrimination and there are sporadic reports of conflicts with host Bangladeshi

¹³ <http://www.bbs.gov.bd/RptZillaProfile.aspx>

¹⁴ The Leda camp was established after makeshift sites near Teknaf, where Rohingyas earlier lived, were risk zones as they were often affected by floods and resulting landslides.

communities. The lack of refugee status means that unregistered Rohingya have no legal recourse for protection. The result is that they are often confronted with violence, abuse, arrest and detention, women and girls being particularly exposed. A factor that partly explains some of the hostility towards Rohingya is the widespread poverty of Cox’s Bazar – reporting some of the lowest social and economic indicators nationwide. In addition, Cox’s Bazar District is prone to disasters such as droughts, floods or cyclones and the population density has already put extreme pressure on existing socio-economic systems and scarce natural resources.

15. This complex environment amplifies the challenges faced by humanitarian organisations in restoring refugees’ livelihoods alongside the humanitarian and development needs of the Bangladeshi populations in the region.

Methodology

16. The methodological approach of the evaluation, including how to address questions and issues raised in the ToR, was designed on the basis of an initial briefing held in Rome with WFP and UNHCR evaluation offices and an inception mission to Bangladesh carried out from March 19-23¹⁵. The methodology and sample design was presented in an Inception Report and approved by WFP and UNHCR and reviewed and commented upon by an expert panel.¹⁶

17. This theory-based impact evaluation was based on a logic model developed by UNHCR and WFP which considered inputs, outputs, short and long-term outcomes and impacts and associated assumptions (the model can be consulted in Annex 6 of the main report)¹⁷. A simplified version of the logical model is presented in Table 1, where over time food assistance transition from an emergency modality to that of recovery, asset building and eventually self-reliance.

Table 1: The logic model simplified

Time	Food assistance	Assumptions	Expected results
Short term	General food distribution (GFD) – full rations.	Emergency response assistance	Lives saved; improved food consumption; safety and protection provided. Minimal level of self-reliance.
Medium term	Food assistance decreases (partial rations)	Transition from emergency response; Complementary social service interventions are available, e.g. water, sanitation, education, housing, etc.;	Improved food basket, improved nutritional status (acute and chronic malnutrition). Increased capacity of beneficiaries to establish livelihoods.
Long term	Food assistance decreases (partial rations)	Livelihood interventions available; asset building	Refugee self-reliance; local integration; resettlement or repatriation.

¹⁵ The following team members participated in the Inception Mission: team-leader, humanitarian and development specialist and senior evaluator (Nicolai Steen Nielsen, DARA); data analyst and survey design specialist (Covadonga Canteli, DARA); Bangladeshi researcher, socio-economic expert and food security specialist (Ferdous Jahan, BRAC University); and two Bangladeshi community researchers (Md. Mamun-ur-Rashid and Omar Faruque Siddiki, DRI). During the inception mission, the team was accompanied by two WFP evaluation office staff members (Ross Smith and Cinzia Cruciani).

¹⁶ The expert panel consists of Michael Bamberger, evaluation expert and independent consultant, and Karen Jacobsen, livelihood expert.

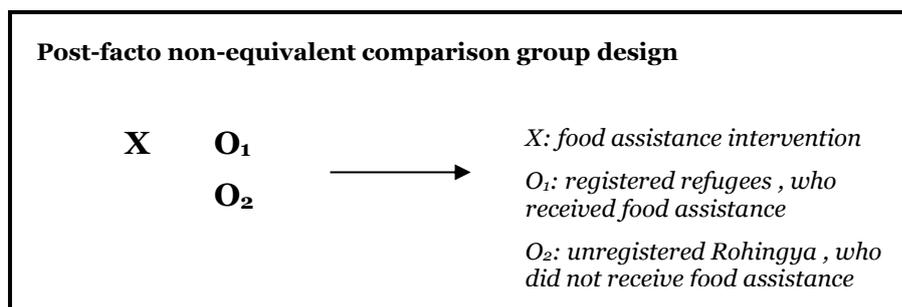
¹⁷ This model was developed as a framework for the series of four impact evaluations.

18. In order to evaluate outcomes and impacts the evaluation team used a mixed method design that combined quantitative survey data with qualitative data collection techniques. Quantitative data provided empirical evidence on the different evaluation questions; the qualitative data complemented this, triangulating the quantitative evidence and forming a key component in understanding the causal linkages between food assistance and the differences between the different Rohingya populations. Key methodological features and sample design are presented in more detail in Annex 4.

19. In order to evaluate impact in the most methodologically rigorous manner, given the context, the evaluation followed a quasi-experimental approach, using a post-facto, non-equivalent comparison group design, as illustrated in Figure 1. The evaluation design featured a comparison of two non-equivalent groups (O1 and O2), only one of which received food assistance (X). The evaluation was done with a single point of measurement after the intervention (post-facto). This was the best impact evaluation design possible given the context and statistical clustering was used to isolate similar sub-groups within the two non-equivalent groups and thus further refine the comparison of outcomes between a group of refugees that received food assistance and one that did not.

20. The key limitations of the evaluation design for this exercise was the potential for selection bias, which can threaten validity of the findings, and the difficulty in isolating the contribution of food assistance from other external assistance variables. These limitations were mitigated through the mixed-method approach; statistically representative samples of registered and unregistered Rohingya populations were surveyed and, combined with the additional inclusion of non-statistically significant strata samples, this data informed the design of the qualitative data collection phase; qualitative data collection was then used to triangulate key quantitative findings and to elaborate on the causal and correlational linkages between and among food assistance and other variables. In addition, a cluster analysis, based on economic activity of households, was used as the basis for regression models and comparison across the different groups; this mitigated the threats to internal validity from the non-equivalent groups and the potential bias from group selection differences.

Figure 1: The impact evaluation design



21. As preparations for the quantitative and qualitative data collection, the team conducted six participatory rapid appraisals (PRA) in selected areas, including both local Bangladeshi communities and camp and makeshift sites. The PRAs sought to define how different dimensions of the evaluation’s scope could be addressed in a sensible way taking into consideration cultural and social norms, as well as the political context.

22. The evaluation design included a quantitative survey covering over 1000 households and more than 50 focus group and key informant interviews with

different households, including registered refugees and unregistered Rohingya as well as local Bangladeshi host communities. Unregistered Rohingya were subdivided into different groups according to their place of living and the support with which they have been provided; the evaluation therefore distinguishes between unregistered Rohingya living in the Leda site where they are provided with assistance such as health services and water and sanitation and unregistered Rohingya living in makeshift sites. The evaluation included a smaller non-statistically significant sample of households from Bangladeshi host communities to provide descriptive comparators. Table 1 provides an overview of the household survey data collection.

23. The groups¹⁸ were as follows:

- Refugees in Nayapara and Kutupalong camps
- Unregistered Rohingya in a makeshift site (near Kutupalong)
- Unregistered Rohingya in the Leda site
- Unregistered Rohingya in local areas (not close to camp areas)
- Poorest Bangladeshi households in the nearby villages

Table 2: Summary Table – Data Collection

LOCATION	TARGET POPULATION	POPULATION SIZE	Population size considered in sampling	SAMPLE SIZE	ERROR (+/-, %)
NAYAPARA REFUGEE CAMP	Registered refugees	2681 households	2681	175	7.19%
	Unharmonised Rohingyas ¹⁹	371 households	371	132	6.85%
	TOTAL	3052 households	3052	307	5.26%
KUTUPALONG REFUGEE CAMP	Registered refugees	1700 households	1700	174	7.04%
	Unharmonised Rohingyas	209 households	209	26	18.0%
	TOTAL	1909 households	1909	200	6.6%
MAKESHIFT CAMP (KUTUPALONG)	Unregistered Rohingyas	<i>4350 (estimate, assuming 6 members per household, as in Kutupalong refugee camp)</i>	4350	150	7.86%
LEDA CAMP	Unregistered Rohingyas	Aprox. 2300, assuming 6 members per household	2300	262	5.70%
COX's BAZAR	Unregistered Rohingyas	??		50	
VILLAGES NEAR NAYAPARA	Locals living in poorest households (identified through PRA's)			100	
Total				1069	

¹⁸ See map in full report for location of the refugee camps and makeshift/Leda sites.

¹⁹ Unregistered Rohingyas in camps are henceforth referred to as Unharmonised Rohingyas by UNHCR. For the sake of clarity, this evaluation will only distinguish between registered refugees and unregistered Rohingyas. Despite living in camps, the so-called 'unharmonised' Rohingyas do not receive food assistance.

24. In addition to a preliminary exploratory data analysis, in which distribution of variables was analysed by stratum, quantitative survey data was analysed in three different ways perspectives in order to address the impact of food assistance in the areas of interest of the evaluation: nutrition, food security, mobility and protection. The three approaches were:

- i) Comparing the registered and unregistered households that live inside the official camp of Nayapara, for which representative samples are available to implement tests of differences in means. Registered and unregistered households in Nayapara receive the same non-food aid and are provided with shelter and the same WASH, education, health and leisure facilities, however the registered receive food aid and the unregistered do not.
- ii) Grouping surveyed households according to their economic activities (cluster analysis), and analyzing whether, within these groups, the registration status leads to important differences in households in terms of the areas of interest of the evaluation. This approach assumes that the impact of food aid on Rohingya households can differ depending on the economic activities they undertake (i.e. the existence of differential impact is taken into consideration) and that if registered households didn't receive any aid, they would behave as unregistered households that undertake similar economic activities (i.e. unregistered households within the same group).
- iii) Fitting multiple linear regression models to explain indicators on the areas of interest of the evaluation based on demographic, socioeconomic variables, and also on variables of registration status, camp location and strata. Comparing regression coefficients of main explanatory variables allows for an estimation of the impact of the registration status or the camp where the household is located, given similar socioeconomic conditions for households.

25. Under the mixed method design, coherence of the findings has been triangulated from the three quantitative approaches and also checked with the information collected through the KIIs and FGDs..

26. Indeed, qualitative research has not only served to triangulate the quantitative findings, but also to explore the causes and consequences of them, and to understand the context in which impact is being estimated. The transcriptions of the FGDs and KIIs, that followed standard guidelines covering all the areas of interest of the evaluation, have also allowed for a systematic review of important issues. If a finding could not be sufficiently verified (i.e. triangulated) using primary or secondary data, as was the case for some of the 'anecdotal' findings, a note of caution is included.

UNHCR and WFP's support to Registered (Rohingya) Refugees

27. WFP and UNHCR have been assisting registered refugees in Bangladesh since the most recent major population movement in 1992 (see Annex 11: Tables and Graphs) for overview of WPF support to Rohingya refugees. In the first decade (1992 - 2002) operations varied significantly, with an initial large response with relief food that subsequently tapered off to the current protracted situation, with a stable population of registered refugees in camps. Based on a working memorandum of understanding, UNHCR and WFP share responsibility for refugee assistance. With respect to food assistance, WFP is responsible for provision of basic food

commodities, including certain therapeutic foods, while UNHCR is mandated to provide some complementary foods. Planning and distribution of food assistance is jointly done with government entities, as are needs assessments, monitoring and reporting.

28. Since 2002, WFP operations have focused on meeting the basic nutritional requirements of registered refugees through basic food rations distributed in the two refugee camps. This is done through general food distribution, supplementary feeding for targeted groups, including school feeding, and some targeted activities related to training, income generation, etc. through food-for-work or food-for-training interventions.

Evaluation Results

Introduction

29. The evaluation findings are organized according to the key evaluation sub-questions; livelihoods and coping strategies, movement, protection and food security.

30. The evaluation methodology required comparison between seemingly disparate population groups (strata) across a range of variables. In order to statistically compare the groups, the evaluation gathered background demographic information and used household economic activity, as a key indicator of difference, to cluster the sampled groups.

31. The analysis thus first compares basic demographic data from the different strata and, under the livelihoods focus, analyses household economic activities and income. This data serves as a basis for the subsequent analyses related to coping strategies, protection, movements and food security, which are dealt with in parts 2.1, 2.2, 2.3, and 2.4, respectively.

Demographic characteristics

32. Table 2 summarizes the main demographic characteristics of sampled household by stratum. From the analysis, it can be concluded that households in Nayapara refugee camp, both registered and unregistered, and registered refugee households in Kutupalong, are all quite similar in terms of demographic characteristics. More precisely, the only significant differences encountered between them is the number of years since the head of household arrived to Bangladesh (unregistered Rohingyas arrived in Bangladesh three years later than the others, on average) and the marital status and sex of the household head. Nayapara refugee camp (regardless of the registration status) presents a higher percentage of female headed households than Kutupalong and the makeshift camp.

33. Households in the Leda site and the makeshift site (unregistered Rohingya) are significantly different from those in the official camps (including the unregistered in Nayapara) on a number of key aspects, including:

- having a higher percentage of below 5 and below 12 year-olds
- the household head arrived in Bangladesh approximately 5 years later than those in refugee households
- having less incidence of separation/divorce
- a higher percentage of households have no formal schooling

34. The education level of household heads is significantly different from one population type to the other. In the case of unregistered Rohingyas in Nayapara camp, the level of education is similar to that of the Leda site. It may be the case that unregistered Rohingyas in Nayapara profit from school services in the nearby camp at the primary education level.

35. In all groups the percentage of unregistered Rohingyas having access to secondary school is dramatically low.

Table 3: Summary of demographic characteristics by type of household²⁰

		Registered refugees		Unregistered Rohingyas			Host community in nearby villages	
		Kutupalong camp	Nayapara camp	Leda site	Nayapara camp	Makeshift camp		Rohingyas living in local areas
Sample size		174	175	262	132	150	50	100
Household size		5.6	6.1	6.9	5.9	5.3	4.5	4.8
Sex and ages of household members	Percentage of men of ages between 12 and 59	26.6	25.5	24.6	28.2	26.8	27.9	29.7
	Percentage of women of ages between 12 and 59	32.4	32.8	28.9	33.1	30.5	31.6	33.3
	Percentage of children below 5 years old	15.1	12.9	19.1	11.4	19.3	16.9	13.9
	Percentage of children below 12 years old	37.9	37.0	43.5	35.0	39.2	33.5	33.3
	Percentage of members of at least 60 years old	3.1	4.7	3.1	3.7	3.5	6.9	3.7
	Age of head of household	39.7	42.0	39.5	41.4	37.0	39.3	37.5
Status in Bangladesh	Number of years since head of household moved to Bangladesh	20.6	20.1	14.8	17.2	9.9	15.1	-
	Percentage of registered refugees	87.9	87.2	0.0	4.5	0.0	0.0	-
	Percentage of refugees holding a national ID card	0.0	0.0	0.0	0.0	0.0	6.8	-
Sex and marital status of head of household	Percentage of female headed households (%)	24.7	32.0	31.7	34.1	13.3	10.0	11.0
	Percentage of households in which head is married (living with spouse)	78.2	70.9	80.9	72.0	86.7	88.0	88.0
	Percentage of households in which head is widow/widower	10.9	17.1	14.5	16.7	9.3	8.0	8.0
	Percentage of households in which head is divorced/separated	9.7	10.8	3.8	9.8	2.6	2.0	0.0
Education levels	Percentage of households in which head never enrolled school or didn't pass any class	53.4	51.4	66.8	63.6	75.3	56.0	65.0
	Percentage of households in which head had primary education	20.1	14.3	9.2	14.4	10.7	20.0	21.0
	Percentage of households in which head had secondary education	9.2	8.6	4.2	4.5	5.3	4.0	4.0
	Percentage of households in which head had religious education	16.7	25.7	19.8	16.7	8.7	20.0	10.0

Source: DARA quantitative household survey (May-June 2012)

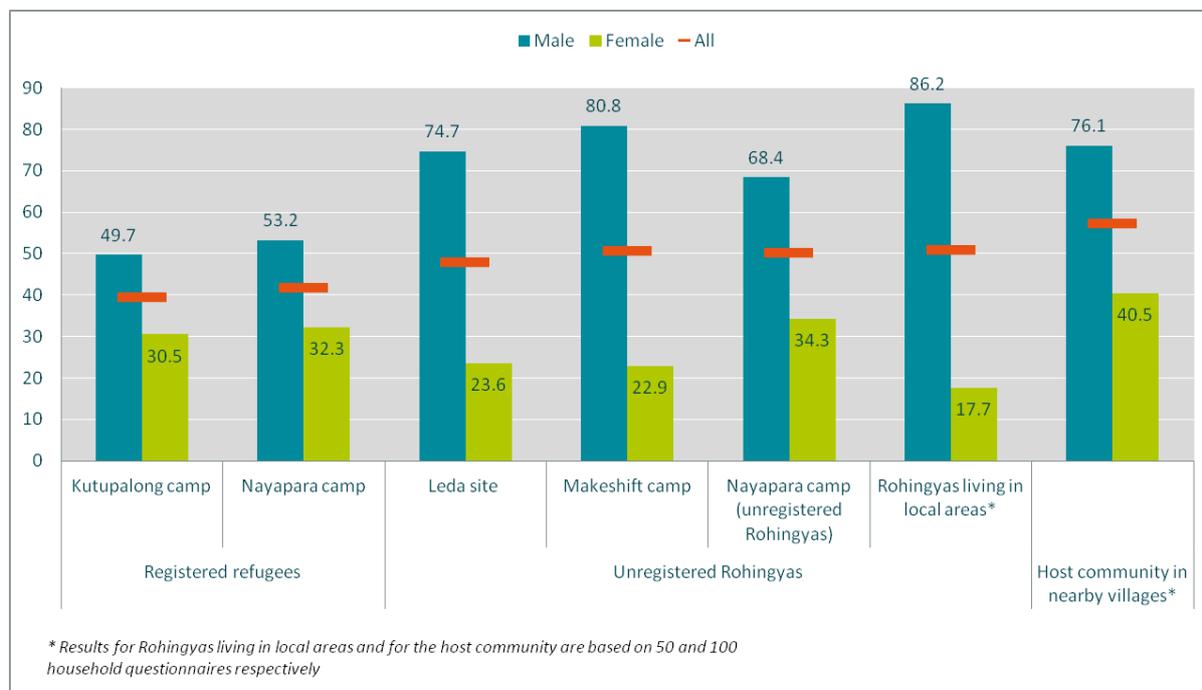
Livelihoods and Coping Strategies

36. Graph 1 show the percentages of working individuals in each strata, organized by sex and age. According to the data, unregistered Rohingyas are more economically active when compared to registered refugees; approximately 50% of

²⁰ Significantly different figures compared to registered refugees in Nayapara are marked in bold. Tests have not been carried out against Rohingyas living in local areas or host community households (last two columns), due to the small sample available for them

unregistered Rohingyas compared to 40% of the registered refugees. When disaggregated by sex, a greater gap exists between percentages of males and females among the unregistered Rohingyas, where only about 20% of females have an economic activity. The exception is Nayapara where 34% of unregistered Rohingya women work.

Graph 1: Percentage of adult respondents having an economic activity by sex (%)



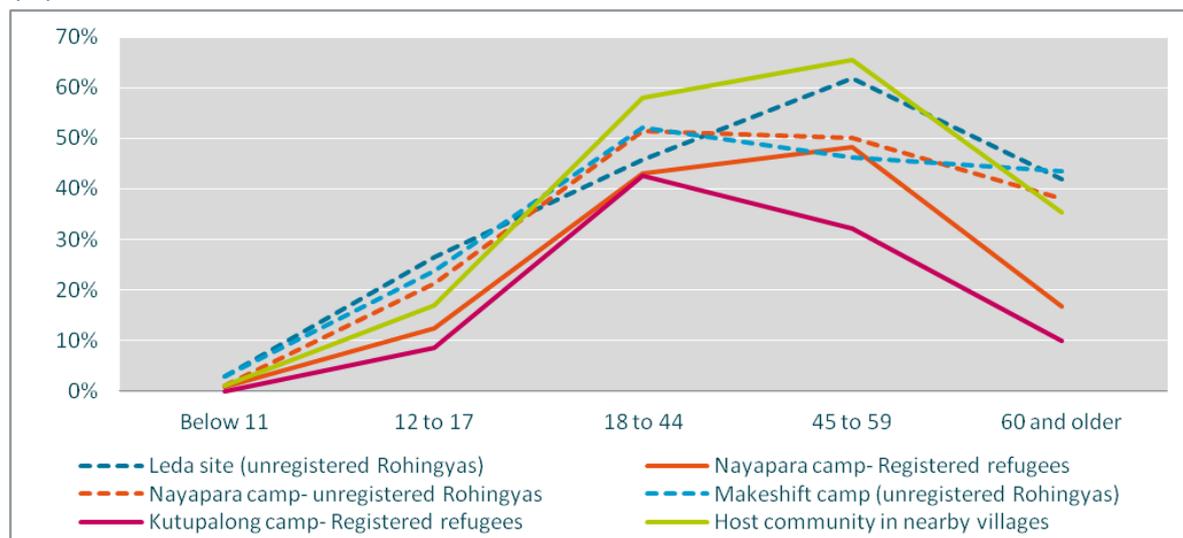
Source: DARA quantitative household survey (May-June 2012)

37. More precisely, unregistered male Rohingyas living in the makeshift camp are those who most frequently have an economic activity (80.8%). Next are the unregistered Rohingyas living in the Leda site (74.7%), followed by unregistered Rohingyas in the Nayapara camp (68.4 %). Least economically active are the registered refugees in Nayapara (53.2) and Kutupalong (49.7%). Interestingly, female refugees from the makeshift site and Leda site are those who less frequently have an economic activity (22.9 and 23.6% respectively). Key explanations were, i) the high percentage of economically active males in these locations, and ii) safety concerns for unregistered Rohingya women. Interviews with women at the makeshift site reported that women with husbands and children do not usually work outside of the house due to safety concerns. Even collecting firewood outside the camp is unsafe, especially for young women. Therefore, only women without adult male household members work, usually through small businesses, begging or as housemaids (FGD with Women at Kutupalong Makeshift Site, May, 2012). Reasons for why lowest female activity amongst all groups (17.7%) is found among unregistered Rohingyas living in local areas merits further investigation.

38. Unregistered Rohingyas have a greater tendency to work than registered Rohingyas, regardless of their age group (see **Graph 2**). The exception is in the 45 to 59 age group, for which the percentage of working individuals is very similar between Rohingyas living in the makeshift camp and registered and unregistered Rohingyas in Nayapara (46.2, 48.3 and 50.0% respectively). In that age group, Leda is the place where the highest percentage of Rohingya work (61.9%), whereas the greatest gap is

found between Nayapara and Kutupalong camps (48.3% compared to 32.2%, respectively).

Graph 2: Percentage of respondents having an economic activity by age group (%)



Source: DARA quantitative household survey (May-June 2012)

39. The evaluation analysed data on economic activities for male and female adult individuals respectively, by camp/site. The main economic activity of male registered refugees is non-agro based day labour, practiced by 11.3 and 16.7% of male individuals in Kutupalong and Nayapara camps, respectively. No other activity is practiced by more than 10% of the registered males (see Annex 11, Tables 11 and 12 for further detail).

40. Unregistered adult males have more economic activities: micro-enterprises outside the house, agro-based day labour, fishing and rickshaw pulling appear as most frequent activities.

41. Contrary to the trend for men, refugee women are more likely to have economic activities than unregistered women. These activities are mainly poultry and sewing. Unregistered females present higher percentages of females who work as maids, servants or who beg, but these percentages are below 10% in all sites/camps.

Economic activities

42. A clustering technique²¹ has been applied against the population groups living in the two official camps, the makeshift site and the Leda site, for which a representative sample of households was surveyed²². The purpose was to classify

²¹ Clustering techniques serve to create automatic classifications of items. Given a set of variables, items for which the variables take similar values are grouped together into the same group and items for which the variables take different values are classified into different groups. In other words, items are classified so that variance within groups is minimised, while variance between groups is maximised. In this case, the technique applied was a k-means cluster on the principal coordinates issued from a Multiple Correspondence Analysis of the variables on economic activities of the household.

²² As mentioned in part 1.1, these are the registered refugees in Kutupalong and Nayapara official refugee camps, and the unregistered refugees in Leda, the makeshift camp of Kutupalong and the Nayapara official camp. The sample for refugees living in local areas is not large enough to be included as active observations in this type of analysis.

refugee households depending on the economic activities they undertake. The clustering technique automatically creates the classification for which households within groups are as similar as possible and households from different groups are as different as possible, always in terms of households' economic activities. In other words, the most homogeneous groups in terms of economic activities emerge automatically from the data, without the potential influence of analysts' prejudices on the existing groups. A simplified but useful picture of the Rohingya population living in official camps, makeshift site and the Leda camp in Bangladesh is therefore produced (see Graph 3).

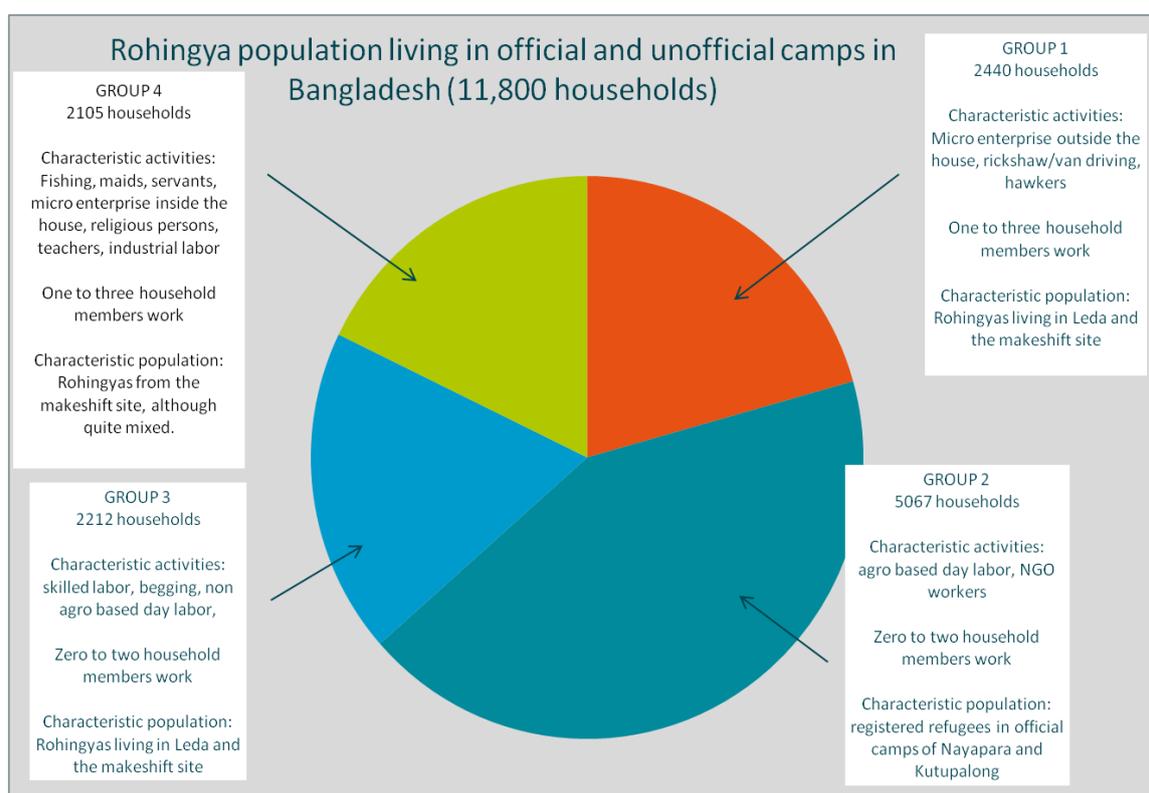
43. When using clustering techniques, a “fuzzy” approach is adopted by the analyst. Resulting groups do not satisfy certain categories at one hundred percent, but if they satisfy them at a percentage which is significantly higher than that of the total population, then the category becomes “characteristic” of the group. In this case, household groups are characterized by certain economic activities that are practiced by the group with a frequency 40% higher than that of the total population. Table 5 shows the frequency with which each economic activity is practiced in each group. Characteristic activities of each group appear in bold.

