VERIFICATION EXERCISE

Preliminary Result March 2014 World Food Programme



ACRONYMS

СР	Cooperating Partner
HH	Household
HHH	Headed Household
MEB	Minimum Expenditure Basket
MFT	Multi-Functional Teams
NFI	Non-Food Items
PLW	Pregnant and Lactating Women
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children Emergency Fund
VASyR	Vulnerability Assessment of Syrian Refugees
WASH	Water Sanitation and Hygiene
WFP	World Food Programme

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1 BACKGROUND

In May and June 2013, WFP, UNHCR and UNICEF conducted the Vulnerable Assessment of Syrian Refugees (VASyR¹), a multi-sectoral survey aiming at understanding the living conditions of refugees and their vulnerability profile in order to guide proper responses.

The survey concluded that approximately 30 percent of the Syrian refugee population could meet their basic food and non-food needs without engaging in irreversible negative coping strategies. The remaining 70 percent of the population were ranked as being highly or severely vulnerable according to multi-sectoral criteria.

Based on the outcomes of the VASyR, WFP and UNHCR jointly reached a decision to re-focus on food hygiene and baby kit assistance to the most vulnerable Syrian refugees through a targeting approach. The targeting approach is based on responsible programming to ensure that the assistance reaches those in need most and that resources are used effectively and efficiently. The targeting exercise in Lebanon started in November 2013.

Households eligible for assistance were selected based on a criterion known as Burden Index². This index assigned a score to each registration case according to the information recorded during the UNHCR registration process of refugees and hence available in the UNHCR PROGRES database³. This score, mainly based on the demographic characteristics, aimed to rank registration cases according to their level of dependency as proxy of household ability to generate income to cover the needs of all household members. The 70 percent of registered Syrian refugees with the highest burden scores, theoretically reflecting the highest degree of dependency, were provided with food, hygiene and baby kit assistance.

Being aware of the limitations of the Burden Index, WFP, UNHCR and various Cooperating Partners (CPs) designed a comprehensive appeal and verification process to guarantee the accuracy of the targeting roll-out, therefore ensure that those most in need were receiving assistance. The families who were excluded according to the Burden Index could appeal and request a revision of their case. All the families who appealed received a verification visit to assess their vulnerability situation, by a team composed by WFP, UNHCR and CPs. In addition, all the households living 500 meters above sea level were visited for their vulnerability status verification due to their special vulnerability risk during winter, apart from the submission of an appeal.

2 PURPOSE

The objectives of the present report are to:

- Provide an overall overview of the vulnerability profile of the households visited during the verification exercise.
- Highlight the differences and similarities in living conditions between the households that were reincluded after verification and those that remained excluded.
- Identify the indicators that show the highest discrepancies by re-inclusion status and that therefore could be considered as the best proxies of overall vulnerability.

¹VASyR: http://54.225.218.247/wfp/documents/Lebanon/VASyR.pdf

² WFP 2013, Executive Summary, Vulnerability Assessment and Targeting.

³ PROGRES: UNHCR's refugee registration database.

3 METHODOLOGY

The verification exercise was carried out through household visits and key information on the living conditions of the families was collected through direct observation and interviews with the family members. The questionnaire was designed to include the most sensitive indicators of vulnerability identified by the VASyR analysis. Additional questions were included to get a more balanced overview of the situation across sectors and through direct observation. The verification questionnaire is included in Annex 1.

The data from all the questionnaires was analyzed and a simplified version of the VASyR multi-sectoral criteria⁴ was applied to classify the vulnerability status of any given family and its eligibility or need for assistance. The final validation of re-inclusion or exclusion results was discussed within a Multi-Functional Team (MFT). The MFT was consisted of a UNHCR staff member, a WFP staff member and - where possible - one or more designated CP staff members. The MFT reviewed the verification questionnaires results and provided a final decision on the re-inclusion or exclusion of each household who had appealed.

In February 2014, a Targeting Task Force was established to revise and fine-tune the targeting criteria and methodology in order to reduce the risk of inclusion and exclusion errors. The analysis of the verification database constitutes a key source of information for this purpose due to the large sample size and the multi-sectoral perspective of the indicators included. The results provide the vulnerability profile of the excluded families and they will contribute to get a better knowledge on the accuracy of the Burden Score and the verification criteria.

The targeting and the verification exercises began during the last quarter of 2013. Seven CPs were contracted to collect the data. A total of 30,673 households were visited including all households who appealed after their exclusion from assistance and all the families who lived 500 meters above sea level. The data was collected using paper questionnaires and mobile devices.

Nine different databases were consolidated into one in order to facilitate the analysis process. After data cleaning, the final database includes 30,673 cases.

Basic statistics for each direct and derived indicator were calculated for all visited families and by reinclusion/exclusion status based on the verification vulnerability criteria. The comparison of vulnerability profiles between re-included and excluded households was analyzed through statistical tests for means and frequencies comparison (t-tests, z-tests and Chi-square tests). Due to the big sample size the results can be regarded statistically significant.

The analysis of the data was performed using the statistical software package of SPSS 20⁵, whereas Excel 2010 was used for tables and graphs.

3.1 Limitations

The verification database analyzed in the present report corresponds to the households who were initially excluded by the Burden Score in October-November 2013, and households who applied for verification of their status by November 2013 or the households whose place of residence was located 500 meters above sea level at

⁴ WFP 2013. Targeting verification criteria.

⁵ Reference of SPSS software.

that time. The selection of the households was not carried randomly and this means that the results are representative for the group of households selected and cannot be extrapolated to the whole Syrian refugee population in Lebanon.