Table 4: Economic activities by group

Economic activities	Rohingya households who declare the item is one of its economic activities (%)				
	All population	Group 1	Group 2	Group 3	Group 4
Non agrobased/industrial day labor	30.8	24.3	30.2	43.3	24.7
Poultry/Farming/Live stock	14.1	13.0	15.6	15.5	11.9
Micro enterprise outside house	14.0	66.0	0.0	0.9	1.7
Agro based day labour	13.0	9.7	19.1	13.3	2.6
Rickshaw	8.2	38.7	0.0	0.0	1.4
Sewing	7.7	6.6	8.6	6.0	8.7
Restaurant	6.6	8.7	4.7	6.7	8.4
Micro enterprise in own house	6.4	0.0	0.0	0.0	33.8
Maid	6.0	5.2	0.0	0.0	26.2
Beggar	5.4	5.8	4.6	8.7	3.3
NGO/govt worker	5.1	1.6	7.5	6.3	2.1
Fisher	4.7	2.7	0.0	0.0	22.1
Teacher/Imam/Religious person	4.1	0.0	0.0	0.0	12.9
Hawker	2.7	3.9	3.2	1.0	2.1
Skilled labour	2.0	0.4	0.0	10.1	0.0

Source: DARA quantitative household survey (May-June 2012)

Graph 3: Characteristics of the Groups of Population



Source: DARA quantitative household survey (May-June 2012)

*Number of households by group is an estimate based on the percentage of sampled households classified under each group.

44. Graph 3 illustrates the classification of the nearly 12,000 households composing the Rohingya population living in official camps, makeshift site and Leda camp in Bangladesh, depending on the economic activities undertaken by their members. Comparatively, the following can be stated (see Annex 11, Table 13):

- Households in groups 1 and 4 (about 4,500 households) are more economically active:
- All of them have at least 1 working member.
- A high percentage of households in these two groups have a member under 14 years old who works (59% for group 1 and 57% for group 4, compared to around 25% for groups 2 and 3).
- Group 1 and 4 earnings per household member are higher, because they work more than groups 2 and 3. Household members in groups 1 and 4 declared having worked a total of 73 and 75 hours in the last two weeks respectively, on average, while household members in groups 2 and 3 worked 68 and 67 hours respectively, on average.
- Groups 2 and 3 are less economically active. However, as per type of economic activity of household members, group 3 can be characterised as being slightly more vulnerable than group 2 in that their jobs are more risk prone and more transient. Households belonging to group 3 are characteristically engaged in farming, non-agro based day labour, begging and some skilled labour, whereas group 2 households are characteristically engaged in farming, agro-based day labour, and NGO work.

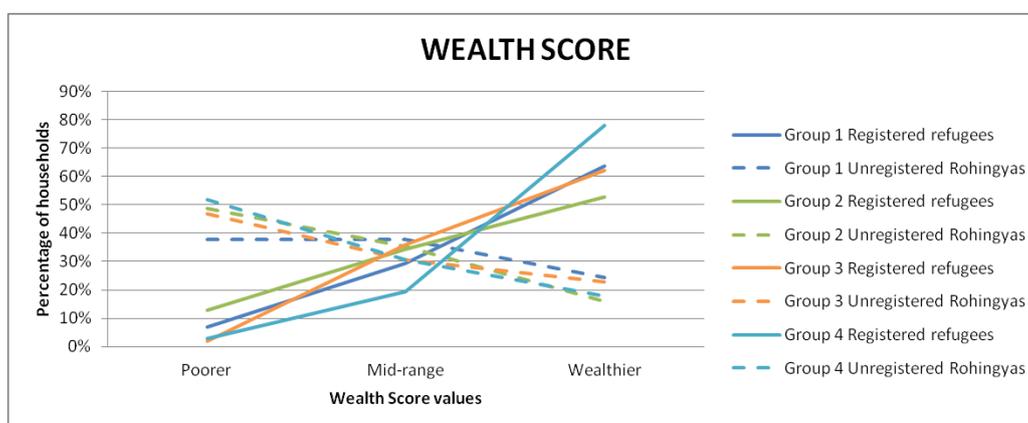
45. Group 2 is therefore an important part of the population (42.9%), composed of households that are less economically active and, given the activities they undertake, slightly less vulnerable. Most registered refugees (60.6%) were classified under this group.

46. A detailed analysis of how indicators behave within groups has concluded that registration status leads to greater differences within groups. In other words, given similar livelihoods, different registration status implies different levels of nutrition, food security, mobility, etc. The most illustrative results are explained in the following sub-sections. Given the bigger sample of registered refugees it includes, comparisons between registered and unregistered households within group 2 are especially relevant.

Wealth Score

47. In terms of wealth score, there are clear and significant differences between refugees and unregistered Rohingyas across all of the four groups (see Graph 4). For example, in group 1, 7% of the registered refugees are poorer and 63.6% wealthier than the average. In the same group, 37.7% of the unregistered Rohingyas are poorer, while 24.5% fall within the wealthier category. The other groups follow similar trends. Given the lower economic activity among registered refugees, external assistance (including food assistance) appears to be a strong differentiating factor due to its value transfer, especially considering that unregistered Rohingyas have higher earnings (see next part).

Graph 4: Wealth score across four groups



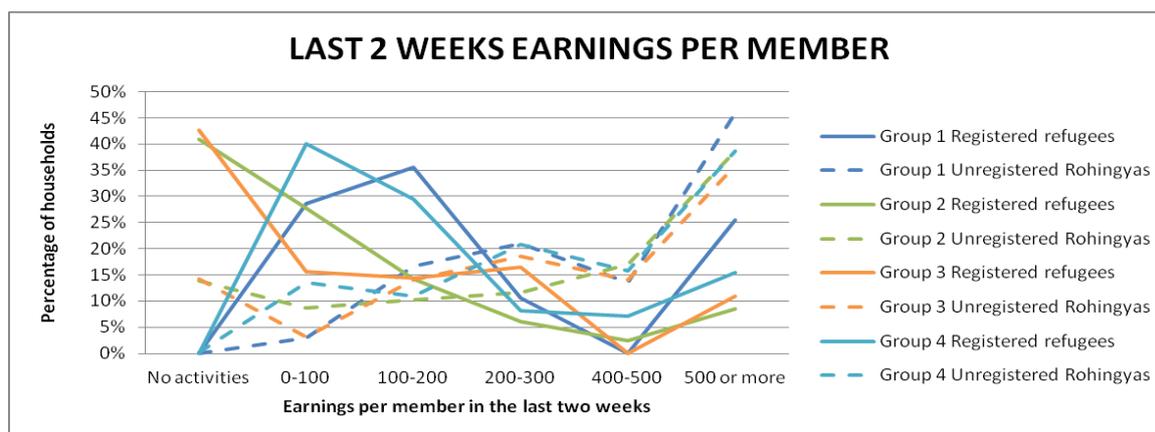
Source: DARA quantitative household survey (May-June 2012)

Household Earnings

48. The evaluation found that, in general, Rohingyas *can* and *do* access jobs and that most – independent of refugee status – are engaged in economic activities. There was, however, a significant difference in terms of level of such engagement, largely depending on refugee status and needs of households to engage in economic activities.

49. In terms of earnings, there is evidence that all unregistered Rohingyas earn more than the refugees when salaries are above 300 BTK (see Graph 5: Earning Last Two Weeks). The evaluation findings indicate that this is because unregistered Rohingyas are economically more active than registered refugees and must earn enough income to meet basic needs, whereas registered refugees are more engaged in small-scale activities that supplements assistance they are receiving.

Graph 5: Earning Last Two Weeks



Source: DARA quantitative household survey (May-June 2012)

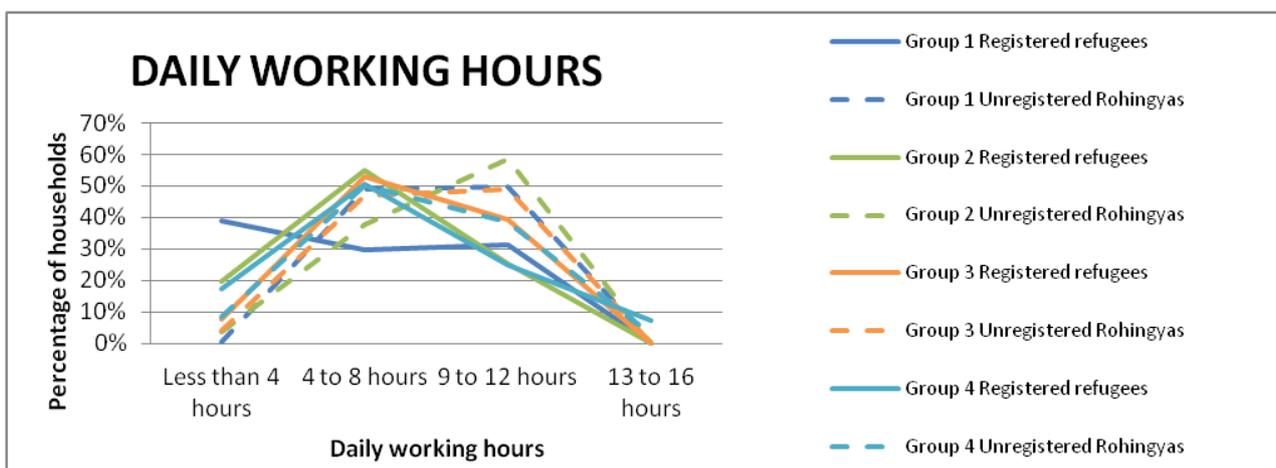
Working Hours

50. The evaluation found that unregistered Rohingyas tend to work longer hours than registered refugees across all groups (see

51.

52. Graph 6: Daily Working Hours). For example, in group 1 almost 50% of unregistered Rohingyas work for 8 to 12 hours per working day, while only 31% of the registered refugees do the same. The similar trend is demonstrated in other groups. The evaluation found qualitative evidence that this was partially because external assistance provided to refugees has an income function and thus there is less need for other sources of income.

Graph 6: Daily Working Hours



Source: DARA quantitative household survey (May-June 2012)

53. According to Bangladeshi traders and community members, Rohingyas are willing to work for lower wages than ‘normal’ market rates, especially if they are working next to their settlements. Because the Rohingyas work at lower rates, they are preferred over the local Bangladeshi day labourers by local employers. Reportedly, this has occasionally triggered disputes between the Rohingyas and the local population. Bangladeshi men interviewed near the Nayapara camp explained that employment opportunities are scarce and many employers, such as farmers,

prefer hiring refugees because they can pay them half the wage of the local villagers. (see text box overleaf)

Ibrahim, age 30, moved outside the camp to work as an agricultural daily labourer. The owner provided him food and shelter during those days along with 120 Taka per day for his work – half of what local people receive. Ibrahim needed work, so he had no other choice but to agree with the proposal. After 15 days he earned 1800 Taka. On his way home, two local people attacked him and stole his money (FGD with male registered refugees in Nayapara, May 2012).

Unprotected Work

54. Because registered refugees and unregistered Rohingya are not legally authorized to work they are not covered by any Bangladeshi labour protection laws. Hence, they are vulnerable to very low wages and unethical employment practices. The qualitative data provided important insights concerning risks, hazards and insecurity that Rohingyas suffer. The findings from interviews carried out in the field provided evidence that work, amongst other issues, involves separation from families, physical risks and harassment. (see text box below)

“A significant number of men here are engaged in working on the sea and/or weaving/repairing nets. Those engaged in these activities stay away from homes for 20 to 30 days consecutively. Bangladeshis tend to avoid such type of work, making it easy for the Rohingyas to get employed” (FGD with male unregistered Rohingyas in Kutupalong Makeshift, May 2012).

Many unregistered Rohingya men from the Nayapara areas go to Teknaf port where they work unloading cargo from ships – often heavy logs. The Bangladeshi locals are not much interested to work at the docks since there is considerable mortal risk (FGD with male unregistered Rohingyas in Leda, May 2012).

“Forest officers and the local villagers sometimes seize equipment from Rohingyas when they go out to the hills to collect firewood. Sometimes, the local villagers take their collected wood by force and physically abuse the Rohingyas. The Rohingyas do not protest because any form of protest results in infliction of physical abuse” (Note. Rohingyas here refers to unregistered Rohingyas. Interview with the female head of household in Leda site, May 2012).

“Women go to work in restaurants or at homes as housemaids at lower rates. Some women work as sex workers, not willingly but because they have no other opportunities.” One female participant at the makeshift site: “Give me food, give me clothing, and I’ll stop doing this job” (FGD with unregistered Rohingya women at Leda, May 2012).

Seasonality

55. Since many Rohingyas are engaged in unskilled labour, they are highly affected by seasonality. Seasonality affects earning for most households whose family members are engaged in local jobs like agriculture, fishing, salt producing industries and rickshaw pulling. According to the evaluation respondents, winter is the best season with steady income, while the rainy season brings significant hardship for vulnerable households (see text box below). The evaluation findings indicate that unregistered Rohingya are more affected by seasonality, with the rainy season being more difficult for many unregistered Rohingyas. Interviews with registered refugees

did not reveal the same challenges, a clear indication that registered refugees are in a better position to cope with seasonal changes, as they also depend less on daily wage labour.

A male head of household is employed at a bamboo distribution centre, but only for seven months, as bamboos are imported from Myanmar only between January and July. Once the season ends, he will lose his job and, if lucky, work on a fishing boat (Household level in-depth interview with the male head of household in Makeshift site, May 2012).

A female head of household mentioned that due to the extreme heat, it has almost become impossible to go to the hills to collect firewood in summer. During the rains, she must remain home, which worsens her family's food security. In the coming rainy season, she expects her income to fall drastically, and so will her son's income. Hence, she will have to borrow money to somehow pass her difficult food insecure days (Household level in-depth interview with the female head of household in Leda site, May 2012).

One Makeshift site male interviewee said, "If we get sick in winter we can buy medicine. But in summer, we cannot. In cases of severe illness during the rainy season, we purchase medicine on credit and re-pay in winter" (Interview with the male head of household in Makeshift site, May 2012).

Similarly, a Rohingya male with a Bangladeshi wife living in a Bangladeshi village reported that his earnings also vary seasonally. He is unable to have a good catch during the rainy season when the river has rough tides. Consequently, during the rainy season the family has to borrow food and/or money to buy food. Hasan's wife makes efforts to store rice and dried fish little by little prior to this period of time in order to supplement consumption. However, despite efforts they often spend many days without food during the rainy season (Interview with a Rohingya male head of household with a Bangladeshi wife living in the host community, May 2012).

Men from the Leda camp said that those who work in salt production may be able to work 15 to 20 days per month, but most jobs depend on the weather. For example, June through August is difficult because of storms and rain (FGD with men from Leda Camp, May 2012).

Household expenditures

56. The evaluation found that household expenditures were significantly less for refugee households than for unregistered Rohingya households. The survey confirms that because of food rations, refugees spend less on food items as compared to unregistered Rohingyas and Bangladeshi communities. While registered refugees spend around 100 BDT per member on a weekly basis, expenditure among unregistered Rohingyas is nearly twice as much, around 200 BDT. This figure is still lower when compared to Bangladeshis (around 250 BDT)²³. The same pattern goes

²³ See Table 11: Economic activities for males (18 and older) by population type (%)

Economic activity (%)	Registered refugees		Unregistered Rohingyas					Host community in nearby villages
	Kutupalong camp	Nayapara camp	Leda site	Makeshift camp	Nayapara camp	Kutupalong camp	Rohingyas living in local areas (Cox's Bazaar)	
Sample size	195	203	368	177	155	26	58	113

No economic activity	50.3	46.8	25.3	19.2	31.6	11.5	13.8	23.9
Non Agro based day labour	11.3	16.7	33.2	26.0	22.6	15.4	29.3	32.7
Micro enterprise outside house	2.1	7.9	10.9	10.7	7.7	3.8	3.4	8.0
Agro based day labour (to other's land)	6.7	3.9	6.0	16.4	6.5	19.2	0.0	8.8
Fisher /Fishery	2.6	3.9	3.5	2.8	3.9	11.5	19.0	9.7
NGO worker	9.7	3.9	0.5	1.1	1.3	3.8	5.2	0.0
Restaurant/Shop worker	2.1	3.0	2.4	5.1	7.7	0.0	1.7	0.0
Imam/religious person	2.6	3.0	0.5	1.1	1.3	0.0	0.0	0.9
Farming	0.5	2.5	0.3	2.8	0.6	3.8	0.0	1.8
Teacher	2.1	2.5	0.3	0.6	0.0	3.8	0.0	0.0
Various micro enterprise in own house	4.6	2.0	1.9	2.8	1.3	7.7	1.7	0.0
Sewing/ Handy craft/ cottage industry	0.5	1.5	0.3	0.0	0.0	0.0	0.0	0.9
Maid/Servant/work in other people's house	0.0	0.5	0.3	1.7	0.6	0.0	0.0	0.0
Rickshaw/Van/Truck/Bus driver	2.6	0.5	9.2	6.2	9.7	11.5	24.1	8.0
Hawker/Mobile hawker	0.0	0.5	1.6	1.1	1.3	3.8	0.0	0.0
Skilled labour (Carpenter, Potter, Black smith...)	2.1	0.5	2.7	1.7	1.3	3.8	1.7	2.7
Beggar	0.0	0.5	0.8	0.6	2.6	0.0	0.0	0.9
Industrial labour	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Live stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 12: Economic activities for females (18 and older) by population type (%)

Economic activity (%)	Registered refugees		Unregistered Rohingyas					Host community in nearby villages
	Kutupalong camp	Nayapara camp	Leda site	Makeshift camp	Nayapara camp	Kutupalong camp	Rohingyas living in local areas (Cox's Bazaar)	
<i>Sample size</i>	<i>223</i>	<i>248</i>	<i>407</i>	<i>192</i>	<i>175</i>	<i>25</i>	<i>62</i>	<i>126</i>
No economic activity	69.5	67.7	76.4	77.1	65.7	44.0	82.3	59.5
Poultry	11.7	13.3	4.7	4.2	4.6	12.0	1.6	23.0
Sewing/ Handy craft/ cottage industry (With payment)	13.0	8.5	2.0	2.1	6.9	16.0	6.5	4.0
NGO worker	2.2	2.8	0.7	0.0	2.9	0.0	0.0	1.6

Various micro enterprise in own house	0.9	1.6	1.0	3.1	0.6	16.0	1.6	0.8
Micro enterprise outside house	0.4	1.2	4.4	1.6	2.9	8.0	1.6	2.4
Live stock	0.0	1.2	0.0	0.0	0.6	0.0	0.0	0.8
Farming	0.9	0.8	0.2	0.0	0.6	0.0	0.0	0.0
Non Agro based day labour	0.0	0.8	0.5	0.0	1.1	0.0	4.8	1.6
Maid/Servant/work in other people's house	1.3	0.8	3.2	5.7	7.4	4.0	1.6	4.0
Industrial labour	0.0	0.4	0.0	0.0	1.7	0.0	0.0	0.0
Hawker/Mobile hawker	0.0	0.4	0.5	0.0	1.1	0.0	0.0	0.0
Beggar	0.0	0.4	5.9	5.2	1.1	0.0	0.0	0.0
Agro based day labour (to other's land)	0.0	0.0	0.0	0.0	1.7	0.0	0.0	1.6
Restaurant/Shop worker	0.0	0.0	0.5	0.0	1.1	0.0	0.0	0.0
Skilled labour (Carpenter, Potter, Black smith...)	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.8
Teacher	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 13: Characteristics of the Groups of Population

GROUPS	GROUP 1	GROUP 2	GROUP 3	GROUP 4
Estimate number of households in real Rohingya population living in camps	2440 (20.6%)	5067 (42.9%)	2212 (18.7%)	2105 (17.8%)
Characteristic population	Unregistered Rohingyas in Leda and the makeshift camp	Registered refugees Nayapara and Kutupalong official camps	Unregistered Rohingyas in Leda and the makeshift camp	Unregistered Rohingyas in the makeshift camp (although quite mixed)
Perc. of households in which no members work	0%. All households have at least one working member	28.5%	20.9%	0%. All households have at least one working member
Number of working members	1 to 3	0 to 2	0 to 2	1 to 3
Perc. of refugee population	15.10%	49.10%	22.00%	32.40%
Perc. of households in which children below 14 work	58.80%	23.60%	26.50%	56.70%
Characteristic activities	Micro enterprise outside the house, rickshaw/van driving, hawkers	Agro-based day labour, NGO workers	Non agro-based day labour, begging, skilled labour.	Fishing, industrial labour, maids, servants, micro enterprise inside the house, religious persons, teachers, servers in restaurants.

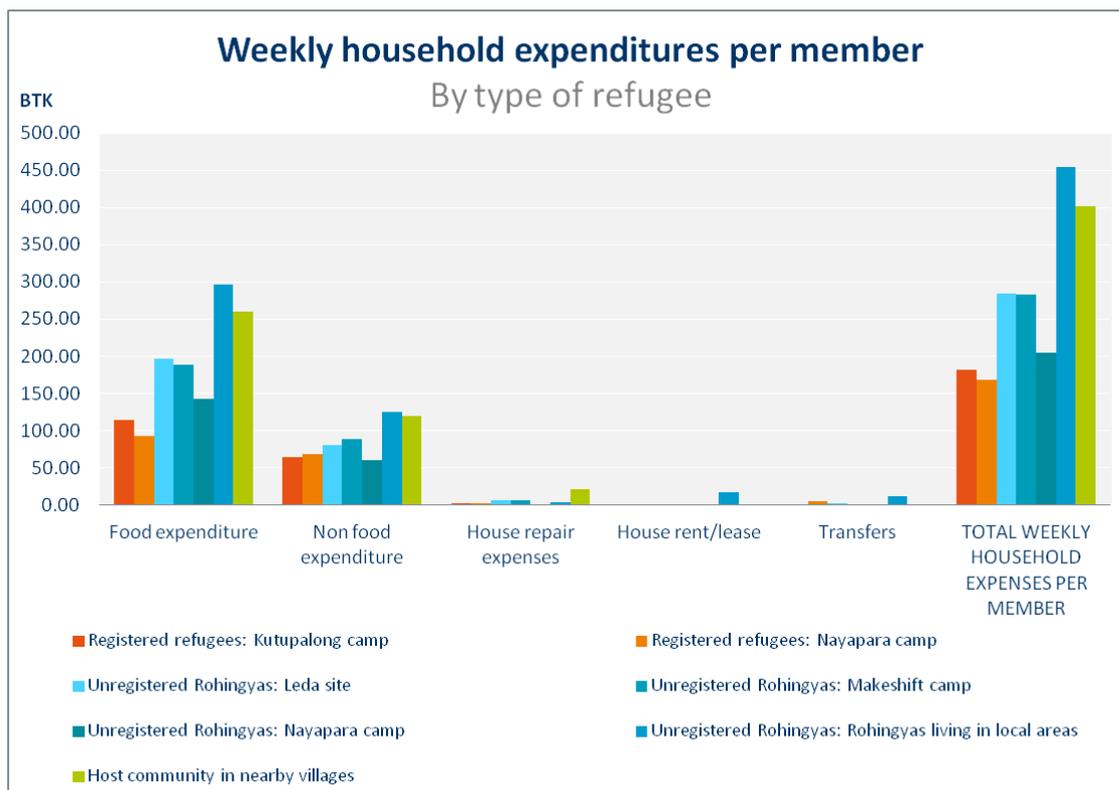
Source: DARA quantitative household survey (May-June 2012)

Table 14: Household Expenditures – Detailed in Annex 11: Tables and Graphs

for other categories such as non-food items, renting and repairs. Generally the survey reveals that across all categories expenditures are lowest for registered refugees. This finding indicates that the assistance they are provided helps them reduce their regular expenditures (e.g. food from WFP, medicine and house repairs – see These differences in household expenditure are directly linked to the adoption of different coping strategies.

57. **Graph 7).** These differences in household expenditure are directly linked to the adoption of different coping strategies.

Graph 7: Household Expenditures per Strata



Source: DARA quantitative household survey (May-June 2012)

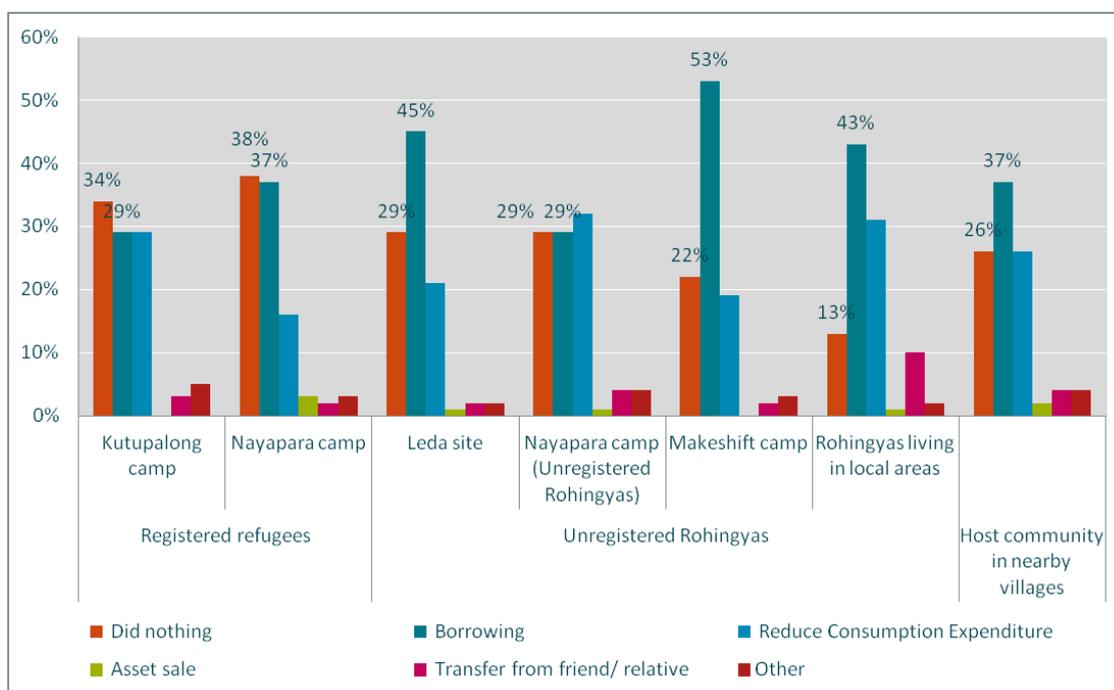
Coping Strategies

58. The evaluation found differences in coping mechanisms dependent on Rohingyas’ refugee status. The most frequent situations referred to in the survey were related to damages of shelter, health related issues and security (arrests or bailouts), where coping mechanisms used by Rohingyas varied according to refugee status. Shelters or houses damaged by rain, cyclones, floods or strong winds were common factors. The main difference between registered and unregistered Rohingyas is that registered refugees’ shelters are repaired by camp authorities, whereas unregistered Rohingyas living in makeshift sites or within local communities must cover the expenses themselves. For health care, a similar pattern was reported: serious illness of a household member was reported as an important risk by host community members and unregistered Rohingyas more often than by registered refugees inside the camps, due to the health facilities that camp populations can access inside the camps.

59. Conventional coping strategy index (CSI) measures were applied to empirically understand what households do in case of either idiosyncratic or co-variant shocks.

The evaluation found significant evidence that registered refugee households employ coping strategies in different ways (see Graph 8).

Graph 8: Frequency of adoption of coping strategies



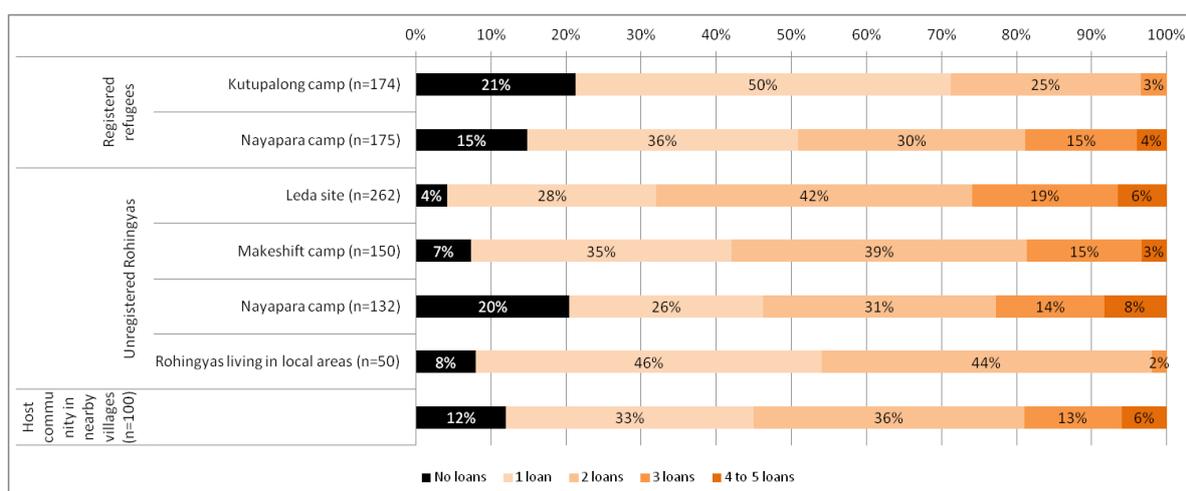
Source: DARA quantitative household survey (May-June 2012)

60. The option of ‘doing nothing’ was found significantly more frequently among the registered refugees and the evaluation evidence pointed to the reliance of external assistance (housing, food, health care, etc.) in the event of shocks to be a key coping mechanism for this group. By contrast, unregistered Rohingya reported this coping strategy much less. The reliance on loans was generally more prevalent among unregistered Rohingya and reduced consumption was found across all groups. Among the unregistered Rohingya, the evaluation found qualitative evidence of persistent reliance on negative coping strategies such as transactional sex and begging, especially among women, either heading the household or when their husbands had migrated away for work.

61. Further analysis on borrowing, food sales, mortgaging of family books or other documents, and begging was done. Within these coping strategies, key differences were found between unregistered Rohingya and registered refugees.

62. Borrowing money is a common practice for Rohingyas and Bangladeshis. More than 80% of all survey respondents had some sort of loan (see Graph 9). In terms of number of loans, the survey did not provide a clear picture except that there is a tendency for Rohingyas around Kutupalong to have fewer loans (up to three) as compared to those near to or inside Nayapara (up to five loans).

Graph 9: Loans as per Refugee Status



Source: DARA quantitative household survey (May-June 2012)

63. FGDs conducted with unregistered Rohingyas in Cox’s Bazaar, Kutupalong, makeshift and Leda site also indicated that borrowing is a common practice when there is shortage of food and when special ceremonies and functions are observed. Registered refugees in Kutupalong indicated that they borrow food from those who receive rations in the early days of the week and return the food to the lenders when they receive their ration in the latter days of the week²⁴. The FGD participants in Cox’s Bazaar area informed that getting food on credit is more commonly used. They get food on credit until the member of the household who has gone to catch fish from the sea returns. A good relationship between Rohingyas and local businessmen or grocers was reported in several FGDs, including the ones in Leda, Cox’s Bazaar and the makeshift site. This relationship made it easier for unregistered Rohingyas to obtain loans. FGD respondents at Leda site said, “*We always maintain a very good relationship with the shop keepers so that we can buy food on credit*” (FGD, Unregistered Rohingyas in Leda, May 2012).

64. Borrowing money by registered refugees from friends and relatives as a coping strategy for food security has been reported in earlier studies also (United Nations High Commissioner for Refugees & International Labour Organisation, 2009). Another study by Médecins Sans Frontières states, “*borrowing, lending, trading, selling, and buying are common coping mechanisms among the refugees to compensate for the food deficit*”. It further states, “*To pay back the loan of one, a refugee borrows from another, or immediately apportions out that amount from the next distribution*” (Fronti & March 2002). The survey data indicate that this situation still prevails among the registered refugees who have received the food assistance. Rohingyas also borrow cash for special events (e.g. organising wedding or celebrating a funeral) or special situations such as bailing out arrested household members.

65. Food exchange and sale (see Table 9) and mortgaging of refugee documents (family books) were also very common coping strategies for registered refugees. The evaluation found that approximately 50% of the food rations were shared,

²⁴ The ration is not provided same day for all refugees. For some it is provided on Monday for others on Thursday. The ones who would get ration on Thursday would borrow from the Monday receivers and would return on Thursday once they receive the ration.

exchanged, or sold; primarily to diversify the diet, finance non-food items, and repay loans.

Table 5: Refugees' usage of food ration

Camp	Percentage of households who <u>share</u> part of their ration	Percentage of households who <u>sell</u> part of their ration	Percentage of households who <u>exchange</u> part of their ration	Percentage of households who <u>consume all the food assistance</u>
Nayapara camp	1.7	37.1	15.4	44.0
Kutupalong camp	13.8	18.4	19.5	51.1

Source: DARA quantitative household survey (May-June 2012)

66. Registered refugees receive food on a regular basis, twice a month, consisting of rice, sprinkles, oil, salt, sugar and suji (porridge). According to the FGD respondents, they sell part of the rice, oil and suji for purchasing other food items such as spices, vegetables, fish or meeting other basic needs such as clothing, medicine, school expenditures and religious functions. The FGD participants perceived suji to be of low quality and therefore they either barter it for vegetables or fish, or sell it at a cheaper price. The buyer of suji uses it as feed for poultry or fish.

67. Food is sometimes sold to buy medicine. FGD participants in Nayapara told researchers that the health services provided in the camp, including medicine, are inadequate. The refugees must go out and pay for treatment and medicine. To pay for treatment and medicine, they have to sell rations. FGD participants in Kutupalong said: *“We save a handful of rice grains before we cook rice, which we use to barter with the villagers’ for fruits and vegetables to diversify household diet and nutrition, having established a good connection with the villagers. In addition, when the saved amount of rice is around 10 or 12 kilograms, we sell these grains in order to purchase clothes for our wives and children”* (FGD, Registered refugees, Kutupalong, 03/05/2012).

68. Selling food is not limited to registered refugees. A woman in a makeshift site near Kutupalong camp said that she sells food collected from begging to meet her other basic needs. These findings coincide with other studies. A 2002 study found that food was the main source of income; therefore, the food items provided in the food basket were sold or bartered for other food and non-food items that were not included in the food package (Action Contre la Faim 2011). Another study shows that about 40% to 50% of registered refugees sell rations obtained from food assistance in order to buy daily consumables (Action Contre la Faim 2011).

69. Registered refugees mortgage family books as guarantees to receive loans. The money lender takes part of the ration as interest until the money is paid back. The interest sometimes was reported to be up to 50% of the ration. FGD participants in Nayapara narrated a case of mortgaging a ration card. *“A few days ago the police took a refugee boy to the police station as he was wandering outside the camp. Then the family members paid some money to the police and they released the boy. They had to mortgage their ration card to arrange the money and pay a portion of the ration to him until they reimbursed the lending amount”* (FGD, Registered refugees, Nayapara, May 2012).

70. Another example of ration card mortgaging was reported by FGD participants in Kutupalong. The FGD report says, “When refugees go to cut down mountain trees/bamboos for their livelihoods, local people arrest as well as verbally and

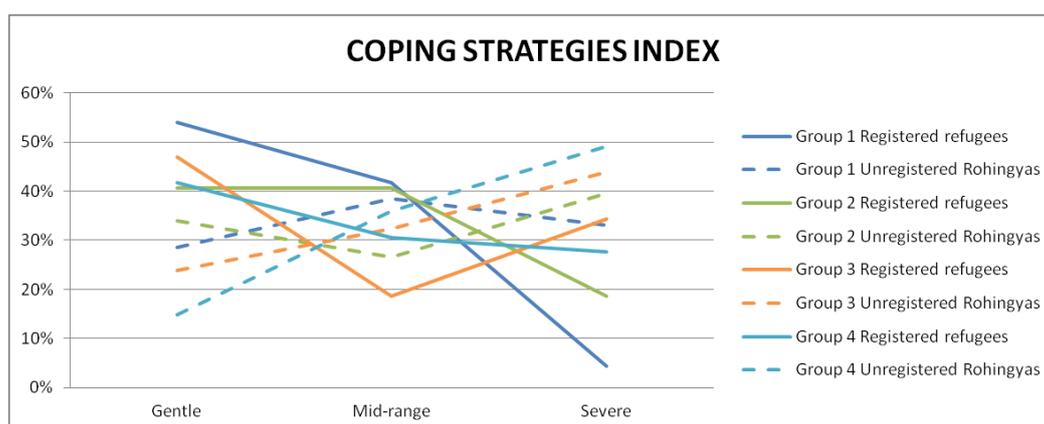
physically abuse them for trespassing in their territory. The locals also seize equipment for felling trees and money belonging to the refugees as well. In such situations, the locals have to be paid in order to release the refugees. Those who cannot afford it resort to mortgaging their family books to other refugees in the camp in exchange for money. So, the borrower has to give the lender his entire ration in order to repay the loan, while the borrower passes days in extreme food crisis” (FGD with registered refugees, Kutupalong, May 2012).

71. The unregistered Rohingyas keep gold jewellery as a guarantee for loans and reportedly the interest rates are lower in such cases (as compared to the use of the ration card) (FGD with Women in Kutupalong Makeshift Site, May 2012). Other items, such as cooking pots, are used to get food from the grocer. If the money is not returned, the grocer sells the pots (FGD with Men in Kutupalong Makeshift Site, May 2012). When an unregistered Rohingya has nothing to mortgage, s/he gets a loan from a known lender but at a very high interest rate, usually TK 200 to 300 per TK 1000 per month, according to an FGD in Cox’s Bazaar.

72. FDGs revealed that begging is used by the most vulnerable Rohingyas as a coping mechanism; for the most vulnerable it is the only income mechanism. Begging is more commonly used among widows or women that do not have family members earning incomes. According to FDGs, female beggars are common phenomena in both Leda and the Kutupalong makeshift site. At these sites, food collected through begging is either consumed or sold in order to meet other basic needs of the families. Begging is also practiced among female refugees in cases where the food provided was insufficient to meet family needs (FGD Nayapara Camp, May 2012). Unregistered male refugees in the makeshift site estimated that 20% of men, mostly the elderly, resort to begging because there are very few economic opportunities. Additionally, around 25% of women beg in the camp as well as in the villages. They sometimes receive handfuls of rice that they can sell (FGD Kutupalong Makeshift Camp, May 2012). Interviewees from the Nayapara camp explained that begging outside the camp is a last resort for women, usually those without husbands, as it is very dangerous. Many women have reported being raped by local villagers (FGD Nayapara Camp, May, 2012) – see also part 2.3 on protection.

73. Based on the quantitative survey data and associated regression models the evaluation concludes the unregistered Rohingya adopted significantly more severe coping strategies (see Graph 10). The adoption of coping strategies was found to be dependent on a number of factors, including the registration status of its members, the wealth score, the household size, the household earnings, the economic activity of the household, and the marital status and education level of the household head. It was also correlated with external assistance to registered refugees; thus the reduced reliance on severe coping strategies among registered refugees is positively correlated to the provision of external assistance (including food rations).

Graph 10: Coping strategies index by Group and Registration Status



Source: DARA quantitative household survey (May-June 2012)

74. The evaluation concludes that food assistance was a contributing factor, along with other forms of external assistance, in the choice of economic activity and the adoption of specific coping strategies. Registered refugees had overall significantly different economic activities in which they were engaged, including higher skilled and less risky employment for an overall higher wage rate than their unregistered Rohingya counterparts. They also had significantly better wealth status based on asset accumulation. Food assistance was an integral component to their livelihoods, used primarily for consumption, as collateral and as a value transfer to pay loans and mortgages. Due to the value transfer of all external assistance in the camps, refugees were able to work less and rely on this external assistance to cope in times of crisis.

75. Despite these differences, all refugee and unregistered Rohingya groups were reliant on economic activity outside the household to support their livelihoods. Unregistered Rohingya employed a *greater range* of coping mechanisms (both positive and negative) and were a significant part of the labour market in the region.

Movements of Registered Refugees and unregistered Rohingyas

76. This section provides an analysis of refugees' and unregistered Rohingyas' movements, as well as opportunities and challenges associated with it. The analysis focuses on differences between registered refugees and unregistered Rohingyas, and to what extent these differences are linked to food assistance (and other external assistance). As in the previous section, the survey provides an overview of the different population groups, while the factors that determine movements are analysed on the basis of data from FGDs and in-depth interviews.

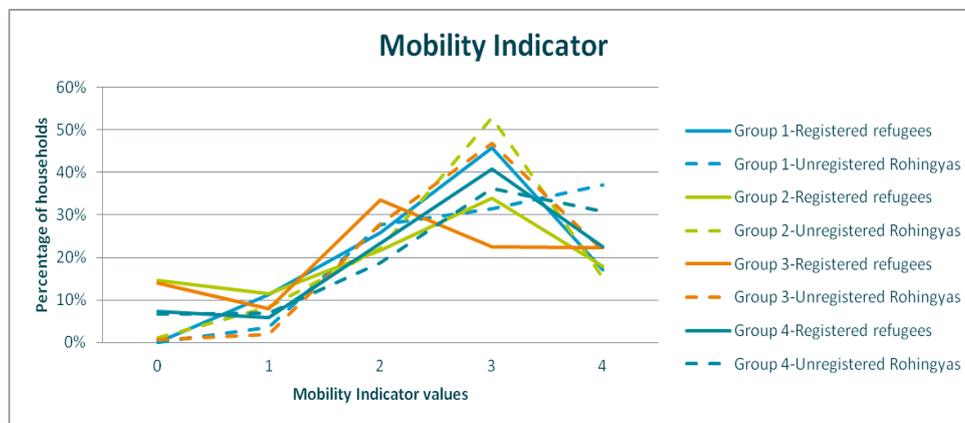
77. According to the legal and institutional arrangements, only the registered refugees have legal status as refugees and can therefore live inside the camps, while other unregistered Rohingyas have no legal status of any kind. The registered refugees are given assistance in the form of food and essential non-food items, and are not allowed to seek work outside the camp. Movements outside camps are only permitted if refugees have explicit permission from the Camp In-Charge (CIC); normally these permits are given only for emergency medical treatment.

78. However, according to the evaluation survey and qualitative data, the ration provided per person is not sufficient to meet a person's daily calorie/nutritional requirements. Therefore, it becomes necessary to earn extra money in order to purchase additional food items. Part 2.1 provided evidence that Rohingyas generally are engaged in various types of economic activities.

79. Despite restrictions on movements, all refugees and unregistered Rohingya were found to be highly mobile, not only within the local communities and camp proximities, but also within Cox’s Bazar district as well as other areas of Bangladesh. These movements were closely linked to their search for income opportunities. The evaluation however found key differences in movements between unregistered Rohingya and registered refugees.

80. Figure 6 summarizes the findings from the mobility indicator²⁵. There was evidence that 40 to 50% of registered refugees in groups 1 and 4 move as far as Cox’s Bazar town. Unregistered Rohingya within the same groups traveled further than registered refugees – more than 30% (and nearly 40% for group 1) traveled to other parts of Bangladesh. Registered refugees in Group 2 and 3 concentrated their movements between Teknaf and Cox’s Bazar (largely depending on placement of camp).

Graph 11: Mobility by Group and Registration Status



Source: DARA quantitative household survey (May-June 2012)

81. Applying a multiple linear regression model (see Table 255 in Annex 11: Tables and Graphs), the quantitative data clearly indicates that registration status has a significant impact on households’ levels of mobility. According to the regression model, mobility depends on economic activities (i.e. where Rohingyas take on jobs, which depends on refugee status), and gender and marital status of the household head (i.e. if households are headed by women or widows or men – the latter able to travel further away from the families than women who are the primary caretakers), the percentage of adult males among household members, the wealth score (i.e. the need to engage in economic activities), the earnings and participation of any household members in certain economic activities.

82. According to FGDs and KIIs at the Leda Site, unregistered Rohingyas earn their living by pulling rickshaws in Cox’s Bazar and on the outskirts of the Upazilla – in order to do so, and to avoid getting caught by police, they have to hide their identities. The sources reported that day labourers are also involved in agricultural and non-agricultural activities in regions such as Comilla, Chittagong and the northern parts of Bangladesh, such as Rangpur, Dinajpur and Gaibandha.

²⁵ The Mobility Indicator is a simple proxy for movements. The higher the indicator the more frequently and the farther the movement: value 0 for households in which no members leave the camp/site, 1 for households in which at least one member visits the nearby areas, 2 for households in which at least one member visits Teknaf, 3 for households in which at least one member visits Cox’s Bazar, 4 for households in which at least one member visits other parts of Bangladesh.

Additionally, many young women migrate to Cox’s Bazar, Chittagong and to Dhaka to earn a living, mostly as housemaids. This supports earlier findings that, “...to mitigate the lack of livelihood opportunities and insecurity near the makeshift site, the Rohingya labour force has now spread out to distant and safer work places, as far as Chittagong, but at the cost of compromising family unity, as women, children and the elderly remain unprotected and often hungry in the makeshift site during their prolonged absence. These Rohingya families are keeping one foot in the makeshift site as a protection strategy and one foot in the local community as a livelihood necessity.” (Lewa 2011).

83. For Nayapara area refugees the Domdomia check-post (on the Cox’s Bazar-Teknaf highway, approximately four kilometres from Nayapara towards Teknaf was reported as a main barrier for their mobility to Teknaf, as BGB personnel check almost every vehicle and arrest anyone suspected to be a refugee.

84. In coherence with regression models, the box-plots (see Annex 11, Graph 18) show mobility indicator by registration status, area and sex of household head and provide evidence that unregistered Rohingyas move more than registered refugees and that those residing around Kutupalong are does so significantly more than those residing in the Nayapara area. Not surprisingly, the model also shows that mobility is higher for male-headed households. This is very much in line with male dominance in terms of ‘economic activities’ (see part 2.1) and was confirmed by the qualitative evidence.

85. The evaluation found significant differences of residency in Bangladesh among the survey respondents. As summarized in Table 7, the majority of refugees were either born in the camp or have lived there more than 20 years. By contrast, unregistered Rohingya have spent less time in Bangladesh. Through additional data collection, the evaluation determined that this reflects the general pattern of mobility and the search for income generating opportunities; unregistered Rohingya spend less time in the vicinity of Cox’s Bazar district as they move into other parts of Bangladesh.

Table 6: Rohingya Households - Years Spent in Bangladesh

Years in Bangladesh (%)	Registered refugees		Unregistered Rohingya		
	Kutupalong camp	Nayapara camp	Leda site	Makeshift camp	Nayapara camp
	Born in Bangladesh	62.6	62.5	49.8	36.7
Less than 5 years in Bangladesh	0.1	0.0	0.2	10.1	0.3
5 to 9 years in Bangladesh	0.0	0.7	9.5	33.7	3.2
10 to 14 years in Bangladesh	0.2	0.9	17.5	9.8	8.4
15 to 19 years in Bangladesh	1.5	2.2	14.8	6.0	15.3
20 years in Bangladesh or more	35.6	33.8	8.2	3.6	16.3
Grand Total	100.0	100.0	100.0	100.0	100.0

Source: DARA quantitative household survey (May-June 2012)

86. Despite their higher levels of mobility, Rohingyas’ movements do however come at a price. While this and other studies demonstrate that movements among Rohingyas are common, they do entail certain risks in terms of harassments, threats and abuses. These are analysed in the next section.

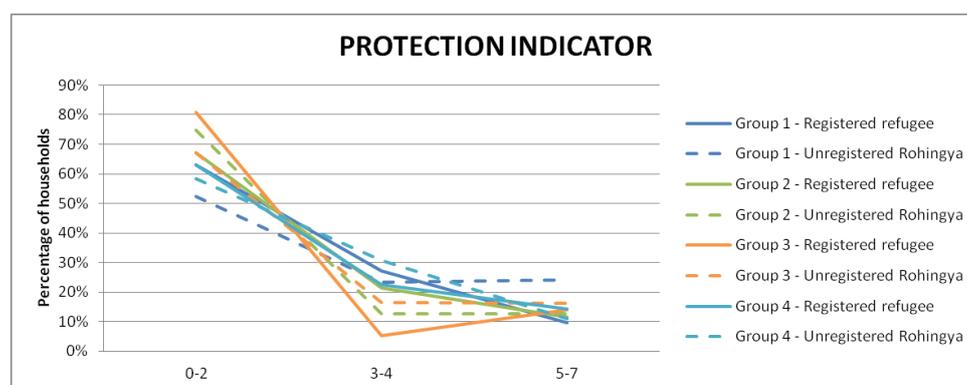
Protection and Protective Environment

87. Registered refugees receive food and non-food assistance, housing, water and sanitation, livelihood skills training, health care and protection from UNHCR and WFP, implementing partners and the Government of Bangladesh. Unregistered Rohingyas in the Leda site and at the Kutupalong Makeshift site have marginal access to healthcare, water and sanitation and life-saving nutrition programmes of two NGOs (services and facilities are much more regular in the first case than in the latter)²⁶.

Protection Perceptions and Refugee Status

88. The evaluation found that all Rohingya, independent of their refugee status, have significant protection concerns. Graph 12 summarizes the evidence from the composite indicator for protection²⁷. Registered refugees had the same perceptions about their own protection and protective environment as unregistered Rohingyas despite living under very different conditions and circumstances.

Graph 12: Protection Indicator by Group and Registration Status



Source: DARA quantitative household survey (May-June 2012)

89. While there were no statistically significant differences between groups based on registration status, geographic location was a relevant variable. Kutupalong was perceived as being a more protective environment than the Nayapara area.

90. The proximity to Cox's Bazar, a large city, may help the Kutupalong area Rohingya to better assimilate with the local community, find more work opportunities and enjoy better mobility, thus making them feel safer. However, it is notable that the refugees perceive the areas outside the camps to be more unsafe (84% Nayapara and 61% in Kutupalong camps) than do unregistered Rohingyas who do not receive any assistance (57% in Kutupalong Makeshift site and 32% of refugees living in greater Cox's Bazar area). The evaluation found that unregistered Rohingyas tend to maintain better relationships with surrounding communities.

91. Unregistered Rohingyas from Kutupalong makeshift and Leda sites reported experiences of abuse and injustice, with little or no recourse for protection. Local

²⁶ Recently (after the field work for this evaluation ended on June, 2012), the Bangladeshi Government banned three INGOs from working with the Rohingyas in the Cox's Bazar area. These organisations are Médecins Sans Frontières (MSF), Muslim Aid and Action Against Hunger (ACF for its French abbreviation).

²⁷ The composite indicator is based on questions about safety, interaction with local authorities and local communities, ability to meet basic needs, and perceptions about refugees. The indicator ranges from 0-7, with 0 being negative and 7 positive on all aspects. See Statistical Annex for more detail.

Bangladeshis move about freely within the Leda site since there are no police guards here and verbally as well as physically abuse the unregistered Rohingyas, cases of rape were also reported during FDGs. (FGD with male unregistered Rohingyas in Leda, May 2012). The evaluation heard that the Rohingyas in these locations are afraid of retaliations and feel unprotected at the absence of any formal protection.

92. The Rohingya workers at Teknaf port also reported discrimination and other protection concerns. It was reported that the port authorities pay a compensation of Tk5.000 to 10.000 to Rohingya workers who have been disabled and Tk20.000 to 50.000 to households of workers who die due to accidents at the port. On the other hand, the compensation paid to the Bangladeshi locals for the death of a worker is around Tk500.000. If the Bangladeshi household is not happy with the compensation, the household may file a law suit against the port authorities. The situation is very different for a Rohingya worker – if he/she has a complaint, they cannot seek justice from any courts in Bangladesh (FGD with male unregistered Rohingyas in Leda, May 2012).

93. The unregistered Rohingyas living in a makeshift site reported that over time, their incomes have improved, along with rising inflation and travel expenses. The FGD participants mentioned, *“We were not acquainted with this area before, but now we can go anywhere. As a result, our incomes and wages have increased. A year or two ago, we would be paid about Tk50/100 for harvesting paddy, but now the wages have risen up to Tk200. Moreover, if we cannot work for the entire day due to, for instance, rain, we would be paid in half, i.e. Tk 100. Earlier, Rohingyas did not have enough mobility because there were many check-posts; but checks have declined and so they can now move about freely. Many people are even migrating to Dhaka in search of work.”* When Rohingyas get arrested outside the camp areas, the news spreads out fast and Rohingyas avoid so-called “risky” places and restrict their mobility, if possible, for the following three to four days (FGD with male unregistered Rohingyas in Kutupalong Makeshift, May 4, 2012).

94. The Kutupalong Makeshift site residents also suggested that villagers’ views of refugees have changed to some degree. Before there were more cases of harassment and robbery against Rohingyas. Earlier, villagers used to rob the Rohingyas and physically abuse them, and there were regular cases of sexual abuse and rape of Rohingya women. However, according to FDGs, recently these problems have subsided and as a result, the unregistered Rohingyas have acquired greater mobility. Also, since some registered Rohingyas have been living in the area for some time, their interactions with the Bangladeshis have increased, which has been instrumental in alleviating those problems (FGD with male unregistered Rohingyas in Kutupalong Makeshift, May 4, 2012).

95. Information from FDGs revealed that government authorities and frontline staff members of NGOs or the UN, offered only limited support when issues related to protection occur among refugees. In cases of assault, violence, sexual abuse or rape against refugees, there was a perception of few legal measures available to refugees. A male registered refugee told researchers, *“We do not have danger within the camp, but we have no security outside it”* and when they are attacked or robbed by outsiders, *“no one advocates for the Rohingyas”* (FGD with male registered refugees in Kutupalong camp, May 2012).