For a high percentage of households interviewed, the total monthly expenditure per households only consists of expenses on food and rent as a result of a misunderstanding of a given question. Therefore, whereas total monthly expenditure is underestimated, results on food and rent expenditure share may well be overestimated, which may also have an impact on the sector scores that include these variables (food security, economic vulnerability, education, protection and NFI) increasing the likelihood of overestimating household vulnerability for these sectors. In order to reduce the impact of this limitation in the data collected, the original criteria were modified and the severely and moderately food insecure and economic vulnerable households were not automatically re-included.

Whereas the verification criteria were based on household definition, the unit of observation and analysis for this verification process was the UNHCR registration case number. It is expected that this difference in the unit of analysis may have an impact on dependency ratio, expenditures, coping strategy and food consumption.

4 KEY FINDINGS⁶

The overall results of the appeal and verification exercise were informative especially in terms of the living conditions of the households excluded from assistance- the households who appealed and those who lived 500 meters above sea level. In general, major differences were found between excluded households and re-included ones across the various sectors. The results showed that re-included households were considerably more vulnerable in comparison to the excluded households.

- Fourteen percent of the households visited were headed by females, 0.3 percent by children under 18 years old and 4 percent by elderly (above 60) and 7 percent were single-headed households with dependents. These cases were significantly more likely to be re-included. The proportion of child-headed households among re-included households is 7 times higher than among the excluded.
- The average household size was found to be 4.25. Twenty four percent of the re-included households were found to have more than 7 members compared to 6 percent of the excluded households. The excluded households had on average fewer children (under 18 years old) per household compared to re-included households, with 1.5 and 2.7 children respectively.
- Twenty one percent of the re-included households had more than 3 dependents per 2 non-dependent members (dependency ratio>1.5). This percentage is more than 4 times lower among the excluded household (4.6 percent).
- Half of the verified households live in apartments or independent houses; 27 percent in separate rooms or collective shelters; 22 percent in warehouses, garages, tents or unfinished shelters; and 0.4 percent were found to be homeless. The proportion of households living in the 2 worst categories of housing is almost 3 times higher among the re-included than the excluded.

⁶ Further analysis of the results is currently in process.

- The highest portion of households visited (69 percent of the excluded and 59 percent of the reincluded) pay rent for unfurnished shelters or lives in shelters provided by employers. Twenty seven percent of the re-included households and 10 percent of the excluded households depend on assistance to be able to reside in a given place. Out of 359 cases found squatting, 107 were excluded based on the overall vulnerability score.
- Households living in smaller spaces were significantly more likely to be re-included. Whereas 13 percent of the excluded households live with less than 3.5 m² per person, more than double of the re-included cases were in this situation (37 percent).
- Twenty nine percent of the verified households reported not having access to soap or hygiene items and 21 percent reported not having access to sufficient water for all essential needs. Regarding access to toilet facilities, 46 percent used traditional pit latrines without slabs and 8 percent used the open air as a toilet facility. Fifteen percent of verified households were sharing a latrine with 15 other people or more, and a similar percentage of the households did not have access to bathrooms (13 percent). The percentage of re-included households sharing a latrine with 15 other people or more is 3 times higher than among the excluded, and those without access to bathroom is almost 5 times higher among re-included compared to the excluded households. Also, the proportion of households using open air as toilet among the re-included is higher than among the excluded households.
- Excluded households had significantly more access to non-food items (NFIs) than re-include households mainly to refrigerators, water heaters, winter clothes or beds.
- Most of the household heads of the verified households (69 percent) received some level of education, usually below secondary, whereas 20 percent of them did not receive any education at all. The likelihood to be re-included increases with the lower the level of education.
- The three main sources of income were 1) income from labor, 2) cash derived from assistance/begging or gifts and 3) debts or loans. The majority of the excluded households (63 percent) relied on labor as their main source of cash, while 41 percent of the re-included households relied on labor as their main source of income.
- Households who remained excluded spent on average US\$133 per person per month, whereas reincluded households' average expenditure was US\$72 per person per month.
- Fifty four percent of the re-included households spent at least 75 percent of their total expenditure on food compared to 22 percent of the excluded households.
- Most of the population (78 percent) had acceptable food consumption but were applying food consumption-related coping strategies. The percentage of households with border line food consumption is double among the re-included than within the excluded; whereas the proportion of households with acceptable food consumption is 3 times higher among the excluded households.
- About three-fourths of the verified households reported having experienced a lack of food or money to buy it, as well as having resorted to food consumption-related coping strategies.
- Among the non-food consumption-related coping strategies, the most common one was buying food on credit or borrowing money to buy food, which is applied by the 71 percent of all the interviewed households. Between 12 percent and 22 percent of the households reduced their non-food essential expenditures, such as health or education, spent savings, sold household goods and/or withdrew children from school. Less than 3 percent of the households resorted to more severe coping strategies, such as child labor, early marriage, begging or accept illegal and high risk jobs.

- The biggest differences between the excluded and the re-included households in resorting to each coping strategy were begging (ratio of the included/excluded=6.1), child labor (4.6), accepting high risk illegal jobs (3.0), early marriage (2.9) and withdrew children from school (2.1).
- Seventy eight percent of the households had borrowed money in the 3 months prior to the survey. Nearly half of the households verified were found to have debts of more than US\$200 and one-fourth of households had more than US\$600 debt. Although significantly different, the likelihood of being re-included does not differ much among debt categories.
- The maximum number of referrals was done for the health sector, 44 percent of the visited households. The proportion of the households who were referred was significantly higher among the re-included households, with the biggest difference in the shelter sector, which showed doubled proportion of referrals among the re-included than the excluded households.
- The proportion of moderately and severely vulnerable households for each sector among the reincluded was on average almost 3 times higher than among the excluded. Considering this difference as a proxy of the discriminant power of each indicator, the non-food item (NFI) and the shelter sectors showing the biggest difference with a percentage 4 times higher for the re-included households, followed by food security (3.3) and WASH (3). In terms of specificity⁷, economic vulnerability was the sector that better identified low and mild vulnerability categories, with the lowest proportion of the household re-included.
- Results show that some of the households in need of assistance were excluded by the burden score confirming the need of having a review process to verify the vulnerability of the households and reduce the exclusion error that unavoidably occur when the burden score is applied for targeting.
- According to all the indicators, the vulnerability of re-included households was significantly higher than that of the excluded ones confirming that the applied criteria allow the identification of vulnerable households.
- Indicators that show the biggest difference in percentage between the re-included and excluded, appearing therefore as potential good proxies of vulnerability, were: child-headed households, begging, children involved in income generation, early marriage and accepting illegal and high risk jobs as coping strategies, big household size, disability, dependency ratio, families with more than 2 children under 5, school-age children, elders or people with specific needs, more than 1 member under 18 with disability, access to bathroom, type of toilet, type of housing and occupancy, NFI items, expenditure per capita/MEB and sum of vulnerabilities for protection.

⁷ Probability of correctly classifying a non-vulnerable household; which means, the probability that for a non-vulnerable household the proxy indicator provides a negative result. It is therefore, the capacity of the indicator to detect non-vulnerability. It is also known as proportion of true negatives.

5 RESULTS

5.1 Interviewees

Sixty five percent of the verification questionnaires was conducted with the head of the household, while 22 percent was conducted with the wives of the head of household and the remaining 3 percent was conducted with other members of the household.

5.2 Demographics

5.2.1 Head of household

The majority of household heads were male, with an average age of 36 years old. Fourteen percent of the families visited were headed by females, 0.3 percent by children under 18, 4 percent by elderly (above 60) and 7 percent were single-headed households with dependents. Although these cases were significantly more likely to be re-included, percentages of the excluded and re-included households had a ratio below 2 for these indicators, except for child-headed households as the proportion among the re-included households was 7 times higher than among the excluded, and for single headed households with dependents as the percentage is almost twice higher among the re-included compared to the excluded (Table 1).

Table 1 shows the proportion of excluded and re-included households by household head. Thirty four childheaded families (41 percent), 1,289 single-headed households with dependents (64 percent), and 71 percent of female headed household and 74 percent of elderly headed households were excluded, based on the overall vulnerability score obtained classifying these households as low or mildly vulnerable.

Several factors could explain the exclusion, especially for the child-headed households:

1) In reality, the household was not always headed by a child. Some cases were verified during the MFT's survey confirming this possibility;

2) It is a child-headed household but receiving some kind of assistance or living in certain circumstances allow him/her to live in relative good conditions. This is the reason why it is important to take into consideration registration cases as a unit instead of household;

3) The limitations on the quality of the data collection and the modification of the criteria must also be considered as they might imply a reduction of sensitivity⁸;

4) The overall criteria were not sensitive enough to capture all these cases, even in optimal conditions.

Table 1: Head of household by re-inclusion status (HHH: Headed households)									
	Excluded		Re-in	cluded	То	tal			
	N	%	N	%	N	%			
Female HHH	3043	13.2%	1057	16%	4100	13.9%			
Child HHH	34	0.1%	49	0.7%	83	0.3%			
Elderly HHH	864	3.6%	348	5.1%	1212	4%			
Single HHH	1289	5.5%	727	10.7%	2016	6.7%			

⁸ Probability of correctly classifying a vulnerable household which means, the probability that for a vulnerable household the proxy indicator provides a positive result. It is therefore, the capacity of the indicator to detect vulnerability. It is also known as proportion of true positives



Figure 1: Proportion of head of household by re-inclusion status

5.2.2 Household Composition

The average household size was found to be 4.25, including 2.4 adults and 1.7 children (under 18) per household. Twenty four percent of the re-included households were found to have more than 7 members compared to only 6 percent of the excluded households. Excluded households had on average fewer children (under 18) compared to re-included households, 1.5 and 2.7 children respectively. The average number of children under the age of five for all households was 0.7. On average, re-included households had usually one child per family, whereas in excluded cases households did not always have a child (average 0.6). The average number of children under 2 years old follows this trend, as the average per household is low but still shows a difference between the reincluded (0.44) and the excluded households (0.3). The average number of elderly also differed: out of 10 excluded households, there was one elderly person compared to one out of every 3 re-included households.