96. Within camps, most interviews and FDGs that mentioned cases of alleged corrupt practices were linked to family books (e.g. authorities withhold them or food

rations are reduced) or inappropriate practice during food distribution. The illicit practices often involved camp management, implementing partners and designated refugees within the camps. There are no effective complaint mechanisms within the camps and disputes are mostly managed by camp authorities. Refugees further commented that they fear authorities' retaliations in cases of complaints (cases of violence and imprisonment have been reported). Refugees from Kutupalong asserted that even protests against organisations [service providers - name of organisation withheld by evaluation team] inside the camp could at times have serious consequences, cases of arrest were reported. Measures to limit the role and influence of these cliques of camp officials, NGO personnel and "*majhis*" (designated refugee leaders) were reported to have been unsuccessful, as these still have significant influence which, according to sources, is misused.

97. There were also reported complaints about the role of UNHCR and WFP in the camps. The evaluation respondents asserted that the absence of presence from both organisations makes it easy for camp officials to continue the above mentioned practices. Criticism against UNHCR highlighted that they did little to change matters regarding camp management – though they pushed for a change of the "*majhis*" system it was reported to not have changed significantly. WFP was criticised for not taking sufficient measures related to distribution of food assistance; refugees especially argued that WFP should have a more regular presence in the camp. Registered refugees at Nayapara reported that WFP has no regular supervisory or monitoring mechanisms, and the authorities only visit once or twice a year²⁸. Several interviews also indicated that when WFP personnel carry out visits, the camp authority distributes better quality rice and pulses. The registered Rohingyas claimed that instead of receiving protection, they often become victims of low quality service provision and harassment by officials.

98. The evaluation found that women were more vulnerable than men, across all Rohingya population groups. Women and adolescent girls experience harassment, abuse and violence, both in their homes as well as in and outside of camps and makeshift sites. Rohingya women are highly vulnerable when they move outside the camps or makeshift sites, where there are repeated cases of sexual assaults and rapes. Irrespective of their 'registration status,' Rohingya women reported to the evaluation team that they are frequently abused by local people.

99. Unregistered Rohingya women mentioned that registered refugees also at times abuse them, along with local residents. For example, a female respondent from Nayapara Camp expressed that the Rohingya registered refugees are a greater threat to her security than the Bangladeshi villagers because the registered refugees living in Nayapara Camp cannot tolerate that her family is enjoying some of the services such as sanitation and medical treatment despite being unregistered. In several FGDs and interviews, women referred to anecdotes and stories of women and girls being sexually abused and raped by the local thugs. Even though they are aware of such problems of venturing outside the camp grounds, the female registered refugees at the Kutupalong Camp feel compelled to take the risk in order to meet their dietary requirements, which are only partially fulfilled by the camp's ration. Though their stories could not be verified by the evaluation team, recurrent references to such incidents indicate the vulnerable state of women and girls.

²⁸ These perceptions are contested by the fact that WFP has a monitoring mechanism in place that monitors post-distribution. The aim of this monitoring is to cover 15% of registered refugee household after each distribution. According to WFP data the food losses are as low as 1-2% at beneficiary level.

An informal system of protection

100. Based on the evaluation data analysis, an informal protection system seems to be in place to maintain a status quo in the greater Cox's Bazar area. This protection system allows the registered refugees to earn income and feed themselves, while providing opportunities for the Bangladeshi local thugs to extort money from the refugees. In this protection system, the local authorities either work as accomplices in maintaining the system or remain indifferent. For example, qualitative interviews and FGDs across all categories reported that robberies have increased in the Cox's Bazar-Teknaf highway and the Rohingya men are the main perpetrators who are controlled by local thugs. Along with robbery, the local inhabitants have facilitated a system of extorting money from the Rohingyas. The examples and analysis below portray the presence of the de-facto system.

101. It was consistently reported that local elites and fishing businessmen use discriminatory loan practices, effectively creating indentured service to loan holders . For example, the evaluation heard reports that Rohingya who cannot afford the fishing equipment take loans from the local rich fisheries; the price of the fish is subsequently determined by the fishery owner and is set lower than that of the market. The buyers at the market were reported to also collude in this process. It was also reported that *"when the Nasaka arrest fishermen from the Naaf, these local fisheries owners make loans available for the release money, which is paid in a similar manner as the loan for the fishing equipment"* (Household interview with a Rohingya male head of household with a Bangladeshi wife living in a host community, May 2012).

102. Similarly, for rickshaw pullers, the garage owners work as patrons. When strict law enforcement is in place, the police set up check-posts on the highway to check national ID cards. Without a national ID, refugees have no alternatives but to stop going out to work for three or four days. At that time, these households borrow money from the garage owners to eat.

103. The evaluation found that the labour market of the area was integrally linked to Rohingya participation, and there was consistent evidence of systematic extortion and payment-for-access schemes. For example, about six months prior to the evaluation, the local MP decreed that Rohingyas were not to be hired at the docks since they did not have national ID cards. This rule was slackened immediately since the authorities found that they faced a shortage of labour supply on the docks. However, the Rohingyas must pay money to different stakeholders to work without any harassment (FGD with male unregistered Rohingyas in Leda, May 2012). The situation was reported to have worsened after the present government came to power with increased fees for job access at the port. Evaluation respondents reported that even though the Rohingya do not get fair wages, if they call off work, the port activities comes to a halt and for the past 50 years, the primary workers at the port have been the Rohingyas. Rohingyas who collect firewood in the forest also reported paying bribes to the forestry officials to gain entry into the forests. (FGD with male unregistered Rohingyas in Leda, May 2012).

104. The unregistered Rohingyas living in the local villages reported that they can live in the villages as long as they maintain a good relationship with the local people. Usually, the local leaders and UP chairman warn the Rohingyas living in the local community when the police or the BGB become stricter. It is during such times that they come to the Makeshift site. Such a situation has occurred three times over the

last five years (FGD with male unregistered Rohingyas in Kutupalong Makeshift, May 2012).

105. Similarly, regarding education of Rohingya children, as the children do not possess a Bangladeshi birth certificate, it is officially impossible for them to enrol in schools. However, interviewees reported that their children go to local primary schools, religious schools, kindergartens and NGO-run schools. After studying in the NGO schools for three to four years, the children may enrol in primary schools and kindergartens using certificates obtained from such NGO-run schools. They hardly face any problem in enrolling in schools as Rohingyas, and the certificate from the NGO-run schools makes it easier. (FGD with male unregistered Rohingyas living in greater Cox's Bazar area, May 2012).

106. Borrowing food from neighbouring families in times of food shortage was also found to be a common practice among registered refugees and unregistered Rohingyas. At times, those who need one kilogram of rice borrow in small quantities from 2 to 5 households. The borrower returns the food to the lender when s/he can afford to do so. If there is an extremely vulnerable family with acute food crisis that cannot be resolved by borrowing, the people discuss the issue with the Imam from the mosque. He might form a group of 2 to 5 people and visit people's homes to ask for assistance for the family suffering from food insecurity. This team led by the Imam thus helps the family by collecting cash and/or rice grains (FGD with male unregistered Rohingyas in Kutupalong Makeshift, May 2012).

107. The evaluation team found that mixed marriage is commonly utilized as a protection strategy. This was reported working in two ways with Rohingya girls, often from poor parents, marrying Bangladeshi men, and Bangladeshi women marrying Rohingya men. Some Rohingya men were reported to have obtained Bangladeshi identity cards through their marriage with Bangladeshi women (see text box example below)

Hasan lives in a local Bangladeshi community and is married to a Bangladeshi woman. The Kutupalong Camp already existed at the time when Hasan's family migrated to Bangladesh. However, they did not settle down at that camp. Instead, they moved to Nayapara village where they constructed a hut beside the religious school (madrassa). The men of the family started fishing to make a living. Hasan's brother married a Bangladeshi woman and settled down in the village. Hasan followed his brother's footsteps and married a Bangladeshi national about 15 years ago. Hasan feels that marrying into a Bangladeshi family has helped him obtain a better life. He did not take the opportunity of becoming a registered Rohingya and therefore availing himself of the ration, because he felt that staying in Bangladesh was better than returning to Myanmar and were he to register, he would have surely been sent back. No one considers him a Rohingya anymore. They all treat him like a Bangladeshi. This has been facilitated by his wife's Bangladeshi relatives. Moreover, he enjoys greater mobility and can even access loans from his Bangladeshi acquaintances. (Household level in-depth interview with a Rohingya male head of household with a Bangladeshi wife living in the host community, May, 2012)

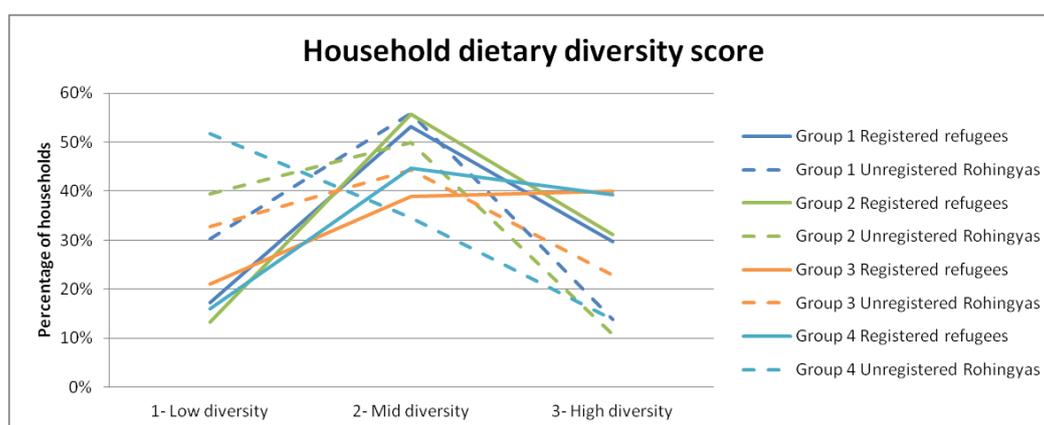
Food Security and Nutrition

108. Food security in Bangladesh has wide regional and seasonal variations, with Cox's Bazar being highly vulnerable. The Household Dietary Diversity Score (HDDS;

FANTA version 2) was used as a proxy indicator for food security and, in addition past nutrition surveys were reviewed. The HDDS provides a snapshot of the seasonal nutritional adequacy of the diet in May 2012 and allows comparison between the different population groups. Data from the literature review provided context over time and trend changes.

109. As illustrated in Graph 13, across all groups the HDDS is lower for unregistered Rohingya. Importantly, the regression models indicated that the lack of economic activity of the household does not correlate with a decrease in the HDDS for the registered refugees, while it does for the unregistered Rohingya.

Graph 13: HDDS by Group and Registration Status²⁹



Source: DARA quantitative household survey (May-June 2012)

110. The HDDS was poor for all populations groups, including the local host population, at this relatively good time of year (see Table 7, with further details in Annex 11: Tables and Graphs). These low levels of dietary diversity are not sufficient to prevent development of malnutrition in the women and children as indicated by all the nutrition surveys.

Table 7: HDDS survey results summary

Survey results May 2012	N	Mean HDDS	% HH having 4 or more food groups in day prior to survey	Weekly food expenditure per person
Rohingya within local communities	50	5.58	96.0	296
Host community	100	5.24	93.0	260
Kutupalong, registered refugees	174	5.00	91.4	114
Nayapara, registered refugees	175	4.91	80.0	93
Leda, unregistered Rohingya	262	4.43	67.5	196
Nayapara, unregistered Rohingya	132	4.01	65.5	143
Makeshift, unregistered Rohingya	150	3.90	58.1	189
Total	1069	n/a	n/a	n/a

Source: DARA quantitative household survey (May-June 2012)

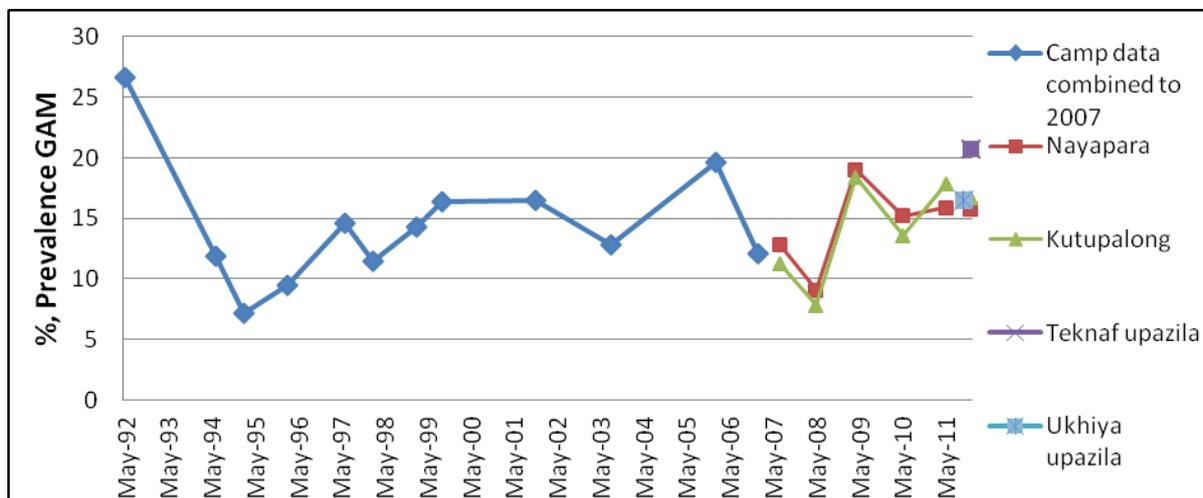
²⁹ Low, mid and high diversity in the graph are only comparative within the range of HDD scores found by the survey (see Table 5). It does not indicate low, mid or high dietary diversity overall.

111. Table 13 summarises the HDDS results and shows that while registered refugees expectedly had higher HDDS than unregistered Rohingya, the scores were still below those of the poorest households within the Bangladeshi population, including Rohingya living within local communities. While findings from the latter groups are only indicative (i.e. due to limited sample size among these strata), the result revealed that Rohingya who have assimilated with local Bangladeshis were managing to diversify their diet more than Rohingya refugees benefitting from food rations. Almost twice as many Rohingya living in local communities had four or more food groups in their diet, compared with unregistered Rohingya in makeshift sites.

112. The WFP food basket has been relatively constant since 2003, providing 2160kcal/day, 46g protein/day and 29g fat/day, though it was noted in the WFP/UNHCR joint assessment mission (JAM) 2004 that it was deficient in vitamin A, calcium and riboflavin. Through to 2003 the ration also contained spices and condiments. The JAM 2010 recommended the switch from blended foods to wheat soy blend (fortified flour) combined with vouchers for fresh foods.

113. UNHCR first records Rohingyas' malnutrition data shortly after arrival in 1992, when global acute malnutrition (GAM) was 26.6% and the associated crude mortality rate (CMR) exceeded emergency thresholds at 2.1/10,000/day. Since then the prevalence initially fell, but has stabilised around 15%, the WHO threshold of a critical situation (see Graph 14). Data in the host communities has only been recently collected, but shows the host communities currently having a comparable situation to the camps³⁰. Graph 14 includes trends in global acute malnutrition for the Nayapara and Kutupalong refugee camps, the Leda and makeshift sites and data from 2011 for the Teknaf and Ukhiya upazila host communities.

Graph 14: Trends in GAM (camps and nearby communities)



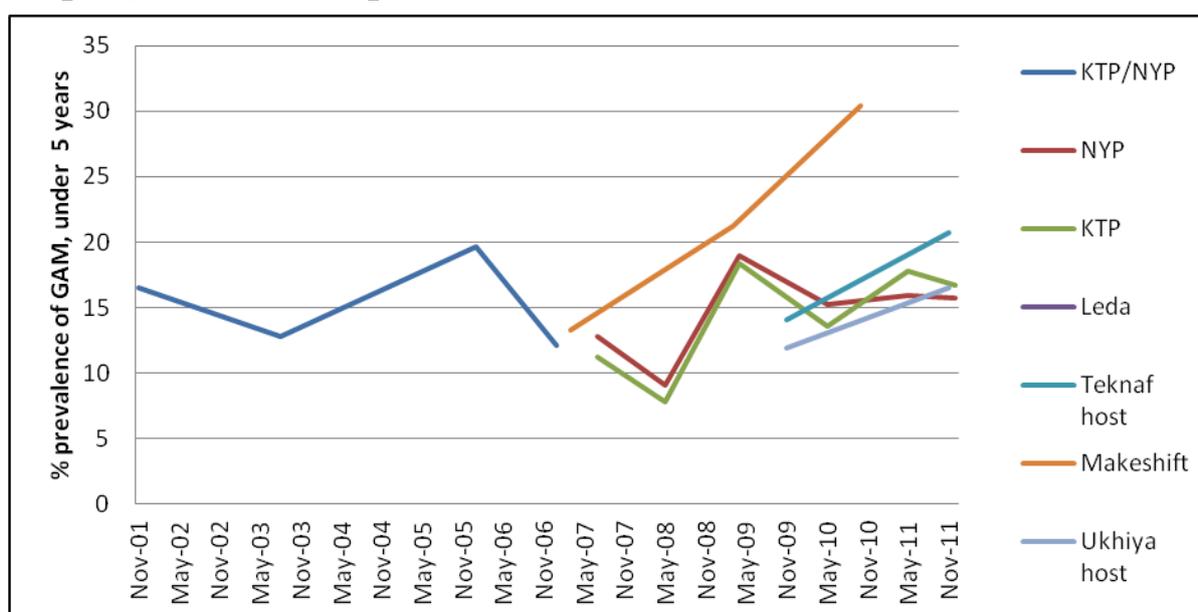
114. GAM data for Chittagong as a whole (Bangladesh household food security and nutrition assessment of 2009, WFP GoB) is also roughly comparable with survey data from the Rohingyas in the camps for children under 5 years of age. However, the JAM of 2010 highlights the much poorer comparative situation for the younger,

³⁰ Only data from formal nutrition surveys using appropriate methods and weight/height <-2 z-scores with/out oedema are included. Data prior to 2006 used the NCHS growth standards, after the WHO 2006 growth standards are used.

more vulnerable group aged 6-24 months in Kutupalong and Nayapara³¹. The current focus of interventions is, appropriately, on the 6-23 months age bracket.

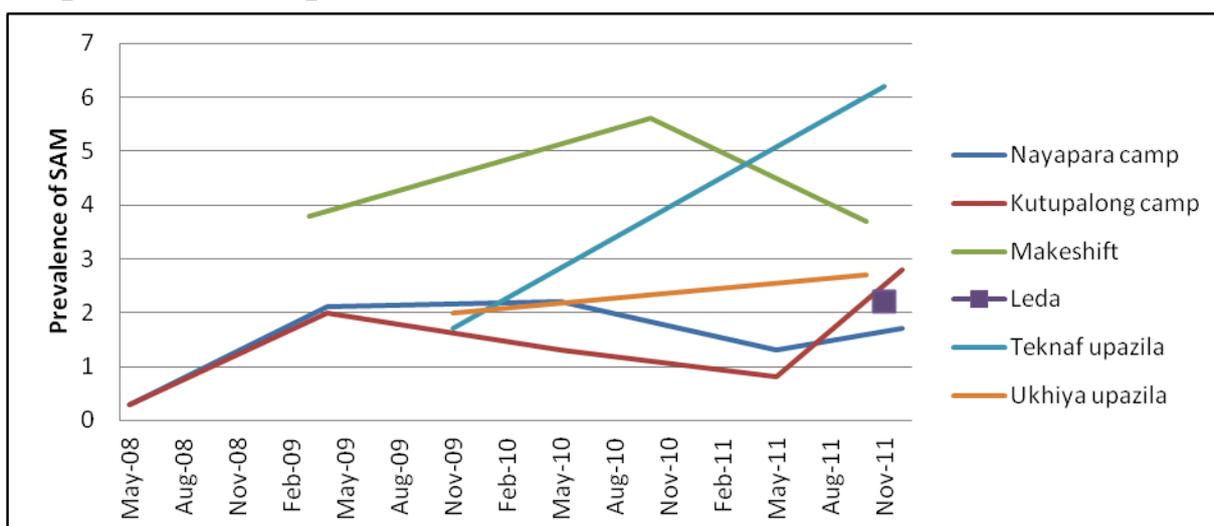
115. Comparison of GAM rates over time for refugees, including the unregistered camps of Leda and Makeshift, and local host populations (see Graph 15) suggests a worsening trend, particularly in the Makeshift site near Kutupalong. Surveys on Makeshift site show extremely high GAM rates, which must be associated with an excess mortality.

Graph 15: Trends in the prevalence of GAM



116. The data for the prevalence of severe acute malnutrition (SAM) has not been systematically presented for as many years. However, it does show a declining trend (see Graph 16). SAM greater than 2% is classified as an emergency.

Graph 16: Trends in prevalence of SAM

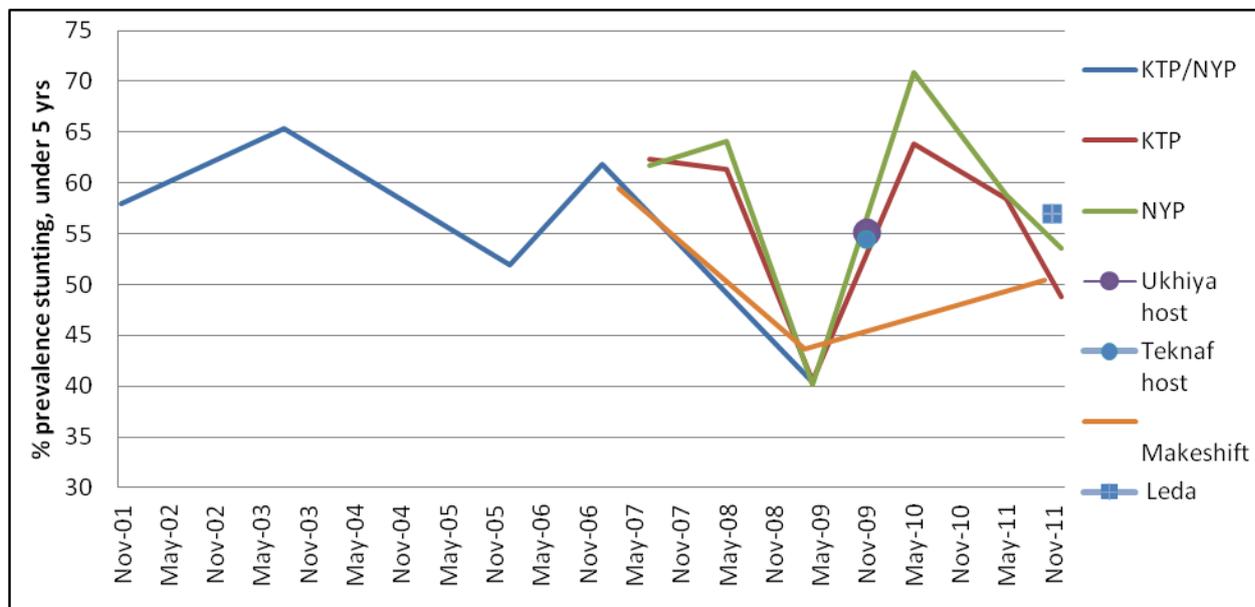


117. Stunting rates are high for all population groups. Graph 17 shows that stunting may be significantly higher than in the host population groups, but the absence of

³¹ Data on this age group has not been standardised and systematically presented by all agencies preventing any meaningful analysis.

data on these communities makes comparison difficult. The Makeshift camp shows a worsening trend in stunting reflecting their poor situation. Chittagong division had a stunting rate of 49.6% (BHFSNA 2009 GoB/WFP/UNICEF). The dip in stunting prevalence on the graph is hard to explain after the global food price crisis of 2007-2008, though a 5-month distribution of a lipid based nutrient supplement³² could have contributed to this.

Graph 17: Trends in stunting rates for camps and host communities



³² A prospective randomised controlled cohort study (Akhter, 2009) concluded that Sprinkles *can* be effective to reduce anaemia over a 6 month period in this population. However, various sources (FGDs 2012 (this evaluation), ACF nutrition causal analysis 2011, HKI 2009) highlight the low level of acceptability of Sprinkles among the Rohingyas, which will jeopardise any long term impacts. To achieve sustained behaviour change in any population group is challenging, think of dieting or condom use, even when benefits are clear. If the distribution of Sprinkles has been maintained, then the current evidence suggests that Sprinkles is not efficacious in reducing anaemia in this population.

How does food assistance create impact?

118. This section of the report analyzes how food assistance creates impact on refugees. As impacts hardly ever are ‘produced’ in isolation, it will be focusing on understanding how contextual factors are influencing the positive or eventually negative impacts of food assistance across the four areas which are analysed in the evaluation (i.e. livelihoods and coping; movements; protection and nutrition). The findings will be held against the Logic Model (see Annex 6: Logic Model – The Impact of Food Assistance on Protracted Refugee Populations) and its underlying assumptions for how food assistance creates impact on refugees in protracted situations.

The contribution of food assistance

Livelihoods and coping strategies

119. Generally, nearly all Rohingya households are involved in some kind of economic activity, but the type of activity, the importance of it in relation to the general household situation and the time Rohingyas spent on it depends on their refugee status. Registered refugees were found better able to cope than unregistered Rohingyas, both during normal daily routines and in situations where extra resources are needed, such as damages to housing, sickness or arrests of family members or close relatives and/or traditional ceremonies such as weddings or funerals. Food assistance, and other external assistance, is a key factor in enabling refugees to cope better in these situations, the ration can also be considered as a ‘value transfer’ because it is exchanged for other items or sold.

120. This value transfer means that registered refugees have less expenditure on a monthly basis because they don’t have to spend the same amount of resources (time or money) to pay for the most basic food items, as these are provided by WFP. Camp-based assistance such as shelter and services, basic health care, and education for children grade 1-4 means that they have considerable savings as compared to unregistered Rohingyas. The value of the ration and the other benefits therefore puts registered refugees in a more favourable situation than unregistered Rohingyas.

121. Unregistered Rohingyas, on the other hand, are more economically active and have higher incomes because they work for longer hours than registered refugees. This, however, does not mean that they are in an economically better situation than the registered refugees, who are more ‘wealthy’ across different comparable groups³³.

122. Adding to the food ration that is provided to the registered refugees every two weeks, they also use their rations or family books as mortgage guarantee if they are in need of extra resources. In terms of coping, this is a clear advantage compared to unregistered Rohingyas who need to take up loans, extra labour or sell off assets. The fact that more registered refugees ‘do nothing’ during crises situations indicates a capacity of being able to cope better with shocks, whereas unregistered Rohingyas tend to adopt other mechanisms, including loan taking or reduction in consumption – including food consumption. Due to the food ration, registered refugees were also in a better position to cope with rainy seasons, which are typically the periods when incomes are lower due to reduced labour intensive activities.

³³ The term ‘wealthy’ relates to the wealth-ranking methodology used in household survey and does not refer to traditional ‘wealth’ concept. In this context it represents the means and assets that are at the household’s disposal.

Movements

123. Survey and interview data suggest that regardless of imposed restrictions on mobility, Rohingyas' movement is frequent and a common practice independent of refugee status. Unregistered Rohingyas have higher frequency of movements and they move farther away in search for income generating opportunities. There is a close correlation between frequency of movements and livelihoods and Rohingyas' with higher wealth status, household earnings and economic activities tend to move less. Amongst these groups are the registered refugees. Regression models confirm this tendency demonstrating significant differences in terms of movements with refugee status as a determinate factor. It also became clear from survey data that Rohingya males move far more than females, especially among unregistered Rohingyas, where men are the primary source of income. A more balanced situation was found among registered refugees; within this group, women participated more in income generating activities and therefore also registered higher levels of movements.

124. There is also evidence that Rohingyas with a legal refugee status have stayed significantly longer in Bangladesh than unregistered Rohingyas. The evaluation found that this was due to several factors. Firstly, registered refugees are in less need to move around in search of livelihoods or protection as compared to unregistered Rohingyas. Secondly, the benefits that registered refugees have due to their legal refugee status outweigh alternative options, such as returning to Myanmar or searching for livelihoods elsewhere in Bangladesh. The restrictions on movements and possible consequences in terms of temporary loss of ration card or forced repatriation is part of refugees' disposition concerning movements. Finally, fear of 'not being there' if camp authorities decide to conduct a household census or when other announcements are communicated to the refugees, such as resettlements to third countries, means that many of them decide to stay inside the camps and wait.

125. Therefore, a combination of restrictions imposed on Rohingyas in general and the fact that they have been receiving food assistance (as well as other support) constantly since 1992 means that the majority of Rohingyas that were registered back in the beginning of the 1990s remains in the camps and haven't move on. In fact, the survey demonstrated that more than 90% of registered refugees were either born in Bangladesh (nearly 63%) or have been there for 20 years or more (34-36%). In comparison, the number of Rohingyas born in Bangladesh now residing in the makeshift camp is below 38% - a third of unregistered Rohingyas have been in Bangladesh between 5 and 10 years. While less movements limits Rohingyas' exposure to unprotected environments, it also means that registered refugees have less contact with local communities and therefore less prepared for a life without food assistance.

Protection

126. The evaluation found that protection is an issue affecting Rohingyas – independently of their refugee status. Rohingyas are exposed to different threats both inside camps and within communities or at makeshift sites. Unregistered Rohingyas, despite potentially being more vulnerable than registered refugees, have found ways to reduce their exposure through informal protection measures. At the same time, the local Bangladeshi community has developed informal mechanisms that allow Rohingyas to engage in minor economic activities, but under conditions where Rohingyas remain unprotected and exposed to exploitation.

127. The evaluation found evidence of a widespread informal system of protection in place, with various patronage and non-patronage networks operating throughout the Cox's Bazar district and forming the core protective environment for the majority of refugee (when outside the camps) and unregistered Rohingya. These networks were comprised of local elites, community leaders, imams, and local authorities. The evaluation found repeated instances of payment-for-access arrangements, allowing refugee and unregistered Rohingya access to transportation, jobs, natural resources, etc. Not all of these arrangements were perceived to be negative or exploitative; the evaluation found evidence that unregistered Rohingya living in local villages are often warned by local leaders and imams when authorities were near.

128. The evaluation heard testimony of inappropriate or illicit practices during food distribution and of few effective complaint mechanisms with the camps. It was commonly found that refugees feared retaliation by official and unofficial authorities in cases of complaints (cases of violence and imprisonment were reported). Camp management problems were cited by several key stakeholders and there were perceptions of low quality service provision and harassment by service providers. Thus food assistance, partially because it is a valuable and predictable resource, indirectly contributes to some protections concerns within the camps

129. Findings related to protection are overall mixed with respect to the contribution from food assistance; on one side registered refugees do not have to expose themselves to the same degree as unregistered Rohingyas because they receive food assistance in the camps. On the other side, lack of effective protection mechanisms inside the camps means that they remain exposed despite not having to move outside the camps. Food assistance and other external assistance contributed to the greater wealth status of refugees and thereby to widespread negative resentment from those not receiving entitlements (unregistered Rohingya and local Bangladeshi households throughout the region). Thus, food assistance, because of its value transfer benefits, was a secondary contributing factor to the negative perceptions of insecurity and vulnerability for refugees.

Food Security

130. The evaluation findings on food security revealed that registered refugees can diversify their diet significantly more than unregistered Rohingya living in the makeshift or Leda sites. Food assistance was a direct contribution to this, due to the rations which could be sold, shared or exchanged. The value transfer of a ration was found to be important in this respect and in the taking of loans. In addition, the analysis revealed the HDDS of registered refugees was not dependent on an income stream (and thus they could absorb shocks, changes in the labour market, etc.), whereas that of unregistered Rohingya was obviously directly dependent on their economic activity.

131. Despite these immediate benefits from the food transfer, malnutrition rates in the area are sobering. The available data shows the prevalence of global acute malnutrition (GAM) has stabilised at around 15%, the WHO threshold of a critical situation. Recent surveys³⁴ found that unregistered Rohingya in the makeshift site had significantly higher rates of malnutrition than this threshold. In addition, under-five stunting rates for all population groups in the area (Rohinya and host communities) are over 40%. While there is a need for more definitive nutrition data

³⁴ ACF (Action Contre La Faim) 2011.

across all groups, it is clear that wasting and stunting persist at critical levels even for the registered refugees receiving food assistance.

Contextual Factors

Cultural kinship, community support and patronage

132. The Rohingyas share common ethnic and religious backgrounds with the greater Cox's Bazar and Chittagong area residents. Many Cox's Bazar inhabitants and Rohingyas are from the same ethno-religious groups and Rohingyas have extended family members and relatives who are now Bangladeshi citizens. This evaluation found cases where these Bangladeshi relatives provide food and shelter to migrants at the initial stage of their settling down. They also assist in providing employment opportunities and physical protection. Similarly, 'older' migrants provide these crucial services to the new migrants. Nonetheless, this support would not have been easy to provide or receive without certain political patronage.

133. Rohingyas have increasingly become part of the life in Cox's Bazar and other areas where they have settled in. In those areas they have become an important element in the local economy, providing labour force to areas that are traditionally not sought by Bangladeshi population, except from the poorest quintiles. These activities include fishing industry (net repairs and high-sea fishing) and port activities in Teknaf (where Rohingyas have worked for many years). There was mentioning of political forces supporting Rohingyas as they have become important part of the local economy, these statements were however few and could not be cross-verified. Whether the tendency is widespread remains to be documented, but it is an indication of the relations existing between Rohingyas and local communities, including support from the political establishment.

134. Interviews and surveys have documented that unregistered Rohingyas have better relations with local communities than refugees and that these relations are more favourable in areas around the Kutupalong makeshift site as compared to Nayapara areas (Leda and Nayapara camps). Interviews indicated that being unregistered made Rohingyas more accepted by the local community and that these communities, despite cases of hostility, were supportive when Rohingyas are in dire needs. Rohingyas' perceptions in protection also indicate that unregistered Rohingyas feel better accepted by local communities than registered refugees. This finding is important in terms of Rohingyas' overall strive towards self-reliance and durable solutions; acceptance from the local community is a key factor.

Restrictions imposed on Rohingyas

135. The restrictions imposed on Rohingyas in Bangladesh, independently of refugee status, prevent them from obtaining a more stable economic situation and access basic social services outside camps. Refugees are not allowed to move outside the camps without permission. This means that they formally are cut-off from improving their livelihoods and therefore also opportunities to become self-reliant.

136. Restrictions imposed on the refugees formally prevent them from getting a legal job, which would include being protected by the country's labour laws and thus being less exposed to exploitation. Restrictions also mean that they cannot attend school beyond grade four, do business or by other means integrate and interact with the Bangladeshi community. Part two of this report provided evidence that despite living under these restrictions, Rohingyas, and in particular unregistered Rohingyas, have

found ways to cope with their needs and that they are economically active and have frequent interaction with surrounding or nearby communities.

137. However, their ability to sustain families is very fragile. There is evidence that unregistered Rohingyas live in the grey zone of what has internationally been defined as acceptable human conditions (i.e. global acute malnutrition rates among Rohingyas above the international emergency threshold of 15% - some figures even suggest these rates to be near 30%). Furthermore, disobeying restrictions comes at the risk of being arrested, fined, harassed or suffering violent attacks from authorities or community members. Restrictions mean that these violations have become part of the refugees' daily lives.

Local poverty and scarce resources

138. Cox's Bazar is among the poorest areas of Bangladesh. This means that the Rohingyas, despite the restrictions imposed on them, are competing with the poorest quintiles of the Bangladeshi society for local jobs, mainly as day-labourers. This does create friction with the local communities, as Rohingyas take on jobs at lower wages. The scarce resources in the area also mean that Rohingyas, both refugees and unregistered Rohingyas, compete with the local population for access to farmland, fishing areas and firewood. This has resulted in declining incomes and worsening hardship for the local populations – a negative consequence of refugees' long-term presence in the area. The large concentration of Rohingyas gathered in the same area adds to the complexity of sharing scarce resources with the poorest parts of the Bangladeshi population.

Implementing Factors

139. Operational factors of UNHCR's or WFP's food assistance interventions were not directly examined in this evaluation and the evaluation design purposely considered food assistance, as it had been implemented, as the intervention variable.

140. The evaluation noted however that the WFP food assistance operations have been relatively well funded for at least the last decade, the target population has been relatively stable, and no significant pipeline breaks were noted by stakeholders.

The Logic Model reviewed

141. As preparation for the evaluation, WFP and UNHCR developed a logic model/theory of change that outlines how food assistance is assumed to create certain outcomes (both short and intermediary) as well as long-term impact (see Annex 6: Logic Model – The Impact of Food Assistance on Protracted Refugee Populations). How these outcomes materialise over time depends on several assumptions that are linked to output and outcome levels.

142. In the logic model, this evaluation mainly refers to the horizontal line (T3) given the protracted dimension of the Rohingya refugee situation. Though this evaluation focuses on outcome levels, it is worth briefly referring to assumptions at the output level that are not in place; *host communities* are less receptive with regards to registered refugees; *protection* is an issue within camp and outside camp (non-camp setting); *natural environment* is not suitable; *targeting* non-effective (blanket) and only limited *non-food assistance* is provided. As for the 'reactions' level, none of the listed reactions were found during the evaluation because: *partial rations supplement purchased food* – rations are still full and not designed to supplement diet; inputs used to supplement/complement livelihood strategies –

there are no inputs provided that supplements registered refugees' livelihood strategies; *local institutions (service delivery and markets) support refugee livelihoods* – this is not been registered, except when illegal arrangements are used (false ID to access services such as health, education or marital arrangements). In fact, even at the output/activity level there were few of the listed items that are relevant under the protracted Rohingya refugee context, these are: water supply, general rations (neither partial nor targeted) and school feeding (until grade four only). Complementary food, vouchers or income generating activities (IGA) are not addressed (the latter only to a very limited extend and its effects on Rohingyas merits further investigation).

143. At the outcome and impact levels of the logic model (compromising the four columns at the right hand-side), the team found that short term outcomes were only partially met. According to the outcome level the evaluation evidences that: *improved food security* has been met only partially – malnutrition is still an issue; access to *improved livelihood* is addressed only partially and through 'illegal' measures only; improved *coping strategies* are in place – but they are not sustainable as they fully depend on external support, i.e. continued provision of food assistance; *asset building* seems to be positive thanks to food assistance, but again, existing assets are non-productive hence with limited sustainability unless they are 'transferred' into something more productive, finally; *improved schooling* seems to have improved among registered refugees, according to survey results, which partially can be attributed to food assistance due to increased household 'wealth'.

144. As for the assumptions outlined at this level, evaluation findings highlights the following: *food is sold and consumed* by registered refugees; there is only very limited *access to land* – more so for unregistered Rohingyas; *legal status allows for employment* – this is not the case and employment is only carried out illegally (hence unprotected) – especially among unregistered Rohingyas; *local institutions provide beneficial services* – this is not the case, only for those who have managed to integrate more into the local communities, e.g. through mixed marriages; cultural/linguistic barriers are not addressed formally through any intervention – those coping better with these seems to be unregistered Rohingyas local communities; assumptions related to *asset liabilities* and *educational opportunities* seems to be the most relevant for registered refugees – unregistered Rohingyas have fewer assets and take loans on markets (higher costs) and education levels among household members are lower.

145. The logic model of food assistance contributing to self-reliance and or other durable solutions is thus built upon a series of linked assumptions that do not hold true in the protracted Rohingya refugee context of Bangladesh. The contextual factors, especially local poverty, restrictions on movement, and embedded patronage systems in the local area, are key factors in maintaining the current status quo.

Conclusions and Recommendations

Overall Assessment

146. The evaluation found several significant differences between registered refugee households that receive food assistance and unregistered Rohingya households that do not. The cluster analysis demonstrated that household economic activity was the key determinant variable in the livelihoods, coping strategies, mobility, protection and food security of households. Food assistance contributed to these factors through its impact on the economic activity of the recipient households.

147. The logic model of the evaluation postulated that food assistance would provide over time short term, medium-term and long-term outcomes, sequentially leading to self-reliance. When compared to unregistered Rohingya groups in the makeshift and Leda sites, there was evidence that food assistance contributed to short term outcomes primarily in the form of improved dietary diversity and reduced frequency of negative coping strategies for the refugees in the Nyapara and Kutapalong camps. However, there were indications that these positive impacts disappear when the refugee groups were compared to the unregistered Rohingya living within the Bangladeshi host communities.

148. The evaluation evidence empirically pointed to the search for income opportunities as the main driving factor behind differences between Rohingya groups and that external assistance (including food assistance) slightly mitigated the necessity of this for registered refugees, thereby reducing their movement away from the camps. Unregistered Rohingya were found to have a pattern of greater mobility as their search for income generating opportunities meant they spent less time in the vicinity of Cox's Bazar district and moved more frequently into other parts of Bangladesh. There were indications that registered refugees have become dependent on camp assistance and this safety net mitigated their search for livelihood opportunities elsewhere.

149. The evaluation found that food assistance was a secondary contributing factor to the perception of insecurity and vulnerability for refugees. Food assistance and other external assistance contributed to the greater wealth status of refugees and thereby to widespread negative resentment from those not receiving entitlements. However, protection was a significant concern for all Rohingya groups and protection provided by refugee status was muted by the prevalence of refugees economically active and moving outside the camps, neither of which is legally permitted.

150. A significant finding of the evaluation is that unregistered Rohingya *not* living in the unofficial sites near the refugee camps, which are the majority of Rohingya in Cox's Bazar District, appeared to have better food security and better access to informal protection systems. In addition, they utilized a greater range of coping strategies and had greater mobility scores. They were the group most near the goal of self-reliance, although remain without legal status in the country. In contrast, unregistered Rohingya residing in makeshift sites (approximately 30,000), were found to be the most food insecure and the most vulnerable in terms of protection. A consistent finding from the evaluation was that this exposure is linked to their highly concentrated numbers in a small area, often outnumbering local populations. The deterioration of the nearby natural environment (e.g. deforestation, fishing, pollution of water sources) was also noted as a source of conflict.

151. The makeshift sites were found to be a safety net; unregistered Rohingya maintain a presence there in the hope that they will one day become eligible for legal refugee status and associated external assistance. Whether large scale food assistance is a pull factor needs to be analysed further but there were indications that its provision within the camps may well have contributed to maintaining nearby makeshift sites where concentrated populations are more food insecure and vulnerable than unregistered Rohingya who have assimilated/integrated into local communities.

152. The evaluation found that external factors, primarily restrictions on unregistered Rohingya stemming from their lack of legal status, and the widespread poverty and low levels of socio-economic development in Cox's Bazar District were very important factors affecting the potential for self-reliance of Rohingya households. Food assistance was found to be a contributing factor to short term outcomes for recipient households but its provision within a package of external assistance over a long period of time and to a select group of households created dependency for these households.

153. The evaluation concludes that the logic of the current food assistance interventions, according to the model supporting the evaluation, will not lead to the self-reliance of targeted households in Bangladesh in the absence of a supportive external environment and in the local context of widespread poverty. The evaluation contributes important empirical evidence on the role of economic activities and the protective environment in the livelihoods of all Rohingya in Cox's Bazar district. Alternative solutions that provide better protection to Rohingya and better services to all vulnerable groups, thereby reducing the necessity of resorting to negative coping strategies in case of shocks and for health and education needs, would be more appropriate to achieve self-reliance.

154. All relevant stakeholders should define a transition strategy from the current stance on Rohingya migrants that will allow for a smooth transition into temporary, but sustainable, acceptance of Rohingya in Bangladesh. A temporary status and recognition, which may be revised periodically, would provide a better protective environment, enable all Rohingya to engage in the local labour market with fewer entry barriers, and would mitigate adoption of many of the more severe negative coping strategies.

155. Food assistance does provide specific short-term food security outcomes, but that assistance needs to adapt to the protracted context, within an overall transition strategy, and move beyond the current emergency modality that has persisted for more than two decades. Alternatives that enable more accurate targeting, are more appropriate to the reality of the livelihoods of Rohingya in Cox's Bazar, and are more cost effective and efficient to implement, should be explored. These alternatives should also address the equivalent needs in the local Bangladeshi populations. A voucher scheme was mentioned during the stakeholder consultations as a potential option. Vouchers should, however, not only address vulnerable refugees, but also local vulnerable groups in order not to disfavour those in most dire need among the host population. This option would need further study.

156. Historical, cultural and religious kinship between Rohingya and Bangladeshi families is an untapped opportunity for reaching more acceptable solutions. However, this opportunity will not be realised without political support from the Bangladesh Government and from the international community. The international

community must also maintain pressure on Myanmar to improve the conditions and legal recognition of the Rohingya in Myanmar.

Recommendations

157. Based on the evaluation findings and conclusions, four recommendations are directed to key stakeholders. The recommendations are intentionally at the strategic level, and should be operationalized in cooperation with the Government of Bangladesh.

Strategic Recommendations:

1. Develop a transition strategy to provide Rohingya in Cox's Bazar with temporary status and recognition, pending durable solutions in Myanmar, that ensures them protection and opportunities to contribute to the economy and to access basic services.
2. Jointly develop an alternative strategy for current food assistance and progressively introduce options that target (a) registered refugees and (b) increasingly the most food insecure Rohingya and local population groups in Cox's Bazar.
3. Identify strategies to ensure that vulnerable Rohingya and Bangladeshi populations in Cox's Bazar are targeted through support interventions including health, education and preventative nutrition services.
4. Within the framework of a transition strategy and alternative food assistance options, develop strategies to gradually reduce the large concentrations of refugees in camps and unregistered refugees in makeshift sites in order to mitigate conflict over natural resources and the significant protection problems concentrated at these locations.

Annexes

Annex 1: Terms of Reference

The contribution of food assistance to durable solutions in protracted refugee situations: its impact and role in Bangladesh: A Mixed Method Impact Evaluation

The Rohingya refugee situation in Bangladesh is one of the most protracted in the world, with almost twenty years of continuous camp settlements in some areas in the most recent period. There are significant cultural and socio-economic differences between the Rohingya and local populations and there are many challenges to finding 'durable solutions'. In this context then, the impact of food assistance on the different protracted refugee populations needs to be better analyzed and understood.

This evaluation serves both accountability and learning purposes. The main objectives are:

- to evaluate the outcomes and impact of food assistance interventions within the protracted Rohingya refugee settlements of Bangladesh, and;
- to identify changes needed to improve the food assistance interventions such that they contribute to the attainment of self-reliance and or durable solutions for the Rohingya refugee populations

This is one of a series of four WFP/UNHCR joint evaluations to be carried out during 2011 and 2012 in different countries. The overall objective of the series is to provide evidence for future strategies to improve the contribution of food assistance to increased self-reliance and potentially to durable solutions for both refugees and host populations in protracted refugee situations.

Groups directly involved in implementing or benefiting from the operations for the Rohingya refugees are the main users of the evaluation and comprise: (i) refugees, (ii) the government of Bangladesh, at the national, district and local levels, (iii) implementing partners (NGOs), (iv) UNHCR and WFP.

Indirect stakeholders include: WFP and UNHCR regional and headquarter offices, donor agencies supporting the Rohingya refugee operations in Bangladesh, and other UN agencies.

The primary evaluation question is:

- What are the differential impacts of long-term food assistance on the different Rohingya refugee and refugee-affected populations in Bangladesh?

The secondary questions are:

- What are the impacts on food security and nutritional outcomes?
- What are the impacts on refugee movement?
- How does food assistance affect household coping strategies, including informal social protection mechanisms, and the prospects for self-reliance?
- What are the impacts on protection and the protective environment?

All WFP and UNHCR operations involving food assistance from over the past 10 years (2002-2011) will be included in the evaluation. WFP has had five consecutive operations since 2002 that focus exclusively on registered refugees, each covering the two official camps and primarily on general food distribution in the camp. UNHCR has had more operational activity over this period, but not all UNHCR activities will be the focus of the evaluation.

This impact evaluation takes a mixed methods approach. The four methods are: (1) desk review of existing literature and stakeholder interviews to establish and assess the institutional logic of the programme, implementation strategies and allocations of resources; (2) review of literature and secondary data; (3) quantitative survey(s) as necessary to complement existing data and ensure the evaluation team can answer the evaluation questions; and (4) qualitative field interviews among beneficiaries and all key stakeholders.

The evaluation team, from *Fundación DARA Internacional*, is internationally and nationally recruited and has strong technical background in conducting independent evaluations for humanitarian and development organizations. The team members bring together a complementary combination of technical expertise in the fields of a) food security & livelihoods, b) nutrition, c) social protection and safety nets, d) protection and gender and e) evaluation methodology, including qualitative and quantitative data analysis, sampling, etc. The team members are also familiar with the refugee context and WFP's and UNHCR's operational modalities.

This evaluation is managed by Office of Evaluation in WFP jointly with the UNHCR Policy Development and Evaluation Service. Ross Smith is the WFP evaluation manager and Angela Li Rosi is the UNHCR evaluation manager. WFP will lead management of the process, but all communications will be sent out jointly.

Briefings and de-briefings will include participants from country, regional and headquarters level. Participants unable to attend a face-to-face meeting will be invited to participate by telephone. Four debriefing sessions are planned, as follows:

- informal debriefing with Country Office senior management of UNHCR and WFP in Bangladesh (aide-memoire)
- debriefing of UNHCR and WFP Country Office staff in Bangladesh (aide-memoire and presentation)
- debriefing of external stakeholders in Bangladesh (presentation)
- debriefing of WFP and UNHCR headquarter-based stakeholders, with participation of Country Office management (presentation)

Reference:

Full and summary reports of the Evaluation and the Management Response are available at

<http://www.wfp.org/evaluation>

Annex 2: Evaluation Matrix

	Evaluation questions	Guiding Questions	Indicator Category (preliminary)	Methodology	Information sources	Comments/observations
primary evaluation question	What are the differential impacts of long-term food assistance on the different Rohingya refugee and refugee-affected populations in Bangladesh? (Nicolai Steen)	How does food assistance affect beneficiary target group (women and vulnerability cohorts)? How do other groups (non-beneficiaries) manage without food assistance?	<ul style="list-style-type: none"> - Socio-economic conditions of HH - Type of livelihood activities - Assets among target groups - Used coping strategies - Conflict and Social Cohesion - HH engagement in economic activities - Impact on children school enrolment - Target group of food assistance 	FGDs Surveys Key informant interviews	Primary data collected by the team Secondary resources, including reports on refugee situation Coping Strategy Index (or similar – to be decided before field work)	The degree to which the team will be able to evaluate differential impacts will depend on how much we can access unregistered Rohingyas and host communities. See also parts 3.4 and 3.6
secondary evaluation question	1. What are the impacts on refugee movement? (Ferdous Jahan) (this area will not include group 5 – see part 3.4)	How does food assistance affect refugees' movements (both return and onwards) both as a pull factor and in search of livelihoods or protection?	Refugee Movements outside camps Breadwinners outside households	Ibid	Primary data collected by the team Secondary resources, including reports on refugee situation	Ibid
	2. How does food assistance affect household coping strategies, including informal social protection mechanisms, and the	Has food assistance contributed to improving household economy of target groups? What are the coping	<ul style="list-style-type: none"> - Household incomes - Coping strategies - Safety nets - Loans - Relative share of food assistance on HH economy 	Ibid	Primary data collected by the team Coping Strategy Index Secondary	Ibid

	prospects for self-reliance? (Pati Gana)	strategies adopted by these groups? How much do they depend on external support to be self-reliant?	- Remittances - Women's empowerment - Alternative sources of income (trade sex, child labour, etc.)		resources, including reports on refugee situation	
secondary evaluation question	3. What are the impacts on protection and the protective environment? (Ferdous Jahan)	Does food assistance have an effect on protection?	Female headed HH where husband/breadwinner has moved 'Split' families as a result of breadwinners' movements Cases of harassment of target groups	Ibid	Primary data collected by the team Secondary resources, including reports on refugee situation	Ibid
	4. What are the impacts on food security and nutritional outcomes? (Kate Godden – Desk)	Has food assistance contributed to general food security and improved nutrition among refugee population?	GAM rates SAM rates Anaemia rates HHDDS	Desk review – primarily using secondary sources. HHDDS to complement nutritional data from secondary sources	JAMs (2006, 2008, 2010) Nutrition surveys Health Information Systems HHDDS (primary data)	It was decided during the briefing that primary data collection would exclude data related to nutrition, except from HHDDS and to a larger extent rely on secondary sources for an analysis of food security and nutrition. HHDDS is used as an indication of HH economic conditions

Annex 3: Stakeholder Matrix

Table 8 below provides an overview of the main stakeholders in the evaluation, highlighting their interests and specific roles in the evaluation. There are two types of stakeholders: (i) Direct stakeholders which includes those directly involved in implementing operations and activities for the Rohingya refugees including the refugees themselves, both registered and non-registered. The Government of Bangladesh is another direct stakeholder, both because it hosts the refugees and because it is a key partner to WFP and UNHCR. Other direct stakeholders include implementing partners such as Bangladesh Red Crescent Society (BDRCS) which distributes food to registered refugees in camps, and cooperating partners at local level providing services, mainly health, water and sanitation, for both registered, non-registered refugees and in some cases host communities (mostly health services).

Indirect stakeholders (ii) include agency representatives based in regional or headquarter offices, donor agencies, other UN agencies, especially UNICEF and UNFPA. Key donor agencies supporting the Rohingya refugee operations in Bangladesh include the USA, Canada, Australia, Germany, Norway, Italy, Switzerland, Japan and a variety of private donors in recent years.