	Table 2: Family members by age and re-inclusion status of the household										
	Number of members										
0 1 2									=3		
		Ν	%	Ν	%	Ν	%	Ν	%		
Under 5yrs	Excluded	12658	80.1%	6955	77.8%	2825	71.5%	357	45%		
	Re-included	3140	19.9%	1985	22.2%	1125	28.5%	430	55%		
5-15yrs	Excluded	14188	84.8%	4293	73.2%	2782	69.2%	1394	52%		
	Re-included	2539	15.2%	1573	26.8%	1236	30.8%	1291	48%		
16-17yrs	Excluded	18960	80.9%	2718	66.1%	406	48.3%	129	42%		
	Re-included	4486	19.1%	1397	33.9%	434	51.7%	178	59%		
18-59yrs	Excluded	298	48.8%	2496	84%	14466	80.2%	6061	71.3%		
	Re-included	313	51.2%	476	16%	3567	19.8%	2437	28.7%		
above 60	Excluded	20263	78.9%	1474	67.1%	278	59.1%	74	42%		
	Re-included	5427	21.1%	723	32.9%	192	40.9%	103	58%		

Table 5. Vulnerable members of the family by re-inclusion status of the household								
		Number of vul	nerable membe	ers				
		0	1	2	>=3			
	Excluded	78.9%	67.1%	59.1%	42%			
Elder	Re-included	21.1%	32.9%	40.9%	58%			
DIW	Excluded	78.6%	60%	80%	58.9%			
PLW	Re-included	21.4%	40%	20%	41.1%			
Specific Needs	Excluded	82%	65.9%	53.3%	53.1%			
	Re-included	18%	34.1%	46.7%	46.9%			

Table 3: Vulnerable members of the family by re-inclusion status of the household

5.2.3 Dependency

The dependency ratio is the proportion of dependents in relation to the non-dependent members of the household. Dependents are those members under the age of 18, those aged 60 or more, and non-autonomous adults who need support for daily basic activities (i.e. going to the toilet).

Eighty one percent of all households verified were found to have a low dependency ratio (less than one). Among these, 84 percent were excluded households. Only few cases (4.5 percent) were found to have more than 2 dependents per non-dependents members; 60 percent of them were re-included households. Around 6.7 percent of total households were found to be single headed households with dependents. Thirty five percent of these households were re-included.

Dependency ratio	Excluded		Re-ind	cluded	Tot	Total	
	N	%	N	%	N	%	
≤ 1	20196	86.9%	4154	61.3%	24350	81.1%	
1-1.5	1979	8.5%	1198	17.7%	3177	10.6%	
1.6 - 2	536	2.3%	613	9%	1149	3.8%	
>2	540	2.3%	810	12%	1350	4.5%	

5.2.4 Special Needs

Special needs is defined as any person requiring specific needs, such as pregnant and lactating women, people suffering of mental or physical disability, temporary injured, chronically ill or presenting serious medical conditions or anyone in need of support to accomplish daily activities.

The average number of pregnant and lactating women is 0.35 per household, with little difference found between the excluded and re-included households, 0.3 and 0.4 respectively.

Dro	apont	Exclud	led	Re-inclu	ded	Total	
Pregnant		N	%	Ν	%	N	%
	0	21203	97.3%	6035	95.7%	27238	96.9%
0-17	1	498	2.3%	201	3.2%	699	2.5%
0-17	>1	100	.5%	68	1.1%	168	.6%
	Total	21801	100%	6304	100%	28105	100%
	0	16214	72.9%	4507	69.8%	20721	72.2%
	1	5947	26.7%	1898	29.4%	7845	27.3%
18-59	>1	77	.3%	55	.9%	132	.5%
	Total	22238	100%	6460	100%	28698	100%
	0	21850	99.8%	6289	99.6%	28139	99.8%
	1	31	.1%	21	.3%	52	.2%
above 60	>1	5	.0%	5	.1%	10	.0%
	Total	21886	100%	6315	100%	28201	100%

 Table 5: Dependency ratio of pregnant and lactating women by age and household re-inclusion status

The results showed that on average there was one member with disability in every ten households. Excluded households had on average 0.07 disabled individuals, whereas re-included households have 0.17 disabled individuals. To get a better idea of the proportion, among the 100 excluded households 7 of them have a disabled member to take care of, while 17 out of 100 re-included families have disabled individuals.

Table 6: Dependency ratio of disabled members by age and household re-inclusion status

Disability		Exclu	uded	Re-in	cluded	Total	
		N	%	Ν	%	Ν	%
	0	21528	98.7%	6081	96.5%	27609	98.2%
	1	236	1.1%	169	2.7%	405	1.4%
0-17	>1	39	.2%	54	.9%	93	.3%
	Total	21803	100%	6304	100%	28107	100%
	0	21120	97.1%	5858	93%	26978	96.2%
10 50	1	583	2.7%	410	6.5%	993	3.5%
18-59	>1	41	.2%	34	.5%	75	.3%
	Total	21744	100%	6302	100%	28046	100%
	0	21811	99.7%	6264	99.2%	28075	99.6%
above 60	1	64	.3%	41	.6%	105	.4%
	>1	10	.0%	8	.1%	18	.1%
	Total	21885	100%	6313	100%	28198	100 %

The average number of temporarily injured individuals was 0.2 per household. As shown in Table 7, no major difference was found between the excluded and re-included households.

Table 7: Dependency ratio of temporarily injured members by age and household re-inclusion status								
Tempo	rarily	Exclu	ded	Re-incl	uded	Tota	al	
Injured		N	%	N	%	N	%	
	0	21058	96.2%	5895	93.2%	26953	95.5%	
	1	730	3.3%	366	5.8%	1096	3.9%	
0-17	>1	99	.5%	66	1%	165	.6%	
	Total	21887	100%	6327	100%	28214	100%	
	0	19464	88.8%	5433	85.2%	24897	88%	
10 50	1	2257	10.3%	844	13.2%	3101	11%	
18-59	>1	201	.9%	99	1.6%	300	1.1%	
	Total	21922	100%	6376	100%	28298	100%	
	0	21794	99.5%	6251	98.9%	28045	99.4%	
above 60	1	97	.4%	53	.8%	150	.5%	
	>1	6	.0%	16	.3%	22	.1%	
	Total	21897	100%	6320	100%	28217	100%	

The average number of household members who need daily support to accomplish basic activities was 0.83. While the excluded households had on average 0.7 members with special needs, the re-included families had on average 1.3 members.

Table 8: Dependency ratio of chronically ill members by age and household re-inclusion status

		Exclu	uded	Re-in	cluded	То	tal
Chroni	Chronically Ill		%	N	%	N	%
	0	20832	95.2%	5631	88.8%	26463	93.8%
	1	905	4.1%	569	9%	1474	5.2%
0-17	>1	141	.6%	142	2.2%	283	1%
	Total	21878	100%	6342	100%	28220	100%
	0	17199	77.6%	4246	65.4%	21445	74.8%
	1	4113	18.5%	1717	26.4%	5830	20.3%
18-59	>1	862	3.9%	532	8.2%	1394	4.9%
	Total	22174	100%	6495	100%	28669	100%
	0	21210	96.7%	5938	93.5%	27148	95.9%
	1	642	2.9%	353	5.6%	995	3.5%
above 60	>1	89	.4%	63	1%	152	.5%
	Total	21941	100%	6354	100%	28295	100%

Serious	Serious medical condition		uded	Re-in	cluded	Тс	otal
conc			%	Ν	%	Ν	%
0-17	0	21435	98.3%	6054	96.2%	27489	97.8%
	1	317	1.5%	195	3.1%	512	1.8%
	>1	51	.2%	45	.7%	96	.3%
	Total	21803	100%	6294	100%	28097	100%
	0	20627	94.5%	5649	89.1%	26276	93.3%
	1	1059	4.9%	612	9.7%	1671	5.9%
18-59	>1	131	.6%	78	1.2%	209	.7%
	Total	21817	100%	6339	100%	28156	100%
	0	21696	99.1%	6208	98.2%	27904	98.9%
above 60	1	183	.8%	98	1.5%	281	1%
	>1	19	.1%	18	.3%	37	.1%
	Total	21898	100%	6324	100%	28222	100%

Table 9: Dependency ratio of members having serious medical conditions by age and household re-inclusion status

5.3 Shelter

5.3.1 Type of Housing

Half of the verified households lived in apartments or independent houses (Table 10). However, the type of housing differed significantly between excluded and re-included households: 59 percent of excluded households lived in apartments or independent houses, while the largest proportion of the re-included households lives in warehouses, worksites or unfinished shelters (44 percent), followed by separate rooms or collective shelters (31 percent). The proportion of families living in the two worst types of housing is almost 3 times more frequent among the re-included than excluded.

Out of the 129 homeless cases initially excluded from assistance and visited for verification, 56 cases remained excluded due to their estimated overall level of vulnerability. As described for child-headed households, there might be several reasons that could explain the exclusion of these cases.

Table 10	Table 10: Type of housing by re-inclusion status									
	Exclu	ıded	Re-ind	luded	Total					
lype of housing	Ν	%	N	%	Ν	%				
Villa/ independent house/ apartment	13598	59%	1662	24.8%	15260	51.3%				
Separate room/ collective shelter	5911	25.7%	2043	30.5%	7954	26.7%				
Factory/Warehouse/ worksite garage/unfinished shelter/tent	3475	15.1%	2929	43.7%	6404	21.5%				
Pedestrian/homeless	56	.2%	73	1.1%	129	.4%				



Figure 2: Proportion of type of housing by re-inclusion status

5.3.2 Occupancy

The highest portion of households visited (69 percent of the excluded and 59 percent of the re-included) paid rent for unfurnished shelters, or lived in shelters provided by employers. These households were more likely to be excluded, as well as the refugee households who paid rent for furnished shelters or hosted. Those relying on assistance for shelter or squatting are significantly were more likely to be re-included, even though 56 percent of all the households assessed as squatting were excluded after verification. It is worth noting that among the verified families, 14 percent relied on assistance in order to have a place to stay.

Time of Occurrences	Excluded		Re-included		Total	
	Ν	%	Ν	%	Ν	%
Owned apartment/ furnished rental /hosted (for free)	4689	20.5%	644	9.8%	5333	18.1%
Unfurnished rental/ provided by employer	15856	69.2%	3924	59.5%	19780	67%
Assistance	2260	9.9%	1771	26.9%	4031	13.7%
Squatting	107	0.5%	252	3.8%	359	1.2%

Table 11: Type of occupancy by re-inclusion status

5.3.3 Living space

Households living in smaller spaces were more likely to be re-included after verification. The average living space of the re-included household was 37m², while the average size of the living space of the excluded households was 61m². While the average density for excluded households was found to be 11m² per person, re-included households had an average density of 5.7m² per person.

Density	Excl	Excluded		cluded	То	Total	
	N	%	N	%	N	%	
>10.5 m2/person	8105	37.4%	568	8.9%	8673	30.9%	
7-10.5 m2/person	5034	23.2%	1035	16.2%	6069	21.6%	
3.5-7 m2/person	5716	26.4%	2393	37.5%	8109	28.9%	
<=3.5 m2/person	2831	13.1%	2391	37.4%	5222	18.6%	

Table 12: Living area (square meters) per person by re-inclusion status

	Table 13: Average density by re-inclusion status									
		Excluded	cluded Re-included			Total				
	Ν	Mean	Standard Deviation	Count	Mean	Standard Deviation	Count	Mean	Standard Deviation	
Density (m ² /Person)	23797	10.94	9.34	6876	5.75	5.00	30673	9.76	8.83	
Living Space (m ²)	23797	61	48	6876	38	36	30673	56	46	

5.4 WASH

Twenty nine percent of the verified households reported not having access to soap and hygiene items and 21 percent reported not having access to sufficient water for all essential needs (Table 14). Regarding access to toilet facilities, 46 percent reported using traditional pit latrines without slabs and 8 percent used open air toilets (table 15). Fifteen percent of the verified households were sharing latrines with 15 people or more and a similar percentage did not have at all access to bathrooms (13 percent).