Table 8: Stakeholder Matrix

Stakeholder Description	Type	Stake/Interest in Evaluation	Involvement in/usage of Evaluation
Registered Rohingya Refugees in official refugee camps. The evaluation will differentiate groups according to gender and age.	Beneficiaries (direct stakeholders)	As beneficiaries of food assistance, the refugees have a high stake in the evaluation.	Interviewees during data collection.
Un-registered Rohingya Refugees in host communities or makeshift sites. The evaluation will differentiate groups according to gender and age.	Refugees, but non-Beneficiaries (direct stakeholders)	Non-beneficiaries but refugees and thus have a stake in the evaluation because it draws attention to their difficulties and challenges.	Interviewees during data collection.
Bangladeshi population living in Cox's Bazar district. The evaluation will differentiate groups according to gender and age.	Host-community members (direct stakeholders)	Some communities in Cox's Bazar district host refugees and also provide income opportunities for the Rohingyas. They have an interest in the evaluation as it analyses and compares their situation to that of the refugees and thereby draws attention to eventual challenges they may encounter.	Interviewees during data collection.
Ministry of Food and Disaster Management (MFDM)	Government of Bangladesh (GoB) (direct stakeholder)	The MFDM is the national authority on issues related to refugees and therefore has a stake in the evaluation outcome.	MDMR will be briefed and kept informed throughout the evaluation process.
RRRC and CIC	Government of	The RRRC is the local	The evaluation team

Stakeholder Description	Type	Stake/Interest in Evaluation	Involvement in/usage of Evaluation
	Bangladesh (GoB) (direct stakeholder)	branch of MDMR at district level and therefore the governmental institution with daily contact to organisations working with refugee issues in Cox's Bazar.	and WFP/UNHCR office will maintain a close coordination with RRRC during the evaluation process to ensure that the Bangladeshi Government's concerns are heard and incorporated to the extent that this is possible.
WFP and UNHCR	Contractors for the evaluation, implementers of food assistance to Rohingya refugees. UNHCR does other activities as well, but the scope of the evaluation is on food assistance. (direct stakeholders)	Both organisations have vested interest in this and other three evaluations carried out to evaluate the impact of food assistance on protracted refugee situations globally.	Key informants with regards to assistance provided over the evaluation period, focusing mostly on aid modalities (not on food rations and nutrition related aspects). Interviews will be carried out with key staff in order to also capture changes over time. The team coordinates with senior staff on evaluation scope and approach (evaluability) since the early stages of the inception phase.
BDRCS, Technical Assistance Incorporated (TAI), Muslim Aid, Management International (RTM), Action Contre la Faim (ACF)	Present cooperating national/international NGOs working with camp population in official camps. BDRCS distributes food aid in camps – direct implementing partner of WFP. Muslim Aid provides health services and assists refugees in Leda camp to improve shelters. (direct stakeholders)	As cooperating partners, these organisations have a vested interest in the evaluation as findings may assist them in rethinking current or future approaches related to refugee situations.	Interviews will be carried out with organisations in order to get in-depth information on issues related to assistance provided to refugees.
UNFPA and UNICEF	Cooperating Agencies (indirect stakeholders)	Both UNFPA and UNICEF are cooperating agencies. Whilst the latter is no longer engaged in refugee matters, they both have an interest in the evaluation as it may address issues that concern their	UNICEF will be interviewed during the field mission because they are still involved in providing assistance to the Rohingyas.

Stakeholder Description	Type	Stake/Interest in Evaluation	Involvement in/usage of Evaluation
		mandates.	
CONCERN, CARITAS, International Federation of Red Cross (IFRC), SHED	Former cooperating National/international NGOs (indirect stakeholders)	These organisations are no longer cooperating partners of WFP/UNHCR, but due to their earlier engagement in the Rohingya refugees' situation, evaluation findings may serve them in terms of lessons learnt.	It is not foreseen that these institutions will be interviewed during the field mission. They may be consulted if the evaluation team needs to triangulate certain information.
Australia, Canada, European Commission (EC)*, European Community Humanitarian Office (ECHO)*, Finland, Germany, Japan, Italy, Norway, Switzerland, USA, Private Donors	Donors (indirect stakeholders)	The programmes supporting Rohingya refugees have been supported by different donors, they therefore have an interest in knowing how effective assistance has been (accountability). Other donors (*) also support Rohingya refugees and the evaluation will be of interest to them as it will also discuss alternative modalities for protracted situations, not only in Bangladesh but also elsewhere.	Interviews will be conducted with key donors currently involved and hence knowledgeable about the situation in the camps and surrounding communities.

Annex 4: Brief Description of Methodology

This impact evaluation uses a mixed method approach combining quantitative and qualitative data sources. The mixed method was used at the following stages of the evaluation; (i) our sampling strategies will determine who to interview so that these are broadly representative of populations, (ii) triangulate qualitative and quantitative data sources and (iii) provide explanations (or causalities) to quantitative data sources, hence combining broad data with specific case studies from individuals or groups (through personal interviews or focus groups discussions). The mixed method approach therefore provides both an internal control mechanism (e.g. testing consistency of different data sources) and the possibility to combine experiences from representative groups that allows the team to analyse broader issues with detailed case-studies (e.g. through personal interviews).³⁵

The main data sources are: (i) desk review of existing programme documentation, surveys and independent reports; (ii) FGDs and key informants interviews; and (iii) household surveys. From these different sources, the evaluation team will answer questions outlined in the TOR by deducing relevant information from different sources around the specific questions or issues. Validity was ensured by using a sample size (from household surveys) large enough to ensure statistical representativeness and accuracy. Furthermore, data from different sources was triangulated and in order to ensure appropriateness of survey design and interview guidelines, the team will test data collection tools through piloting exercises.

A household survey was conducted of refugees and within host communities in order to map and analyse how refugees cope with livelihoods in these different settings – the scope of the household survey will depend on the degree to which the evaluation team will have access to registered and unregistered refugees. Core team members will oversee the quality of the data collected by local researchers, both during the data collection process and throughout data entry.

The evaluation will include direct and indirect stakeholders. According to the evaluation design, the quantitative data collection was concentrated on registered refugees, unregistered refugees in makeshift sites and host communities and local population in the host communities. Qualitative approaches are applied to the same groups, but will also include direct and indirect stakeholders with more programmatic and political insights.

Logic of the Intervention

Together WFP and UNHCR address lifesaving interventions through food aid and provision of basic services, protection, strengthening of refugees' resilience and restoring of their livelihoods. While this evaluation looks at WFP's strategic objectives one to four and UNHCR's strategic priority four, focus was on aspects that are related to refugees' livelihoods and their opportunities to become less dependent on food assistance over time, hence enabling self-reliance among Rohingya refugees.

³⁵ As part of the IM – a pilot phase was carried out where interviews were conducted in and around the refugee camps to ensure better understanding of local context and ensure better adaptation of data collection tools. Questionnaire was also tested before the real survey started (see Annex 10 for resume of findings carried out as part of the pilot phase)

The logic model outlines how food aid/assistance, technically and over time, may lead to self-reliance³⁶. As in any other case, logic models are based on assumptions that inputs produce or enable certain outputs, which again lead to outcomes and eventually impacts. The model implies the perfect setup and timely fitting of several factors that enables interventions to progressively move forward towards the end-goal of the operations, which in the case of the Rohingya refugees is self-reliance or other durable solutions. The evaluation will therefore use the logic model as an analytical reference for testing some of the assumptions and hypothesis behind the model. In concrete terms, this means analysing to what extent food assistance/aid (inputs and outputs) has contributed to or enabled the Rohingyas to attain more self-reliance or more durable solutions. In order to evaluate this, the evaluation will compare registered refugees with unregistered Rohingyas in areas close to the camps where beneficiaries are concentrated. As mentioned in the introduction (part 1.2), the situation around the Rohingya refugees is politically sensitive and affects options for self-reliance, especially in terms of community integration.

Evaluation Matrix

The evaluation matrix (see Annex 2) outlines how the evaluation team will address the evaluation questions outlined in the TOR (see Annex 1). Based on the inception mission and desk review carried out henceforth the team has outlined guiding sub-questions and indicators for verification related to these questions. We may add or change indicators after pilot testing the survey tools.

Nutrition aspects was covered mainly through the use of secondary sources (mainly surveys) which have been regularly updated. These surveys provide the information needed to address issues related to the nutritional situation of the refugees. Makeshift sites population and non-registered refugees in general is however not included to the same extend as registered refugees, limiting the desk survey's scope.

The literature will, to the possible extend, provide a clear, coherent overview of the situation over time by mapping the prevalence of malnutrition overtime and to include the micronutrient deficiency diseases to explore what is and has been going on over time. External factors such as the global food price crisis of 2007-2008 for example and perhaps other local political events. Taken together the nutrition analysis will help determine the level of success of various food assistance interventions. This is however all dependent on the quality of the data/information. The team may consider including some questions related to nutrition during the FDGs. The questionnaire survey will include household dietary diversity score (HHDDS) as measure of socio-economic conditions of families and this data will complement existing secondary sources related to nutrition.

³⁶ Self-reliance is the social and economic ability of an individual, a household or a community to meet essential needs (including protection, food, water, shelter, personal safety, health and education) in a sustainable manner and with dignity. Self-reliance, as a programme approach, refers to developing and strengthening livelihoods of persons of concern, and reducing their vulnerability and long-term reliance on humanitarian/external assistance.

Annex 5: Overview of Data Collection Process

One of the major strengths of the present evaluation is the collection of a great amount of information of the different groups of Rohingya population that were targeted. The adaptation of different sampling techniques to the reality of the different camps/sites and the use of systematic tools for the collection of both quantitative and qualitative data, has allowed the team to gather an important amount of comparable information that has been crucial in the analysis and the search of evidences.

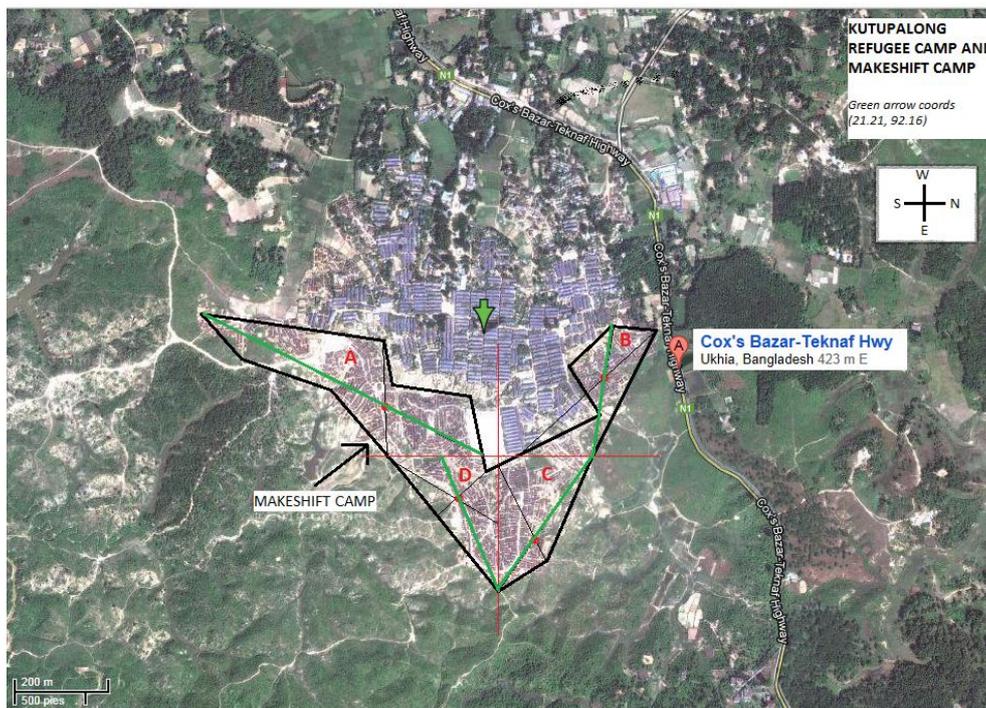
Quantitative information collection process (see Statistical Annex for further details)

- Household survey : 1069 household sampled in 8 different strata
- Standard tool: quantitative questionnaire presented in Annex 8. Questionnaire modules are relevant for most strata (except for modules on food ration and mobility, which were restricted to certain strata only).
- An error below 8% assured for all relevant strata in the estimation of impact, i.e. registered refugees in Nayapara, unregistered Rohingyas in Nayapara, registered refugees in Kutupalong, unregistered Rohingyas in the makeshift camp and unregistered Rohingyas in Leda (see Annex 9).
- Sampling:
 - Nayapara refugee camp: Random sampling was done using random function of Microsoft Excel. Lists of registered and unregistered were sampled separately, as they were two different strata. Enumerators faced difficulties to find the unregistered households in sample, due to changes in households since 2009.
 - Kutupalong refugee camp: Random sampling was done using random function of Microsoft Excel. Lists of registered and unregistered were not sampled separately.
 - Leda camp: Systematic sampling based on household rows. Rows were selected randomly, while households in them were selected in a systematic manner. (see Figure 1)
 - Makeshift site near Kutupalong: Aerial sampling based on google maps. (See Figure 2) Makeshift site is divided in 4 different areas. Households are selected systematically by area.
 - Ultra poor households in host community: Households were selected through six Participatory Rural Appraisals (PRA) in communities near the Nayapara refugee camp. (See Annex 6)
 - Rohingyas living in Cox's Bazar: Household selection was done in a non-representative manner walking through determinate neighborhoods in which unregistered Rohingya live. Only 50 household were sampled.

Figure 2: Aerial map of Leda



Figure 3: Aerial map of the makeshift site used in sample procedures



Qualitative information collection process

The qualitative information collection processes undertaken by Development Research Initiative (DRI), sometimes in the presence of an evaluation team member, are the following:

- Preliminary observation, walking through the different camp/sites and informal chats with population
 - This was done during the inception mission (approximately 4 days) and also in the month of April (another 4 days, national consultants only).
 - It has allowed identifying certain issues that needed further investigation and refining the data collection tools used later.
- Focus group discussions (FGD)
 - Standard tool: guide. The same guide is used in all camp/sites and regardless of the sex and age of FGD participants, although formulation and FGD conduction is adapted to participants by experts from Development Research Initiative. (Guides are included in the Inception Mission Report)
 - A designated person took exhaustive notes of the entire FGD sessions. All FGD sessions are transcribed and then translated into English.
- Household interviews
 - Standard tool: guide. The same guide is used in all camp/sites.
 - Complementary and validation of information collected through the quantitative questionnaire is searched for
- Participatory rural appraisals (PRA)
 - Held in host community to identify ultra poor households and other dynamics and issues in communities.
 - Communities were chosen in a random manner while driving through the Arakan road.
- Key informant interviews (KII)
 - Key informant interviews in the field targeted imams, local political leaders, local elites, NGO workers, and shopkeepers. Interviews to people working in RRRC, WFP, and UNHCR have also been held in Cox's Bazar and Dhaka.
 - Gathering a number of different points of view, they have served to validate and complement the information collected at household level.

In the next page, a table summarizing all the qualitative information procedures conducted is presented.

Table 9: Qualitative data collection process

SL	Date		Areas	Activities	Quantity	Comments
	From	To				
01.	01-05-2012	05-05-2012	Host Community	PRA	06	
Sub total					06	
DRI Team only						
02.	06-05-2012	11-05-2012	Nayapara Registered Camp	FGD	02	
			Kutupalong Registered Camp		02	
			Makeshift Non- Registered Camp		02	
			Leda Non- Registered Camp		04	
			Host community		02	
			Cox's Bazar		02	
Sub total					16	
DRI Team & Evaluation Team						
03.	14/05/12	21/05/12	Nayapara Registered Camp	FGD	02	
			Kutupalong Registered Camp		01	
			Makeshift Non- Registered Camp		01	
			Leda Non- Registered Camp		02	
			Host community		01	
			Cox's Bazar		03	
Sub total					10	
DRI Team only						
04.	12/05/12	08/06/12	Nayapara Registered Camp	KII	07	Imam, Local political leaders, Local Elites, NGO workers, Shopkeepers etc
			Kutupalong Registered Camp		05	
			Makeshift Non- Registered Camp		04	
			Leda Camp		04	
			Host community		05	
			Cox's Bazar		03	
Sub total					28	
DRI Team & Evaluation Team						
05.	14/05/12	21/05/12	Nayapara Registered Camp	KII	02	
			Kutupalong Registered Camp		02	
			Teknaf		02	
			Nayapara Communities		01	
			Kutupalong Communities		01	
			Cox's Bazar Community		02	
			Leda Camp		02	
			Makeshift site Nayapara		01	
			Makeshift site Kutupalong		02	
Sub total					15	
DRI Team only						
06.	09-06-2012	12-06-2012	Nayapara Registered Camp	HH Int:	02	
			Kutupalong Registered Camp		02	
			Makeshift Non- Registered Camp		02	
			Leda Non- Registered Camp		02	
			Host community		02	
			Cox's Bazar		02	
Sub total					12	

Annex 6: Logic Model – The Impact of Food Assistance on Protracted Refugee Populations

Result Chain	How?		Whom?		What (short and intermediate outcomes)		Why? (impact)				
	Inputs / Resources	Assumptions	Outputs / Activities	Participants/ Stakeholders ³⁷	Assumptions	Reactions	Short-term	Assumptions	Intermediate	Long-term	
Needs → Results logic over time	T ₀ (before)						Population movement from conflict, drought, insecurity Ethnic divisions	Selling of assets Loss of assets Damage to agricultural crops Hunger		Movement across borders Formal encampment Informal resettlement	Displaced population Livelihoods broken Food insecurity Insecurity / conflict Separated families
	T ₁ (early)	GFD (full ration) Stoves/pots/utensils Fuel Soap, Water Complimentary foods Supplementary foods Therapeutic foods Latrines	Livelihoods are not (refugees have no money), fully dependent on external assistance, registrations systems functioning, distribution systems functioning, delivery systems functioning, local partners have sufficient capacity, 2100kcal/day/person is sufficient, food basket is sufficient, internal targeting is too difficult	2100 kcal/day (general) NFIs Food basket for households Water supply Therapeutic feeding centers	New arrival camp and non-camp populations New arrival PoC (separated children, victims of violence, special needs, etc.) Camp leaders / food distribution staff Host communities	Food is taken home, grains can be milled, complement of interventions provided (therapeutic feeding, NFIs, WASH, etc.), predictable food and NFI delivery schedules, local institutions exist (for service delivery, trading, etc.), host communities are receptive, services provided to PoC (OVC tracing, family reintegration, etc.), coordinated security and protection within camp and non-camp settings, natural environment is suitable, intra-household distribution is equitable, targeting is effective, non-food assistance inputs are provided (schools, teachers, training, transportation, communication, etc.)	Consumption of food equitably within household Use of NFIs by targeted households Acute and chronic malnourished accept and receive care Host communities cooperate	Lives saved through hunger mediation Security and protection provided	Food is sold and consumed (mix), access to land (legal or illegal), legal status allows for employment, local institutions provide beneficial services (dispute resolution, family integration, communication, transportation, etc.), cultural / linguistic barriers can be addressed, assets are not liabilities, remittances can flow, educational opportunities are appropriate (language, culture, etc.)	Reduction in mortality (Crude mortality) Reduction in GAM Reduced vulnerability Reduction in reliance on external assistance.	Repatriation ³⁸ Resettlement Local integration (camp) (out-of-camp) Protection ³⁹
	T ₂ (yrs 2-3)	GFD (partial ration) Stove/pots/utensils Fuel Soap Water Complimentary foods Supplementary foods Cash / vouchers		Partial rations (general) (targeted) Complimentary foods School feeding Cash / voucher schemes NFIs Water supply	Existing camp and non-camp populations PoC Local organizations & volunteers providing delivery support Host communities		Partial rations supplement purchased food Cash / vouchers utilized to improve food security Use of WASH and other complementary interventions Local organizations provide institutional support for integration & livelihoods	Improved knowledge / access to water & sanitation Improved access to food basket Supplementary livelihood activities (cash income, agriculture, etc.) Security and protection provided		Improved nutrition (Acute malnutrition) (chronic malnutrition) Improved food basket (Diet diversity score) (Food consumption score) Improved neonatal and <5 outcomes (<5 anthropometric indicators)	Repatriation Resettlement Local integration (camp) (out-of-camp) Community development
	T ₃ (protracted)	GFD (partial ration) Fuel Soap Water Complimentary foods Supplementary foods IGA supplementary training/supplies Cash / vouchers		Partial rations (general)(targeted) Complimentary foods School feeding Cash/voucher schemes Water supply IGA activities	Existing camp and non-camp populations PoC Local markets & market actors Local support institutions Host communities		Partial ration supplement purchased food Inputs used to supplement/complement livelihood strategies Local institutions (service delivery and markets) support refugee livelihoods	Improved food security Improved access to livelihood opportunities Coping strategies are positive Asset building Improved schooling		Improved nutrition Improved food basket Improved <5 outcomes HH with successful IGAs (cash income) HH with successful agricultural activities Family re-integration Improved education outcomes	Repatriation Resettlement Local integration (camp) (out-of-camp) Self-reliance ⁴⁰

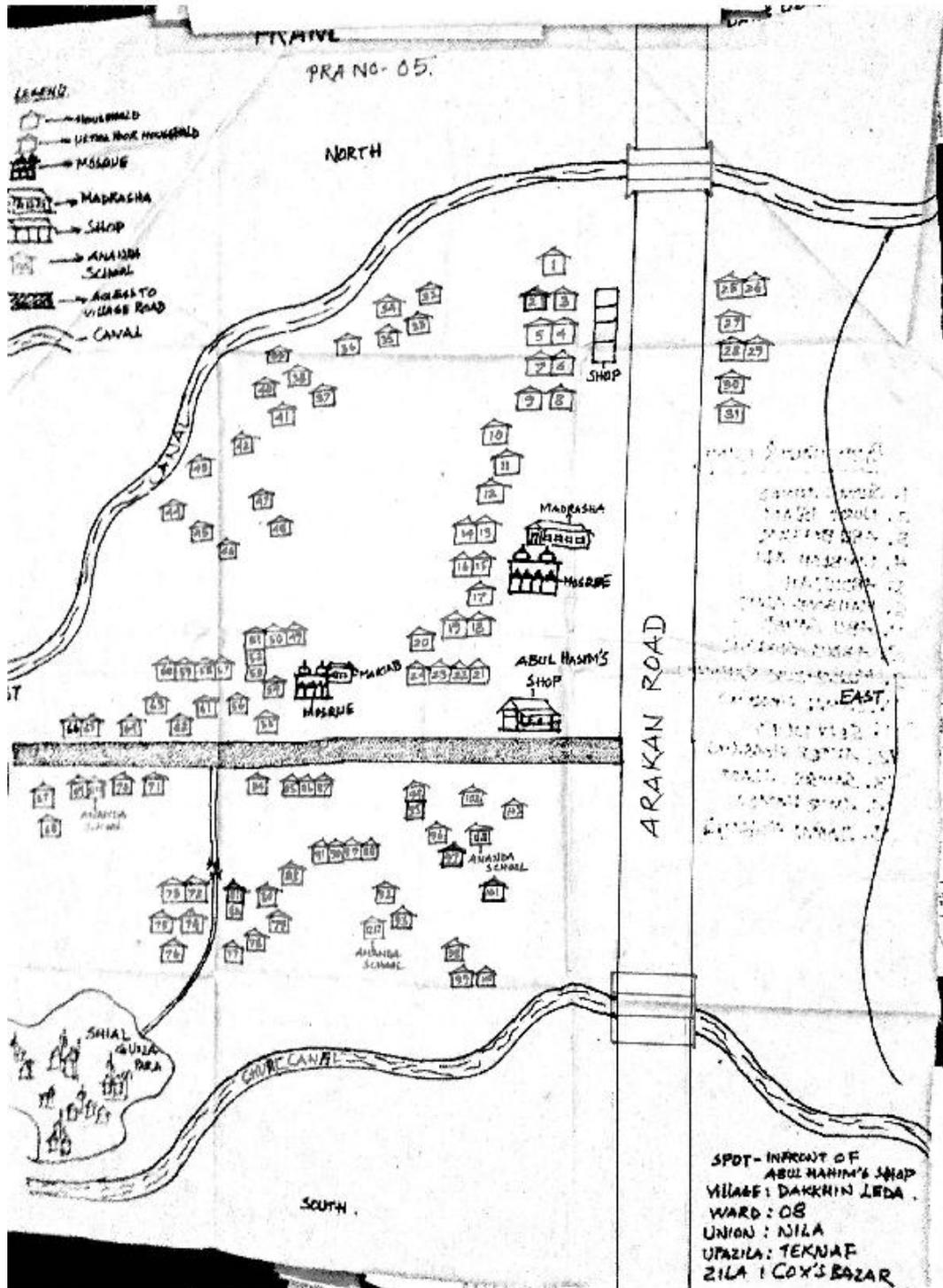
³⁷ these participants/stakeholders are not mutually exclusive

³⁸ Repatriation, resettlement and local integration are the three UNHCR 'durable solutions'

³⁹ Protection, community development, and self reliance are the phases toward local integration

⁴⁰ Self-reliance is the social and economic ability of an individual, a household or a community to meet essential needs (including protection, food, water, shelter, personal safety, health and education) in a sustainable manner and with dignity. Self-reliance, as a programme approach, refers to developing and strengthening livelihoods of persons of concern, and reducing their vulnerability and long-term reliance on humanitarian/external assistance.

Annex 7: Example of PRA techniques used during consultation process



Annex 8: Timeline of Key Events⁴¹

Events & UN activity	Year	Government of Bangladesh activity
From late 1991 to early 1992 some 250,000 people from the North Rakhine State in Myanmar took refuge in Southeast Bangladesh from alleged religious and ethnic persecution	1991	
Repatriation started	1992	At the request of the GoB, WFP has provided relief aid to the refugee population since April 1992
Between 1992 and 1997, 232,000 refugees returned to Myanmar		
	1993	MoU between GoB & UNHCR to enable UNHCR to ensure repatriation
	1994	MoU between UNHCR & GOUM allowing presence of WFP & UNHCR in Yangon and North Rakhine State to support the returnees
By 1997, 232,000 refugees returned to Myanmar	1997	15 July 1997: Last date set by GOUM for repatriation
End of repatriation		
Some 21,999 refugees stayed behind		
UNHCR urged GoB to consider the local integration of the 21,000 refugees who had not repatriated. The proposal was not accepted.		
Repatriation resumed	1998	
Some 21,500 refugees still in place	2001	GoB permitted limited Food for Work (FFW) activities for the refugees in the two camps, as well as for the surrounding host population
UNHCR's implementing partners started informal primary education		
UNHCR's implementing partners started several small-scale self-help projects		
WFP FFW started		
Establishment of refugee committees	2002	
WFP SF started		
Small-scale self help projects & activities were suspended by the GoB in 2002 as they were seen to represent a disincentive to repatriation		
Peak in repatriation in mid-2003 which subsequently slowed to a trickle due to the unwillingness of refugees to repatriate	2003	
Rohingya refugees were included in a UNHCR global initiative to promote self-reliance among refugees for whom no clear durable solution exists		
Renewed efforts by UNHCR resulted in an easing of the GOUM's acceptance of those willing to repatriate		
Expansion of WFP SF	2004	
The proposal of the UNHCR global initiative to promote self-reliance was rejected by GoB		
JAM		
Since 2006, FFW was not implemented	2006	Since 2006, FFW for the camp population was not implemented, as the government required more time to elaborate a more

⁴¹ Source: WFP project documents, WFP standard project reports, Kiragu, Li Rosi, Morris. 2011. States of Denial. A review of UNHCR's response to the protracted situation of stateless Rohingya refugees in Bangladesh.

		diversified FFW programme and submitted no proposal during the year
Third country resettlement became an option for the Rohingya population in 2006		
As a result of improved relations with the government, UNHCR was allowed to promote self-reliance in the camps, rehabilitate shelters, and initiate refugee education & resettlement programmes		
UNJI to provide assistance and services to both Rohingya and host communities (Bangladeshi)		
JAM		
Establishment of an overarching Camp Management Committee	2007	
WFP initiated a number of small-scale livelihood development activities including home gardening and a grant scheme for vulnerable women	2008	
JAM		
UNHCR added an estimated 200,000 Rohingya outside of camps to its acknowledged population of concern	2010	The government has tightened its restrictions on refugee movements outside the camps and has limited income-generating activities inside the camps
UN and UNHCR's relations with authorities deteriorated		The government suspended resettlement in November 2010
JAM		
	2011	The government declined any help through the UNJI

Annex 9: Survey Questionnaire

Impact Evaluation of Food Assistance in Protracted Refugee Situation of Bangladesh

SI. NO.		