Households without access to sufficient water, hygiene items or improved pit latrines were significantly more likely to be re-included, as well as those sharing toilets or without any access to bathrooms. Tables 14 and 15 show the differences in these percentages by re-inclusion status.

While more than half of the excluded households used improved latrines (53 percent), most of the re-included (54 percent) used the traditional pit toilet. The percentage of re-included households sharing latrines with 15 people or more was 3 times higher than among the excluded and those households without access to bathroom was almost 5 times higher among the re-included compared to the excluded households. Also, the proportion of households using open air among the re-included was more than 6 times bigger than that of the excluded. However, it is important to note that among those who remained excluded, there were cases that did not have access to water (16 percent), hygiene items (23 percent), toilet facilities (3.7 percent) and bathroom (7 percent), as well as families that shared latrines with more than 14 people (11 percent).

Table 14: Lack of access to water and hygiene items by re-inclusion status

Lack of access to	Excl	Excluded		cluded	Total		
	Ν	%	N	%	Ν	%	
Enough water	3718	16 %	2448	36.3 %	6166	20.6 %	
Enough soap & hygiene items	5262	22.7 %	3349	49.6 %	8611	28.8 %	

	inclution	<i>oy ie meiu</i>	ton otarao			
Tailat and bathroom facilities	Excluded		Re-included		Total	
Tonet and Dathroom facilities	Ν	%	Ν	%	Ν	%
Improved latrines with cement slab/flush latrine	12072	52.8 %	1445	21.6 %	13517	45.7 %
Traditional pit latrine/ without slab/ open pit	9976	43.6 %	3649	54.5 %	13625	46.1 %
Open air (bush, stream)/corner place in the compound	834	3.6 %	1597	23.9 %	2431	8.2 %
Latrine shared with \geq 15 people	2381	10.9%	1537	29.7%	3918	14.5%
No Bathroom	1663	7.4%	2148	33.1%	3811	13.2%

Table 15: Type of sanitary facilities by re-inclusion status

5.5 Non-Food Items

Excluded households had significantly more access to NFIs, such as refrigerators, water heaters, winter clothes or beds, than re-included households. Figure 3 shows the percentage of households with access to different types of NFIs by re-inclusion status. 65 percent of excluded households had access to water heaters, whereas 35 percent of re-included households had access to water heaters. However, there were households with no access to sufficient basic assets such as blankets, mattresses, winter clothes or kitchen utensils, among the ones who were excluded. Also there were re-included households with access to relatively luxurious items such as refrigerators, water heaters or beds.





5.6 Education

Most of the heads of households verified (69 percent) had at least primary level of education, whereas 20 percent did not received any education at all (Table 16). Although this indicator was not considered in the criteria, it was noted that the percentage of household heads without any education was significantly higher among the re-included families. As can be seen in Figure 4, the likelihood to be re-included increased when the level of education was low.

Education Level of household head	Excl	Excluded		cluded	Total					
	N	%	N	%	N	%				
None	3815	16.4 %	2062	30.6 %	5877	19.6 %				
Below secondary	16634	71.4 %	4206	62.3 %	20840	69.4 %				
Secondary or higher	2847	12.2 %	478	7.1 %	3325	11.1 %				

Table 16: Education level of household heads by re-inclusion status





5.7 Livelihood sources

5.7.1 Main source of income

Table 17 shows the proportion of households by their main source of income. The three main sources of income are labor, cash derived from assistance, begging or gifts and debts or loans. The households who mainly relied on labor, savings or sale of assets were more likely to be excluded from assistance, while those depending on any kind of assistance or on loans were more likely to be included. Therefore, re-included households tended to rely more on assistance and gifts (39 percent) compared to the excluded households (21 percent). The majority of excluded households (63 percent) relied mostly on labor as their main source of income.

Table 1	Table 17: Main source of income by re-inclusion status										
Main source of	Excluded		Re-in	cluded	То	Total					
cash/income	Ν	%	N	%	N	%					
Income from labor	14447	63.1%	2789	41.4%	17236	58.2%					
Assistance/begging/gifts	4728	20.7%	2603	38.7%	7331	24.8%					
Remittances/informal commerce	316	1.4%	80	1.2%	396	1.3%					
Savings/sale of assets	767	3.4%	157	2.3%	924	3.1%					
Debts/Loans	2626	11.5%	1103	16.4%	3729	12.6%					

5.8 Expenditures

Households who remained excluded from assistance spent on average US\$133 per person per month, whereas re-included households' average expenditure was US\$72 per person per month.

Table 18 shows the proportion of households by re-inclusion status and according to the percentage of money spent on food in relation to their total expenditure. Households with a food expenditure share higher than 75 percent, compromising the non-food expenditures, were significantly more likely to be re-included. As a result, 54 percent of re-included households spent at least 75 percent of their total expenditure on food compared to 22 percent of the excluded households. On the other hand, households that allocated less than 65 percent of their total income on food were more likely to be excluded.

However, there were households with low food expenditure share that were re-included according to their overall degree of vulnerability. Also, there were households with a very high percentage of expenditure on food who have been excluded. Ten percent of the households, who allocated less than 50 percent of their expenditure on food, were re-included. This percentage was higher as the food expenditure share increased until reaching 41 percent of households who spend more than 75 percent of their expenditure on food were re-included.

Food Expenditure	Excluded		Re-inc	luded	٦	Total		
Share	N	%	N	%	Ν	%		
< 50%	10069	44.0%	1081	17.1%	11150	38.1%		
>=50- 65%	4885	21.3%	800	12.6%	5685	19.4%		
>=65 -75%	3005	13.1%	1020	16.1%	4025	13.8%		
>=75%	4938	21.6%	3438	54.2%	8376	28.6%		





5.9 Food Consumption

Table 19 shows the proportion of verified households that did not consume pulses, fruits or meat by re-inclusion status. Most of the visited households consumed pulses the week before the visit (97 percent). 40 percent of households consumed fruits and 30 percent consumed meat. The households that consumed these items were significantly more likely to be excluded, although the magnitude of the difference was below a ratio of 2. These items were selected as the most linked to vulnerability and their consumption was used to calculate a proxy of the food consumption score (FCS).

With regards to the food consumption classification, no household was found to have poor food consumption. Thirty seven percent of households, whose food consumption classification was borderline, were re-included. Twelve percent of households classified as having acceptable levels of food consumption were also re-included.

Table 19: Households who have not consumed pulses, fruits or meat by re-inclusion status										
	Excluded		Re-ind	cluded	Total					
	Ν	%	Ν	%	Ν	%				
Nuts and Pulses	514	2.2%	281	4.1%	795	2.6%				
Fruits	13244	56.7%	4856	71.9%	18100	60.1%				
Meat	15436	66.5%	5440	81.1%	20876	69.7%				



Figure 6: Proportion of housheolds who haven't eaten pulses, fruits or meat by re-inclusion status

Regarding the type of food consumed by households, it was found that fruit and meat were consumed less by re-included households compared to excluded households. Seventy one percent of re-included households did not consume fruit and 81 percent did not consume meat. Although it is smaller proportion compared to the re-included, 56 percent of the excluded households did not consume fruit and 66 percent did not consume meat during the last week.

5.10 Coping Strategies

Table 20 shows, by re-inclusion status, the proportion of households selected for the verification exercise who reported having experienced a lack of food or money to buy it and those who applied coping strategies. Figure 7 represents the proportion of households who were re-included or excluded according to the adoption of each coping strategy.

Approximately three-fourths of verified households reported having experienced a lack of food or money to buy it, as well as resorted to applying diverse food consumption-related coping strategies (e.g. reducing the number of meals per day or portion sizes). Among these households, 25 percent were re-included, whereas 11 percent of the households who did not experience lack of food or did not apply these coping mechanisms prior to the survey were re-included. This result shows that the likelihood of being re-included is twice as likely if refugees experienced a shortage of food or money to buy it or had applied food consumption-related coping strategies.

Among the non-food consumption related coping strategies, the most common one among the verified households was buying food on credit or borrowing money to buy food, which was applied by 71 percent of the households. A much lower percentage, between 12-22 percent, reduced non-food essential expenditures such as health or education, spent savings, sold household goods or withdrew children from school. Less than 3 percent of the households resorted to more severe coping strategies, including child labor, early marriage, begging or accepting illegal high risk jobs.

The percentage of households who applied coping strategies was significantly higher among the re-included households compared to the excluded ones. However, the least severe coping strategies, such as spending savings or sale goods, were used more by the excluded families. This result may indicate that households who could still cope with food insecurity by spending savings or selling goods were less likely to be vulnerable. It was found that 83 percent of re-included households had to buy food on credit compared to 68 percent of excluded households. The second most adopted coping strategy by both types of households was the reduction of nonfood expenses, with 31 percent and 19 percent of re-included and excluded households who respectively adopted it. A substantial number of re-included households. Table 20 also shows that some excluded households, although in small percentages, had to employ some severe coping strategies, such as begging (0.5 percent), child labor (1 percent) and holding an exploitative/illegal/high risk job (0.7 percent)

Although significant, the difference between the excluded and re-included households resorting to these coping strategies was more than double only for some of them. The discriminant power is the biggest differences of the variables to identify vulnerabilities. The best proxies of vulnerability according to this discriminant power are, in decreasing order: begging (ratio of included/excluded=6:1), child labor (5:1), accepting high risk illegal jobs (3:1), early marriage (3:1,) and withdrew children from school (2:1).

	Table 20: Cop	ing strategies at	lapted by re-ind		-	
Coping Strategies	EXCI	uded	Re-Ind	cluded	10	tal
Employed	N	%	N	%	N	%
Lack of food or money to buy it	16880	73.1%	5836	88.1%	22716	76.5%
Food related coping strategies	16137	74.7%	5550	88.9%	21687	77.9%
Spent Savings	4199	18.7%	1126	17.0%	5325	18.3%
Sold goods	3932	17.2%	1033	15.4%	4965	16.8%
Bought food on credit	13782	68.1%	5030	82.6%	18812	71.4%
Sold Productive assets	594	2.6%	229	3.4%	823	2.8%
Withdrew children from school	2135	9.3%	1325	19.9%	3460	11.7%
Reduced non-food expense	4366	19.1%	2038	30.6%	6404	21.7%
Marriage of children under 18	119	.5%	100	1.5%	219	.7%
Child labor	260	1.1%	348	5.2%	608	2.0%
Begged	113	.5%	201	3.0%	314	1.0%
Accepted high risk	153	.7%	132	1.9%	285	.9%
Sold house or land	164	.7%	83	1.2%	247	.8%