[Conduct the interview after obtaining consent from the respondent]

(Interviewers: Clearly read out the following to the respondent for his/her consent before interviewing)

DRI-DARA with support from the United Nations High Commissioner for Refugees (UNHCR) and World Food Programme (WFP) is conducting a research project in your locality. As it is not possible to collect information from all, our intention is to collect information from some randomly selected households. Your household is one of the selected households. We will try to understand your household's socio-economic situation from your information. For this reason we will collect information from you about the members living in the household, various income generating activities, assets, social awareness, and to some extent we will collect detailed information on those issues. We will use your information only for research and all information will be kept confidential. If it is possible for you to take part in our research and provide information then please sign below. We assure you that after starting the interview, you can stop providing information at anytime. For providing us with information you will neither be benefited nor harmed. Do you agree to provide information?

Respondent's Consent			Respondent's Signature	Date
Yes		No		/ / 2012

Interviewer's Name	Date	Starting Time	End Time
	/ / 2012		

Check			FS Name: _____				
			FC Name: _____				
	YES	No	Date	Time	Signature	Code	
Accompany	1	0	/ / 2012				
Back Check	1	0	/ / 2012				
Scrutiny	1	0	/ / 2012				

	Name	Line No:
Respondent's Name:		
Name of Household Head:		

	Name	Code
District:		
Upazilla (sub district):		
Union:		
Village:		
PRA no:	HH no :	

SI	Question	Type	Code
1	Type of respondent	Nayapara camp	1
		Makeshift camp (Non-registered Refugees)	2
		Host community nearby village	3
		Leda camp (Non-registered Refugees)	4
		Refugees living in local areas (Cox's bazaar/Teknaf)	5
2	For how many years has the respondent been living here?	If he/she has always lived here then write 95	□□
3	Respondent's Religion	Islam	1
		Hinduism	2
		Buddhism	3
		Christian	4
		Others	

A1. Household Basic Information

SI no	Question	Type	Code
01	How many rooms does this HH have?		
02	What type of ownership do you have?	Own	1
		Rented	2
		Parents' home	3
		In-laws house	4
		Registered Camp's House	5
		Non-Registered Camp and built by myself or hired someone to do it for me	6
		Non-Registered Camp but built with NGO's assistance	7
		Registered camp house and additional room	8
	Others (Specify)		
03	Do you have to pay any rent/lease for the house?	Yes	1
		No	0
04	If yes, how much (in BDT)? (per year) (if the respondent tell us the rent per month, then multiply it by 12 and write)	Per year	
05	Materials of Housing (take the mostly used materials)	Grass/straw/jute	1
		stick/palm leaf/plastic	2
		Bamboo	3
		Mud	4
		Tally/tiles	5
		Tin	6
		Tripol	7
		Cement/brick /rod	8
		Wood	9
	Others		
06	What is the overall condition of the house? (Interviewer will determine)	Good	1
		Partial renovation required	2
		Major renovation required	3
		Terrible	4
07	In the last 12 months have you spent any money to improve/repair your home and or latrine?	Yes	1
		No	0
08	If yes, then how much (in BDT)?	
09	How did you manage the money (Multiple answers applicable)	Used savings	1
		Borrowed from household members	2
		Borrowed from friends/neighbours	3
		Other household members contributed the money	4
		Household members earned the money by working	5
		NGO/UNHCR provided the money	6
		By selling asset	7
		By reducing food consumption	8
			Other (specify)

A2. Household Roster

Line No. for HH members	Name	Age (in complete years)	Gender	Relationship with the HH head (See Code)	<i>(In case of individual who are 5 years old and older)</i> [] Highest level of Education	<i>(In case of individual who are 10 years old and older)</i> [] present marital status	[If refugees] When did you first come in Bangladesh? (in year) (if s/he was born in Bangladesh, then write 95)	[If refugees] Is this HH member registered as a refugee	[If refugees] Do you have Bangladeshi National ID card?	[If refugees] Do you have Bangladeshi Birth certificate?
		1	2	3	4	5	6	7	8	9
01				1=HHH						
02										
03										
04										
05										
06										
07										
08										
09										
10										
11										
A2. Gender: [1] Male [2] Female	A3. Relationship with the HH head: [01] Household Head [02] Husband/wife [03] Son/daughter [04] father/mother [05] father/mother-in-law [06] brother/sister [07] brother/sister-in-law [08] daughter/son-in-law [09] bhabhi/bonai [10] wife/husband of husband's brother/sister [11] grand son/grand daughter	[12] grand father/mother [13] grandfather/mother of husband [14] grand father-in-law/mother-in-law [15] chacha-mama sashur/ chachi-mami shasuri [16] cousin [17] husband's cousin [18] nephew/niece [19] husband's nephew/niece [20] care taker [21] <i>satin</i> [22] non-relative others, specify.....	A4. Education : [00] never enrolled/didn't pass any class [01] class 1 passed (<i>potmadon</i>) [02] class 2 passed (<i>dutiadon</i>) [03] class 3 passed (<i>thatiadon</i>) [04] class 4 passed (<i>chotiadon</i>) [05] class 5 passed (<i>pingsamadon</i>) [06] class 6 passed (<i>sesamadon</i>) [07] class 7 passed (<i>kunipanadon</i>) [08] class 8 passed (<i>cityadon</i>) [09] class 9 passed (<i>kutiadon</i>) [10] SSC or equivalent (<i>metron</i>) [11] HSC or equivalent	[12] BA/Bcom/BSc or equivalent [13] MA/Mcom/MSc or equivalent [14] Phd [15] Doctor/engineer/advocate [77] diploma/ vocational [55] Religious education only [88] don't know [98] educated but don't know how much others, specify.....	A5. Marital Status : [1] Never married/unmarried [2] Married (living with spouse), [3] divorced [4] widow/widower [5] Separated	A7/A8/A9/: [1] yes [0] no				

B2. Engagement of household members in economic activities in the last two weeks

Code:	Economic Activity/Occupation	No. of adult male engaged	No. of adult female engaged	No. of boy children below 14 years engaged	No. of girl children below 14 years engaged
		1	2	3	4
[01]	Farming /fishing				
[02]	Agro based day labour (to other's land)				
[03]	Non Agro based day labour (Example: Road repairing, construction worker)				
[04]	Fisher /Fishery				
[05]	Industrial labour (Example: Garments worker)				
[06]	Restaurant/Shop worker				
[07]	Maid/Servant/work in other people's house				
[08]	Sewing/ Handy craft/ cottage industry (With payment)				
[09]	Rickshaw/Van/Truck/Bus driver				
[10]	Hawker/Mobile hawker				
[11]	Various micro enterprise in own house				
[12]	Micro enterprise outside house				
[13]	Skilled labour (Carpenter, Potter, Black smith, Gold smith, Mechanic)				
[14]	NGO worker				
[15]	Governmental organization worker				
[16]	Imam/religious person				
[17]	Beggar				
[18]	Live stock				
[19]	Poultry				
[20]	Teacher				
	Other				

B3. How would you compare Rohingya's mobility before and after 2009?

(only for Leda, Makeshift and Nayapara camp dwellers)

Sl no	Destination	do you or any member of your family usually go to []? (if no, go to next place)	How easy/difficult to go to []?
		1	2
1	Nearby village/town		
2	Teknaf		
3	Cox's Bazaar		
4	Other parts of Bangladesh		
5	Other countries		
	1. ever visited [1]yes; [0] no	2.How easier: [1]Easier than before [3] More difficult than before	[2] No change

C. Do you and/or your household members have/has any outstanding loan?

[1]yes; [0] no

(if n to Section D.1)

If yes, how many loans you have?

(if the outstanding loan is more than one, collect details of the five highest loan)

Sl no	Sources of borrowing	Whether in cash or kind ? [1] In Cash; [2] In kind (food item) [3] In kind (non-food item)	Loan amount present outstanding (in BDT)
	2	3	4
1		1 2 3	
2		1 2 3	
3		1 2 3	
4		1 2 3	
5		1 2 3	
2.Sources of borrowing:			
[01] Bank			[08]Employer (Non Registered Refugee)
[02] Money-lender (Block wise)			[09] Employer (Bangladeshi)
[03] Money-lender(Bangladesh)			[10] Relative
[04] Money-lender (Registered Refugee)			[11] Friend/Neighbour
[05] Money-lender (Non Registered Refugee)			[12] National Level NGO
[06] Shop-keeper inside the camp			[13] Local level NGO
[07] Employer (Registered Refugee)			[14] shop-keeper outside the camp
			Other (Specify)

D.1. Food Security for every member in household

In the past 30 days, if there have been times when you did not have enough food or money to buy food, how often has your household had to:		Relative Frequency			
		Never	Rarely	Sometimes	Often
		1	2	3	4
1	Rely on less preferred and less expensive foods?				
2	Borrow food, or rely on help from a friend or relative?				
3	Purchase food on credit?				
4	Gather wild food, hunt, or harvest immature crops?				
5	Consume seed stock held for next season?				
6	Send household members to eat elsewhere?				
7	Send household members to beg?				
8	Limit portion size at mealtimes?				
9	Restrict consumption by adults in order for small children to eat?				
10	Feed working members of HH at the expense of nonworking members?				
11	Reduce number of meals eaten in a day?				
12	Skip entire days without eating?				

E.1. Food consumption and Expenditure

Please tell us which of the following was consumed in your household by any its members <u>yesterday</u> .				
sl no	Items		Consumed yesterday	Where do you obtain this food from? (see 5.Food source codes)
	Food group	Examples	[1]Yes; [0]No (If no, go to next group)	(only if consumed yesterday)
			1	2
1	CEREALS	rice, wheat, corn or any other grains or foods made from these (e.g. bread, noodles, porridge or other grain products)	1 0	
2	WHITE ROOTS AND TUBERS	white potatoes, white yam, or other foods made from roots	1 0	
3	VITAMIN A RICH VEGETABLES AND TUBERS	pumpkin, carrot, squash, + <i>other locally available vitamin A rich vegetables (e.g. red sweet pepper)</i>	1 0	
4	DARK GREEN LEAFY VEGETABLES	dark green leafy vegetables, including wild forms + <i>locally available vitamin A rich leaves such as amaranth spinach</i>	1 0	
5	OTHER VEGETABLES	other vegetables (e.g. tomato, onion, eggplant) + <i>other locally available vegetables</i>	1 0	
6	VITAMIN A RICH FRUITS	ripe mango, cantaloupe, apricot (fresh or dried), ripe papaya, dried peach, and 100% fruit juice made from these + <i>other locally available vitamin A rich fruits</i>	1 0	
7	OTHER FRUITS	other fruits, including wild fruits and 100% fruit juice made from these	1 0	
8	ORGAN MEAT	liver, kidney, heart or other organ meats or blood-based foods	1 0	
9	FLESH MEATS	beef, lamb, goat, chicken, duck, other birds	1 0	
10	EGGS	eggs from chicken, duck,	1 0	
11	FISH AND SEAFOOD	fresh or dried fish or shellfish	1 0	
12	LEGUMES, NUTS AND SEEDS	dried beans, dried peas, lentils, nuts, seeds or foods made from these (eg. hummus, peanut butter)	1 0	

13	MILK AND MILK PRODUCTS	milk, cheese, yogurt or other milk products	1	0	
14	OILS AND FATS	oil, fats or butter added to food or used for cooking	1	0	
15	SWEETS	sugar, honey, sweetened soda or sweetened juice drinks, sugary foods such as chocolates, candies, cookies and cakes	1	0	
16	SPICES, CONDIMENTS, BEVERAGES	spices (turmeric, chilly, black pepper, salt), coffee, tea, alcoholic beverages	1	0	
5. Food source: [01] Own crop/garden production; [02] Purchased from a big market; [03] Local market/shop purchase; [04] Food for work; [05] Borrowing/debts;			[06] Gift from neighbour/relatives; [07] Food aid; [08] Barter or trade of goods/services; [09] Scavenging for food/wild food collection; [10] Ration [11] Hakwer Other (specify)		

sl no	Questions	Code	
E.2.	Did you or anyone in your household eat anything (meal or snack) OUTSIDE the home yesterday?	Yes	1
		No	0
E.3.	How much money does your household spend on food on a weekly basis? (exclude food assistance for registered refugees) BDT	

E4. Non- Food Expenditure

Has your HH purchased/received/obtained/spent on any of the following (ask separately about each item and take detail)

sl no	Items	Total Value (BDT)	Main source
		1	2
Last one month expenditure			
1	Kerosene		
2	Tobacco and betel nuts (if one reports daily or weekly expense, then convert it into monthly expenses)		
3	Travel cost		
4	mobile bill		
Within last one year expenditures			
5	Clothing for household members		
6	Household utensils		
7	Furniture		
8	Textiles (bed sheets, curtains, etc.)		
9	Materials for ritual ceremonies (including marriages, births, deaths, circumcisions etc.)		
10	Education		
11	Medicine/ healthcare		
12	Others (specify) (only major expenses that have not been reported above except expenses for repairing house that has already been recorded before)		
2 Main source: [01] spending own money [02] Received as wage [03] Own production [04] Collected [05] Gift/charity		[06] Begging [07] Ration [08] Provided by NGO [09] Borrowing Others	

F. Household Assets: (For Interviewers- quantity of assets will be taken as number, but in case of land it will be in decimal, storage will be in kg and Ornaments in Ana)

	Name of asset	Does this household have [] asset? [1] yes; [0] No <i>if no, go to column 5</i>	type of ownership	quantity **		[] asset that was sold within last 12 months? [1] yes; [0] No If no, go to next asset.	[] Main reason of selling
		1	2	3		5	6
Livestock							
1.	Bull/Buffalo/horse	1 0				1 0	
2.	Goat/sheep	1 0				1 0	
3.	Poultry	1 0				1 0	
4.	Duck	1 0				1 0	
5.	Dairy cow	1 0				1 0	
6.	pigeon/Koel	1 0				1 0	
Land							
7.	agricultural land	1 0				1 0	
8.	homestead land	1 0				1 0	
9.	Pond	1 0				1 0	
10.	other land	1 0				1 0	
Transport							
11.	pickup/vehicle	1 0				1 0	
12.	motor bike	1 0				1 0	
13.	bi-cycle	1 0				1 0	
Productive							
14.	local boat	1 0				1 0	
15.	engine driven boat	1 0				1 0	
16.	Fishing net	1 0				1 0	
17.	Cycle rickshaw/van	1 0				1 0	
18.	auto rickshaw	1 0				1 0	
19.	CNG	1 0				1 0	
20.	buffalo cart	1 0				1 0	
21.	Sewing machine	1 0				1 0	
22.	Carom board	1 0				1 0	
Agricultural tools							
23.	power tiller	1 0				1 0	
24.	Plough	1 0				1 0	
25.	Joal	1 0				1 0	
26.	Irrigation pump	1 0				1 0	
27.	L L P (Irrigation machine)	1 0				1 0	
28.	Axe	1 0				1 0	
29.	Kodal(Spade)	1 0				1 0	
30.	Shabol(Shovel)	1 0				1 0	
31.	insecticide Spray machine	1 0				1 0	
32.	Roar pump	1 0				1 0	
33.	Paddle thresher	1 0				1 0	
2. Type of ownership [01] shared [02] leased [03] mortgaged [04] own [05] rented [06] Govt. allotted		6. Main reason of selling [01] did not need any longer [02] for regular livelihood [03] to buy food for family [04] to incur treatment cost [05] for payment of loan		[06] to maintain social cost [07] to meet funeral expenses [08] to pay children's school/college fees [09] additional money were needed [10] for dowry		[11] to buy agricultural tools [12] to take land/asset rent or lease [13] to buy productive materials [14] to pay lawyer/court fees [15] For going abroad [16] Because of conflict with other other (specify)	

(For Interviewers- quantity of assets will be taken as number, but in case of land it will be in decimal, storage will be in kg and Ornaments in Ana)							
	Name of asset	Do this household has [] asset? [1] yes; [0] No <i>if no, go to column 5</i>	type of ownership	quantity **	total value of [] asset (if sell today)	[] asset was sold within last 12 months? [1] yes; [0] No If no, go to next asset.	[] Main reason of selling
		1	2	3	4	5	6
Appliances/furniture							
34.	Radio/cassette player	1 0				1 0	
35.	Electric fan	1 0				1 0	
36.	Mobile phone	1 0				1 0	
37.	Television	1 0				1 0	
38.	VCD/DVD	1 0				1 0	
39.	Refrigerator	1 0				1 0	
40.	Ornaments (gold/silver)	1 0				1 0	
41.	Almirah (wardrobe)	1 0				1 0	
42.	Mosquito net	1 0				1 0	
43.	Cot	1 0				1 0	
44.	Bench	1 0				1 0	
45.	Others (Specify)	1 0				1 0	
46.	Others (Specify)	1 0				1 0	
47.	Others (Specify)	1 0				1 0	
2. Type of ownership [01] shared [02] leased [03] mortgaged [04] own [05] rented [06] Govt. allotted		6. Main reason of selling [01] did not need any longer [02] for regular livelihood [03] to buy food for family [04] to incur treatment cost [05] for payment of loan		[06] to maintain social cost [07] to meet funeral expenses [08] to pay children's school/college fees [09] additional money were needed [10] for dowry		[11] to buy agricultural tools [12] to take land/asset rent or lease [13] to buy productive materials [14] to pay lawyer/court fees [15] For going abroad [16] Because of conflict with other other (specify)	

G. Transfers/remittances during last year

if more than 5 transfer, then take major 5 from the highest amount

G.1 During the last year, has your HH received any transfers in cash/kind? Yes [1]; No [0] <i>if no, go to next G.2 section</i> <input type="checkbox"/>						
SL no	From whom?	Whether in cash? [1] Cash; [2] Kind (food item); [3] Kind (non-food item);	total amount (in BDT)	Location of the sender	Did you spend any irregular/ speed money to collect remittance [1] Yes; [0] No	If so, how much?
	1	2	3	4	5	6
1		1 2 3			1 0	
2		1 2 3			1 0	
3		1 2 3			1 0	
4		1 2 3			1 0	
5		1 2 3			1 0	
1. Sender Relative [1]; Neighbour [2]		Household member [3] HH member living in other countries [4]; Other, specify [5] _____	4. Location of sender: Same camp/village [1]; Different camp/village [2]; Different District [3];		Dhaka and Chittagong [4]; Outside country [5] Don't know [8] Other, specify	
G.2 During the last year, has your HH given out any transfers in cash/kind? Yes [1]; No [0] <i>if no, go to next section</i> <input type="checkbox"/>						
SL no	To whom?	Whether in cash? [1] Cash; [2] Kind (food item); [3] Kind (non-food item);	total amount (in Takas)	Location of the recipient	Did you spend any irregular/ speed money to send the cash/ kind [1] Yes; [0] No	If so, how much?
	7	8	9	10	11	12
1		1 2 3			1 0	
2		1 2 3			1 0	
3		1 2 3			1 0	
4		1 2 3			1 0	
5		1 2 3			1 0	
7. Receiver [01] Relative [02] Neighbour		[03] Household member [04] HH member living in other countries Other, specify _____	10. Location of recipient: [01] Same camp/village [02] Different camp/village [03] Different District		[04] Dhaka and Chittagong [05] Outside country [08] Don't know Other, specify	

H. Coping with crisis within the last year:

We would like to know about eventual challenges your family faced in the last 12 months

Events		Has the event [] occurred within last 12 months? [1]Yes [0]No	Was this an important loss for household living?*	How did you cope with the increase of spending money?
		1	2	3
1	House damaged seriously due to any events related to weather (e.g. cyclone, storms, floods or fires)	1 0	1 0	
2	Crops lost due to any natural disaster	1 0	1 0	
3	Serious illness of income earning HH member	1 0	1 0	
4	Serious illness of other HH member	1 0	1 0	
5	Death of an income earning household member	1 0	1 0	
6	Death of other household members	1 0	1 0	
7	Marriage of household member	1 0	1 0	
8	Divorce of a family member	1 0	1 0	
9	Loss of land	1 0	1 0	
10	Loss of livestock/poultry due to natural causes	1 0	1 0	
11	Poisoning/damaging livestock by others	1 0	1 0	
12	Legal Case/dispute	1 0	1 0	
13	Arrest of a family member	1 0	1 0	
14	Theft	1 0	1 0	
15	Mugging/robbery/looting/hijacking	1 0	1 0	
16	People restricting movement and asking bribes in exchange of mobility	1 0	1 0	
17	Domestic violence	1 0	1 0	
18	Other (specify)	1 0	1 0	
19	Other (specify)	1 0	1 0	

3. Coping strategies

[00] did nothing; [01] Reduce Consumption Expenditure; [02] Use savings; [03] Asset sale; [04] Sending child to other household; [05] Sending child (less than 14) to work; [06] Sending previously non-working adult HH member to work; [07] Begging; [08] Borrowing; [09] Sell Advance Labor; [10] Relief Aid; [11] Transfer from friend/ relative; Others, specify

* important loss" means " a loss that required to develop a particular strategy (among those listed) to cope up with it, or the loss that threatened the household capacity to feed all members"

I. Use of Ration Assistance Received (only for registered refugee households)

[To be collected only for last one ration after which 15 days have passed]

SI No	Items Received	The number of family members who shares the ration	Does HH consume all food that is received [1] yes [2] no	Does the ration meet the HH's need for food [1] yes [2] no	Share, sell or trade [1] yes [2] no	Amount shared with relatives	Amount sold in open market	What did you do with the money received from selling	Did you exchange with others to receive something else?		Do you have any ration amount left after the last 15 day cycle?	
									[1] yes [2] no	if yes, amount	[1] yes [2] no	if yes, value in BDT
	Food Items	1	2	3	4	5	6	7	8	9	10	11
1	Rice								1 0		1 0	
2	Salt								1 0		1 0	
3	Sugar								1 0		1 0	
4	Oil								1 0		1 0	
5	Lentils								1 0		1 0	
6	Suji (Grinded rice)								1 0		1 0	
	Non-food items											
7	Soap (bathing)								1 0		1 0	
8	Detergent/ washing soap								1 0		1 0	
9	Kerosine								1 0		1 0	
10	Firewood								1 0		1 0	

Code for 7: (Use of money received from selling Food assistance)

[1] bought other food items

[2] bought other non food items

[3] spent the money for children's education

[4] spent the money for HH members' illness

[5] gave the money to relatives

Others (specify)

J. Protection

sl no	Question	Describe how you perceive	Describe how this has changed over time?
		1	2
1	Your own or family members' safety when need to move outside from where you live?		
2	The local community's perception of refugees?		
3	Refugees' relationship with local communities?		
4	Refugees' relationship with local authorities?		
5	Refugees' opportunities to attain self-reliance? (manage to ...)		
6	That the basic needs of your family are met (e.g. health/sanitation, education and livelihood opportunities)		
7	How would you characterize your family's safety since 2009		
1 perceptions: [01] Postive/favourable, [02] Negative/restrictive, [03] don't know		2 change over time: [01] Has always been like that, [02] Changed recently (within last two years), [03] Don't know	

K. Future plan: (only Refugees)

SL	Questions	Code	
1	What is your plan for the future?	Want to live here in Bangladesh	1
		Want to go back to Myanmar	2
		Want to go to a third country	3
		Have no future plan	4
		Other (specify)	5
2	What are the barriers to implement your plan (Multiple answer applicable)	No barrier	1
		Lack of money	2
		Lack of permission	3
		Lack of security	4
		Other (specify)	5
3	How to remove the barrier (Multiple answer applicable)	Savings	1
		Permission from camp in-charge	2
		Permission from the govt.	3
		Assistance from international organization	4
		Other (specify)	5
		Permission to go out of the camp	6
		International organizations should arrange job	7
		Bangladesh govt. should arrange job	8
Other (specify)	9		

Annex 10: Sampling error estimations

Table 10: Sampling error estimations by population group

LOCATION	TARGET POPULATION	POPULATION SIZE	Population size considered in sampling	SAMPLE SIZE	ERROR (+/-, %)
NAYAPARA REFUGEE CAMP	Registered refugees	2681 households	2681	175	7.19%
	Unregistered Rohingyas	371 households	371	132	6.85%
	TOTAL	3052 households	3052	307	5.26%
KUTUPALONG REFUGEE CAMP	Registered refugees	1700 households	1700	174	7.04%
	Unregistered Rohingyas	209 households	209	26	18.0%
	TOTAL	1909 households	1909	200	6.6%
MAKESHIFT CAMP (KUTUPALONG)	Unregistered Rohingyas	<i>4350 (estimate, assuming 6 members per household, as in Kutupalong refugee camp)</i>	4350	150	7.86%
LEDA CAMP	Unregistered Rohingyas	Aprox. 2300, assuming 6 members per household	2300	262	5.70%
COX's BAZAR	Unregistered Rohingyas	??		50	
VILLAGES NEAR NAYAPARA	Locals living in poorest households (identified through PRA's)			100	
Total				1069	

For each population group, error calculations are based on the estimation of the variance of the dichotomous variables' estimates from a single survey, i.e. the estimate of the proportion of the population that verifies a particular characteristic. The applied formula is the following:

$$e = \sqrt{\frac{k^2 * p * q * (N - n)}{(N - 1) * n}}$$

Where,

e = sampling error

k = 1.96 = z-value for a confidence level of 95%

p = q = 0.5, which is most conservative value for the true proportion of the population that verifies a particular characteristic

N = population size

n = sample size

UNHCR provided the quantitative team with a full list of refugee households in both Nayapara and Kutupalong. Extracted from the ProGRES database, it contained household member level information, such as registration status and occupation. This allowed the team to create a randomized selection algorithm, including two separate strata: Registered and unregistered households. The table in the following page presents sampling error calculation for both strata, based on the formula above.

Since it also included refugees' occupation information, the ProGRES database has also allowed for the calculation of the minimal size required for samples to be used for comparing means between different population groups/strata (registered and unregistered Rohingyas).

$$n = \left(\frac{z_{\alpha} * \sqrt{2 * p * (1-p)} + z_{\beta} * \sqrt{p_1 * (1-p_1) + p_2 * (1-p_2)}}{p_1 - p_2} \right)^2$$

Where,

$z_{\alpha} = 1.96$, which means error is fixed to 5%

$z_{\beta} = 0.84$, for a statistical power of 80%

$p = \frac{p_1 + p_2}{2}$, where p_1 and p_2 are the proportion of male refugees (18 year olds and older) that have an occupation, among registered and unregistered Rohingyas respectively. The percentage of occupied refugees can indicate refugees' self reliance and therefore it is used in this estimation. It can indeed be expected that occupation is correlated with some of the variables that will be used as dependent variables in regression models, such as Household Dietary Diversity Score, Coping Strategies Index, Mobility Indicator and Protection Indicator. Females were excluded in this estimation because, for both strata, high percentages of them appear as occupied. However, the occupation of most of them is housewife, and that can't be taken into account as a self-reliance measure, for it is not remunerated.

$p_1 = 52.7\%$; $p_2 = 68.7\%$;

Therefore, $n=114 < 125$, which is sample size for unregistered refugees stratum. Thus, sizes are big enough for such a test for both strata.

Annex 11: Tables and Graphs

Table 11: Economic activities for males (18 and older) by population type (%)

Economic activity (%)	Registered refugees		Unregistered Rohingyas					Host community in nearby villages
	Kutupalong camp	Nayapara camp	Leda site	Makeshift camp	Nayapara camp	Kutupalong camp	Rohingyas living in local areas (Cox's Bazaar)	
<i>Sample size</i>	195	203	368	177	155	26	58	113
No economic activity	50.3	46.8	25.3	19.2	31.6	11.5	13.8	23.9
Non Agro based day labour	11.3	16.7	33.2	26.0	22.6	15.4	29.3	32.7
Micro enterprise outside house	2.1	7.9	10.9	10.7	7.7	3.8	3.4	8.0
Agro based day labour (to other's land)	6.7	3.9	6.0	16.4	6.5	19.2	0.0	8.8
Fisher /Fishery	2.6	3.9	3.5	2.8	3.9	11.5	19.0	9.7
NGO worker	9.7	3.9	0.5	1.1	1.3	3.8	5.2	0.0
Restaurant/Shop worker	2.1	3.0	2.4	5.1	7.7	0.0	1.7	0.0
Imam/religious person	2.6	3.0	0.5	1.1	1.3	0.0	0.0	0.9
Farming	0.5	2.5	0.3	2.8	0.6	3.8	0.0	1.8
Teacher	2.1	2.5	0.3	0.6	0.0	3.8	0.0	0.0
Various micro enterprise in own house	4.6	2.0	1.9	2.8	1.3	7.7	1.7	0.0
Sewing/ Handy craft/ cottage industry	0.5	1.5	0.3	0.0	0.0	0.0	0.0	0.9
Maid/Servant/work in other people's house	0.0	0.5	0.3	1.7	0.6	0.0	0.0	0.0
Rickshaw/Van/Truck/Bus driver	2.6	0.5	9.2	6.2	9.7	11.5	24.1	8.0
Hawker/Mobile hawker	0.0	0.5	1.6	1.1	1.3	3.8	0.0	0.0
Skilled labour (Carpenter, Potter, Black smith...)	2.1	0.5	2.7	1.7	1.3	3.8	1.7	2.7
Beggar	0.0	0.5	0.8	0.6	2.6	0.0	0.0	0.9
Industrial labour	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Live stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 12: Economic activities for females (18 and older) by population type (%)

Economic activity (%)	Registered refugees		Unregistered Rohingyas					Host community in nearby villages
	Kutupalong camp	Nayapara camp	Leda site	Makeshift camp	Nayapara camp	Kutupalong camp	Rohingyas living in local areas (Cox's Bazaar)	
<i>Sample size</i>	<i>223</i>	<i>248</i>	<i>407</i>	<i>192</i>	<i>175</i>	<i>25</i>	<i>62</i>	<i>126</i>
No economic activity	69.5	67.7	76.4	77.1	65.7	44.0	82.3	59.5
Poultry	11.7	13.3	4.7	4.2	4.6	12.0	1.6	23.0
Sewing/ Handy craft/ cottage industry (With payment)	13.0	8.5	2.0	2.1	6.9	16.0	6.5	4.0
NGO worker	2.2	2.8	0.7	0.0	2.9	0.0	0.0	1.6
Various micro enterprise in own house	0.9	1.6	1.0	3.1	0.6	16.0	1.6	0.8
Micro enterprise outside house	0.4	1.2	4.4	1.6	2.9	8.0	1.6	2.4
Live stock	0.0	1.2	0.0	0.0	0.6	0.0	0.0	0.8
Farming	0.9	0.8	0.2	0.0	0.6	0.0	0.0	0.0
Non Agro based day labour	0.0	0.8	0.5	0.0	1.1	0.0	4.8	1.6
Maid/Servant/work in other people's house	1.3	0.8	3.2	5.7	7.4	4.0	1.6	4.0
Industrial labour	0.0	0.4	0.0	0.0	1.7	0.0	0.0	0.0
Hawker/Mobile hawker	0.0	0.4	0.5	0.0	1.1	0.0	0.0	0.0
Beggar	0.0	0.4	5.9	5.2	1.1	0.0	0.0	0.0
Agro based day labour (to other's land)	0.0	0.0	0.0	0.0	1.7	0.0	0.0	1.6
Restaurant/Shop worker	0.0	0.0	0.5	0.0	1.1	0.0	0.0	0.0
Skilled labour (Carpenter, Potter, Black smith...)	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.8
Teacher	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 13: Characteristics of the Groups of Population

GROUPS	GROUP 1	GROUP 2	GROUP 3	GROUP 4
Estimate number of households in real Rohingya population living in camps	2440 (20.6%)	5067 (42.9%)	2212 (18.7%)	2105 (17.8%)
Characteristic population	Unregistered Rohingyas in Leda and the makeshift camp	Registered refugees Nayapara and Kutupalong official camps	Unregistered Rohingyas in Leda and the makeshift camp	Unregistered Rohingyas in the makeshift camp (although quite mixed)
Perc. of households in which no members work	0%. All households have at least one working member	28.5%	20.9%	0%. All households have at least one working member
Number of working members	1 to 3	0 to 2	0 to 2	1 to 3

Perc. of refugee population	15.10%	49.10%	22.00%	32.40%
Perc. of households in which children below 14 work	58.80%	23.60%	26.50%	56.70%
Characteristic activities	Micro enterprise outside the house, rickshaw/van driving, hawkers	Agro-based day labour, NGO workers	Non agro-based day labour, begging, skilled labour.	Fishing, industrial labour, maids, servants, micro enterprise inside the house, religious persons, teachers, servers in restaurants.

Source: DARA quantitative household survey (May-June 2012)

Table 14: Household Expenditures – Detailed

Type of respondent		Sample size	Food expenditure		Monthly non food expenditure		Yearly non food expenditure		House repair expenses		House rent/lease		Transfers		TOTAL WEEKLY HOUSEHOLD EXPENSES PER MEMBER	
			Average	Std dev	Average	Std dev	Average	Std dev	Average	Std dev	Average	Std dev	Average	Std dev	Average	Std dev
Registered refugees	Kutupalong camp	174	114.12	68.77	33.28	28.42	31.24	33.98	2.32	4.73	0.00	0.00	0.17	2.19	181.13	98.67
	Nayapara camp	175	92.90	69.87	29.75	25.16	38.67	50.65	2.19	3.17	0.00	0.00	4.70	44.44	168.20	121.23
Non-registered refugees	Leda site	262	196.31	94.16	49.90	31.69	30.13	35.16	6.01	7.74	0.00	0.00	1.81	12.55	284.17	136.82
	Makeshift camp	150	188.82	75.58	62.49	48.80	26.29	24.33	5.75	8.37	0.00	0.00	0.09	0.78	283.44	129.42
	Nayapara camp	132	142.86	80.06	32.61	30.82	27.13	31.38	1.26	3.54	0.00	0.00	0.28	3.15	204.14	110.41
Host community in nearby villages		100	259.98	117.41	65.87	48.68	54.08	56.92	21.27	37.01	0.24	1.07	0.19	1.37	401.63	191.91

Household expenditure structure. Averages (and std. dev.) by type of respondent. All expenses are calculated per member and on a weekly basis.

Table 15: HDDS categorisation by population group

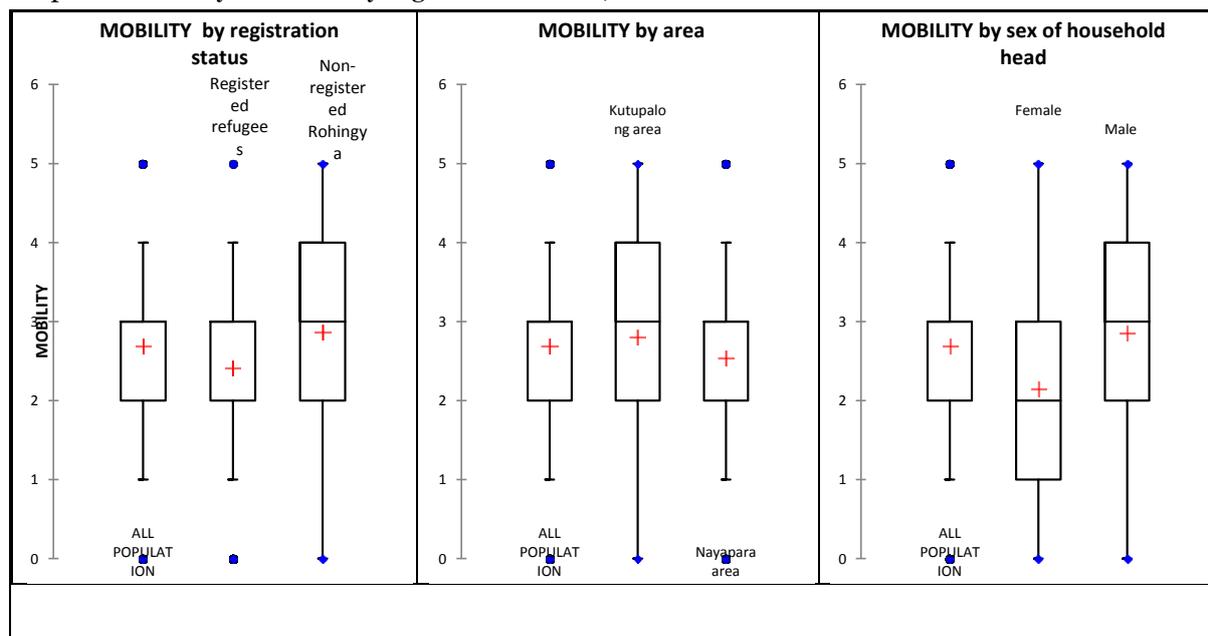
		HDDS categories			Total	% of respondents having a Bangladeshi National ID	% of household members with a Bangladeshi birth certificate
		1- Low	2- Mid	3- High			
Registered refugees	CategoriesKutupalong camp	8.6	59.4	32	100		
Leda (N 262)		0	0				
	Nayapara registered (N 175)camp	20	46.3	33.7	100	0	
Unregistered refugees	Nayapara non registered (N 132)Leda site	32.5	44.3	23.2	100	0	
	Kutupalong MSMakeshift camp (N 150)	41.9	48	10	100	0	
	Kutupalong Nayapara camp- Unregistered (N 173)refugees	34.5	51.7	13.8	100	0	
Kutupalong non registered (N 26)		0	0				
Refugees living in other areas (N 50)		0	66.7				

Categories	Inside the camp/own community	Nearby village/town	Cox's Bazar	Other parts of Bangladesh
Leda (N 262)	10	33	03	02
Nayapara registered (N 175)	25	13	2	2
Nayapara non registered (N 132)	16	27	04	04
Kutupalong MS camp (N 150)	10	25	09	07
Kutupalong registered (N 173)	26	09	03	1
Kutupalong non registered (N 26)	35	26	10	02
Refugees living in other areas (N 50)	12	11	28	
Host community (N 100)	28	28	04	02

Table 16: Change over Time in Mobility

	Evaluating movements by respondents											
	nearby village			Teknaf			Cox's Bazar			Other parts of the country		
	Easier	No change	More Difficult	Easier	No change	More Difficult	Easier	No change	More Difficult	Easier	No change	More Difficult
Leda (N 262)	54	09	37	54	09	37	53	13	35	57	19	24
Nayapara registered (N 175)	51	20	29	41	29	30	47	28	25	58	15	27
Nayapara non registered (N 132)	46	20	34	45	21	34	41	20	39	47	21	32
Kutupalong registered (N 173)	65	13	22	61	15	25	75	9	16	80	11	09
Kutupalong non registered (N 26)	61	17	22	68	32	0	65	20	15	80	20	0
Kutupalong MS camp (N 150)	50	08	41	44	11	44	50	06	43	71	5	24
Refugees living in other areas (N 50)	90	06	04	74	11	14	98	2	0	100	0	0

Graph 18: Mobility Indicator by registration status, area and HH--sex

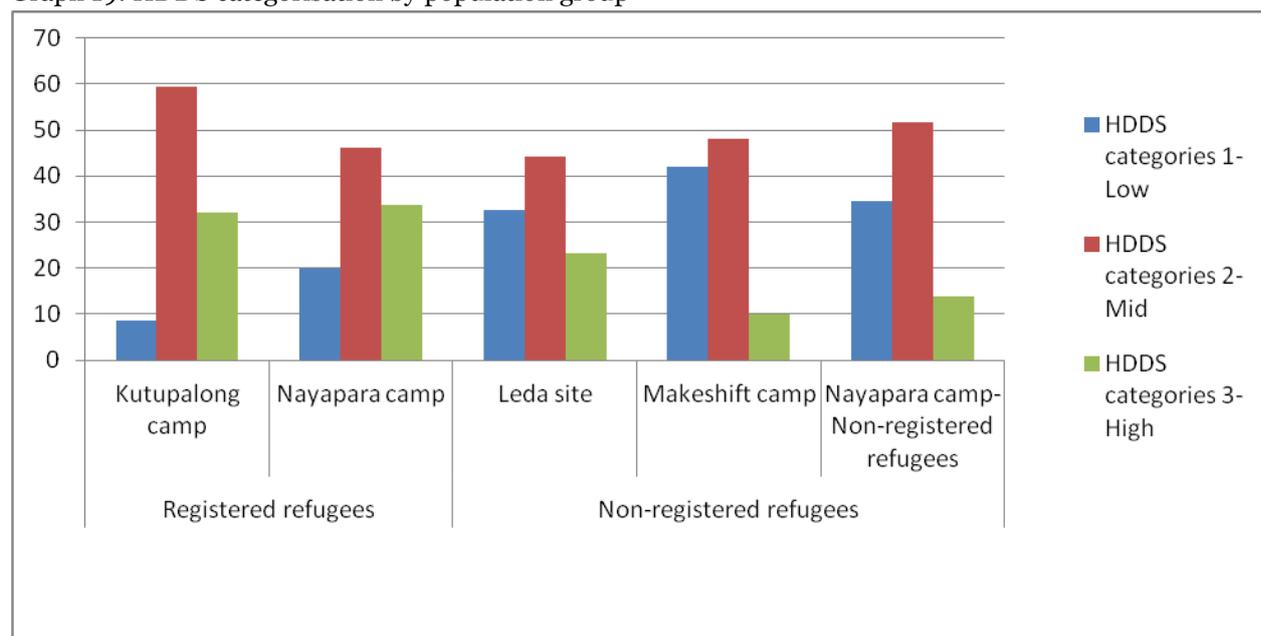


Source: DARA quantitative household survey (May-June 2012)

Table 17: Perception of family safety

Categories	Perception of the respondents (safety re. mobility) (rounded)					
	Positive response			Negative response		
	%	Has always been liked that	Changed recently	%	Has always been liked that	Changed recently
Leda (N 262)	21	16	84	78	61	39
Nayapara registered (N 175)	12	11	89	84	62	37
Nayapara non registered (N 132)	21	31	69	76	45	53
Kutupalong MS camp (N 150)	40	18	82	57	40	60
Kutupalong registered (N 173)	35	26	73	61	52	48
Kutupalong non registered (N 26)	39	58	42	58	50	50
Refugees living in other areas (N 50)	68	11	89	32	8	92

Graph 19: HDDS categorisation by population group



The registered refugees have a lower proportion in the Low HDDS and more in the High HDDS ⁴².

Table 18: Relationship Rohingyas and Community

Categories	Perception of the respondents (relationship with local communities)					
	Positive responses			Negative		
	%	Has always been liked that	Changed recently	%	Has always been liked that	Changed recently
Leda (N 262)	23	30	70	76	77	23
Nayapara registered (N 175)	12	43	57	81	80	18
Nayapara non registered (N 132)	24	52	48	69	64	36
Kutupalong MS camp (N 150)	45	30	70	53	61	39
Kutupalong registered (N 173)	39	40	60	56	84	16
Kutupalong non registered (N 26)	50	54	46	46	67	33
Refugees living in other areas (N 50)	58	21	79	42	62	38

Table 19: Relationship with local authorities

Categories	Perception of the respondents (relationship with local authorities)						
	Positive responses			Negative responses			Don't know
	%	Has always been liked that	Changed recently	%	Has always been liked that	Changed recently	
Leda (N 262)	26	71	29	53	65	35	20
Nayapara	19	68	32	60	74	23	21

⁴² Low HDDS 3, Mid HDDS 4-5 and High HDDS 6-9 food types per day. HDDS uses 12 different food groups but the maximum in this population was 9.

registered (N 175)							
Nayapara non registered (N 132)	27	78	22	49	65	35	24
Kutupalong MS camp (N 150)	29	72	28	48	65	36	23
Kutupalong registered (N 173)	39	69	31	51	77	23	10
Kutupalong non registered (N 26)	50	85	15	50	85	15	0
Refugees living in other areas (N 50)	46	48	52	32	63	37	22

Table 20: Refugees' perceived opportunities to become self reliant

Categories	Perception of the respondents (self reliance of the refugees)						
	Positive responses			Negative responses			Don't know
	%	Has always been liked that	Changed recently	%	Has always been liked that	Changed recently	
Leda (N 262)	22	35	65	74	70	30	04
Nayapara registered (N 175)	13	41	55	82	78	22	05
Nayapara non registered (N 132)	05	57	43	83	67	32	11
Kutupalong MS camp (N 150)	19	29	71	79	80	20	03
Kutupalong registered (N 173)	18	48	52	81	74	26	01
Kutupalong non registered (N 26)	12	0	100	89	78	22	0
Refugees living in other areas (N 50)	32	25	75	68	68	32	

The trend here is that refugees in Cox's Bazar are most positive followed by non-registered and then followed by registered ones. This trend indicates that the food assistance provided may act as a demotivating factor for refugees to improve their quality of life using their self-esteem.

Table 21: How would you characterize your family's safety since 2009?

Categories	Perception of the respondents (family's safety since 2009)						
	Positive responses			Negative responses			Don't know
	%	Has always been liked that	Changed recently	%	Has always been liked that	Changed recently	
Leda (N 262)	28	19	81	63	58	42	09
Nayapara registered (N 175)	30	15	85	63	64	34	07

Nayapara non registered (N 132)	34	22	73	52	49	51	14
Kutupalong MS camp (N 150)	44	23	77	46	51	49	10
Kutupalong registered (N 173)	60	19	81	38	59	38	02
Kutupalong non registered (N 26)	54	50	50	42	64	36	04
Refugees living in other areas (N 50)	68	12	88	32	19	81	0

Table 22: Money spent on repairing dwellings and sources

	Registered refugees		Unregistered refugees		
	Kutupalong camp	Nayapara camp	Leda site	Makeshift camp	Nayapara camp
Percentage of households who spent money to improve/repair home and/or latrine (%)	37.4	51.4	72.1	55.3	26.5
Sources of money spent (percentage out of repaired/improved households, %)					
Used savings	15.4	15.6	12.2	19.3	14.3
Borrowed from household members	1.5	4.4	1.1	3.6	0.0
Borrowed from friends/neighbours	49.2	17.8	53.4	59.0	14.3
Other household members contributed the money	0.0	1.1	3.2	0.0	5.7
Household members earned the money by working	63.1	67.8	65.6	66.3	65.7
NGO/UNHCR provided the money	6.2	3.3	1.6	0.0	0.0
By selling asset	1.5	2.2	1.1	0.0	0.0
By reducing food consumption	6.2	4.4	3.2	18.1	8.6
Relatives/Neighbours help	0.0	0.0	2.1	1.2	0.0

Table 23: Coping Strategies followed by Households

	Registered refugees		Unregistered refugees				Host community in nearby villages
	Kutupalong camp	Nayapara camp	Leda site	Makeshift camp	Nayapara camp	Refugees living in local areas (Cox's Bazar)	
<i>Total number of used strategies (sample size)</i>	<i>278</i>	<i>338</i>	<i>682</i>	<i>316</i>	<i>234</i>	<i>72</i>	<i>217</i>
Did nothing	34.0	38.0	29.0	22.0	29.0	13.0	26.0
Borrowing	29.0	37.0	45.0	53.0	29.0	43.0	37.0
Reduce Consumption Expenditure	29.0	16.0	21.0	19.0	32.0	31.0	26.0
Asset sale	0.0	3.0	1.0	0.0	1.0	1.0	2.0

Transfer from friend/ relative	3.0	2.0	2.0	2.0	4.0	10.0	4.0
Relief Aid	1.0	2.0	0.0	0.0	2.0	0.0	0.0
Other	3.0	1.0	0.0	0.0	1.0	1.0	4.0
Sending child to other household	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Begging	0.0	0.0	1.0	1.0	0.0	1.0	0.0
Sending child (less than 14) to work	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sending previously non- working adult HH member to work	0.0	0.0	0.0	1.0	0.0	0.0	0.0
Sell Advance Labor	1.0	0.0	1.0	1.0	0.0	0.0	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 24: Two-week Estimated Income

	Registered refugees				Unregistered refugees										Host community in nearby villages	
	Kutupalong camp		Nayapara camp		Leda site		Makeshift camp		Nayapara camp		Kutupalong camp		Refugees living in local areas (Cox's Bazar and Tekhnaf)			
<i>Sample size</i>	165		188		371		187		166		37		61		137	
Statistics	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Total money earned in the last two weeks (Tk)	755.58	905.1	727.79	1039.14	1406.85	1193.78	1674.03	1328.07	1250.97	1221.48	1015.68	769.62	2120.74	3884.48	1042.81	1082.73
Daily income (Tk)	102.07	120.1	99.66	125.24	171.31	97.42	199.5	143.92	141.68	174.33	131.12	99.46	222.46	269.04	140.85	132.59
Number of working days in the last two weeks	9.9	4.2	9.6	4.8	8.7	3.9	9.1	3.7	9.9	4.0	9.0	3.9	8.4	4.0	9.1	4.1
Hours of work per day	6.0	3.4	5.9	3.7	8.1	2.5	8.2	2.5	7.9	3.0	7.5	3.8	8.3	2.5	6.4	3.2
Number of hours of work in the last 2 weeks	55.8	40.0	52.6	45.5	69.1	39.5	73.7	38.6	77.7	45.2	63.6	39.4	69.5	41.2	52.2	32.9

Table 25: Summary of Regression Models

Concept/indicator	Model	Main regressor variables	Other regressor variables	Results depending on “principal” regression variables	Goodness of fit indicators
Food consumption: Household Dietary Diversity Score (HDDS) Ranging from 0 to 12	M1. Multiple linear regression model without joint effects	Type of household Wealth score	Economic activity of HHH (dummy variable) Marital status of HHH Level of education of HHH Economic activity group Number of activities	Type of household: Unregistered in makeshift camp 3.48 Unregistered in Leda 3.79 Unregistered in Nayapara camp 3.37 Registered in Nayapara camp 4.03 Registered in Kutupalong camp 4.24	Adjusted R-squared: 0.926
	M2. Multiple linear regression model with joint effects	Type of household Wealth score Economic activity of HHH (dummy variable)	Type of household * Economic activity of HHH (dummy) Marital status of HHH Number of activities Type of household *Percentage of HH members older than 60 Level of education of HHH Type of household *Poultry i.o.o.h.i.g.a's* Economic activity group		Adjusted R-squared: 0.928
Food Security : Coping Strategies Index (CSI) Ranging from 0 (no strategy is ever adopted) to 96 (all strategies are adopted often)	M3. Multiple linear regression model without joint effects	Registration status Household size Earnings per HH member	Economic activity group Marital status of HHH	Registration status: Unregistered 32.18 Registered 27.51	Adjusted R-squared: 0.8749
	M4. Multiple linear regression model with joint effects	Registration status Earnings per HH member Beggar i.o.o.h.i.g.a's Wealth score Day labor i.o.o.h.i.g.a's	Poultry i.o.o.h.i.g.a's Fisher i.o.o.h.i.g.a's Sewing i.o.o.h.i.g.a's Refugee status*Sewing Refugee status*Fisher		Adjusted R-squared: 0.8804
Protection: Indicator based on module J of the household questionnaire Ranging from 0 to	M5. Multiple linear regression model without joint effects	Wealth score Location Marital status of HHH Earnings per HH member	Maid i.o.o.h.i.g.a's Beggar i.o.o.h.i.g.a's Micro enterprise in own house i.o.o.h.i.g.a's Sex of HHH Micro enterprise outside house i.o.o.h.i.g.a's Rickshaw i.o.o.h.i.g.a's	Location: Kutupalong 0.73 Nayapara 0.28	Adjusted R-squared: 0.4979
Mobility: Indicator based on module B3 of the household questionnaire Ranging from 0 to 5	M6. Multiple linear regression model without joint effects	Registration status Sex of HHH	Day labor i.o.o.h.i.g.a's Earnings per HH member Other i.o.o.h.i.g.a's Maid i.o.o.h.i.g.a's Non agro based day labour Economic activity group Beggar i.o.o.h.i.g.a's	Registration status: Unregistered 2.05 Registered 1.61	Adjusted R-squared: 0.9013

*i.o.o.h.i.g.a's =is one of household's income generating activities

Table 26: Description of the Coping Strategy Index

The Coping Strategies Index (CSI), which measures the level of food security in the household, **is based on a series of strategies for which the respondent is asked how often the household had to adopt each of them in the last month, due to lack of food and money to buy it. Strategies are given a degree of severity following the scale below.**

Level of severity	
1	Household members eat sufficiently
2	Household members eat sufficiently but adopt strategies that will have consequences in the future
3	Household members reduce the food ration
4	Household members reduce the food ration and adopt strategies that will have severe consequences in the future

A numeric value is associated to the level of frequency of adoption of each strategy

Frequency	Value
1. Never	0
2. Rarely	1
3. Sometimes	2
4. Often	3

CSI is the sum of: the level of severity of each strategy multiplied by the value associated to the frequency with which it is adopted.

CSI distribution statistics	
Sample size	893
Mean	31.0
Std Dev.	13.1
Median	32.0

The categorization of the CSI is based on its distribution on the main five population groups, taking their relative weight into account.

Categories	CSI values	Perc. of population
Severe	[38-70]	33.5 %
Mid-range	[26-37]	33.6 %
Gentle	[0-25]	32.9 %

Acronyms

ACF	Action Contre La Faim
ALNAP	Active Learning Network for Accountability and Performance
BDRCS	Bangladesh Red Crescent Society
CIC	Committee In Charge
CSI	Coping Strategy Index
CT	Core Team
DRI	Development Research Initiative
DAC	Development Assistance Committee
EC	European Commission
ECHO	European Community Humanitarian Office
EQAS	Evaluation Quality Assurance System
ET	Evaluation Team
FGD	Focal Group Discussions
HHDDS	Household Dietary Diversity Score
IFRC	International Federation of Red Cross
IM	Inception Mission
IR	Inception Report
MDMR	Ministry of Disaster Management and Relief
NGO	Non-Governmental Organisation
OE	Office Of Evaluation
PI	Personal Interviews
PRA	Participatory Rural Appraisal
RRRC	Refugee Relief and Repatriation Commissioner (or 3RC)
RT	Research Team
TAI	Technical Assistance Incorporated
TOR	Terms of Reference
UNDAF	United Nations Development Assistance Framework
UNFPA	United Nations Population Fund
UNHCR	Office of The United Nations High Commissioner for Refugees
UNICEF	United Nations Children Fund
WFP	World Food Programme

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