Figure 7: Proportion of households by copying startegies employed and by re-inclusion status





Figure 8 -Proportion of households by emergency copying startegies employed and by re-inclusion status

5.11 Debt

Results showed that 78 percent of households borrowed money in the previous 3 months. Furthermore, nearly half of the households confirmed that they had debt of more than US\$ 200 and one-fourth had more than US\$ 600 of debt (Table 21). As shown in Table 21, the proportion of households who borrowed money and/or had debts of more than US\$ 200 were significantly higher among the re-included (p<0.01). Although significant, the differences were not critical and therefore the likelihood of being re-included according to debt amount did not differ much among debt categories. Overall, some 25 percent of the households whose debt was above US\$ 200 were re-included whereas 11 percent of households without any debt were re-included as well (Figure 8). This result highlights the relatively weak discriminant power of debt amount by itself, when it is considered as an independent variable.

Table 21: Households distribution by amount of debt and re-inclusion status									
	Exclu	Excluded		ded	Total				
Debt	N	%	N	%	N	%			
Borrowed money	17453	75.3%	5660	84.8%	23113	77.5%			
No debt	4066	17.8%	545	8.2%	4611	15.6%			
Debt ≤200\$	5892	25.8%	1524	22.9%	7416	25.1%			
Debt 201-600\$	7835	34.3%	2701	40.6%	10536	35.7%			
Debt >600\$	5066	22.2%	1875	28.2%	6941	23.5%			



6 REFERRALS

In the verification questionnaire, enumerators were asked to refer cases that would need special follow up for health, education, protection, registration, psychosocial support and/or shelter. Table 22 shows the proportion of the households who were referred for any of these services. The maximum number of referrals was carried out for health (44 percent), followed by education, shelter and registration. As per protection and psychosocial support, there was less referrals (10 percent). The proportion of households who were referred was significantly higher among re-included households, in particular for shelter which showed doubled proportion of referrals among the re-included than excluded households. This result points out that shelter is a major concern.

Table 22. Referred Households by category and re-inclusions status							
Referrals	Excluded		Re-ind	Re-included		Total	
	N	%	N	%	N	%	
Health	8581	41.6%	3168	53.6%	11749	44.3%	
Education	3511	17%	1576	26.7%	5087	19.2%	
Protection	728	3.5%	377	6.4%	1105	4.2%	
Registration	2477	12%	1196	20.2%	3673	13.8%	
Psychosocial	1695	8.2%	690	11.7%	2385	9%	
Shelter	3135	15.2%	1790	30.3%	4925	18.6%	

Table 22: Referred households by category and re-inclusions status

7 SECTOR VULNERABILITY

The information collected combines specific vulnerability criteria from 8 sectors (WFP 2013⁹), providing an overall score for each household. Based on this score, a vulnerability categorization of a household is carried out within each sector. There are 4 levels of vulnerability: low, mild, moderate and severe for each sector. Table 23 shows the profile of all households visited according to their level of vulnerability per sector and re-inclusion status.

		Low Vulnerability	Mild Vulnerability	Moderate Vulnerability	Severe Vulnerability
	Excluded	1%	69.6%	16.4%	.0%
Food Security	Re-included	1.5%	43.7%	54.7%	.1%
	Total	11.2%	63.8%	25%	0%
_	Excluded	5%	37.6%	51.7%	5.7%
Economic	Re-included	.1%	4.1%	57.1%	38.7%
vaniciability	Total	4%	30%	53%	13%
	Excluded	51%	27.7%	13.7%	7.6%
Health	Re-included	27.6%	25.3%	21.8%	25.2%
	Total	46%	27%	15.5%	11.5%
	Excluded	49.6%	33.9%	12.9%	3.6%
Shelter	Re-included	10.1%	26%	28.4%	35.5%
	Total	41%	32%	16%	11%
	Excluded	20.5%	55.2%	18.4%	5.8%
Wash	Re-included	2.1%	25.5%	35.1%	37.3%
	Total	16%	49%	22%	13%
	Excluded	31.2%	52.9%	15.3%	.6%
NFI	Re-included	1.6%	34.8%	54.3%	9.3%
	Total	25%	49%	24%	2%
	Excluded	2%	65%	11%	22%
Protection	Re-included	0%	23%	26%	52%
	Total	2%	55%	14%	29%
	Excluded	54.8%	21.3%	20.5%	3.5%
Education	Re-included	28.8%	9.6%	37.2%	24.4%
	Total	49%	19%	24%	8%

Table 23: Vulnerability profile by sector and re-inclusion status

According to the result, the highest level of vulnerability for the total number of households visited was found in the economic sector: 66 percent of households were classified as moderately or severely vulnerable. The sectors with higher proportions of households classified as moderately or severely vulnerable were: economic

⁹ WFP 2013. Targeting verification criteria.

(66 percent), protection (43 percent), WASH (35 percent), education (32 percent) and shelter, health, NFI and food security (26 percent).

These overall percentages differed significantly between re-included and excluded households. The proportion of moderately and severely vulnerable households among the re-included was on average almost 3 times higher, for all the sectors, than among the excluded households. NFI and shelter show the biggest difference as the percentage of moderately and severely vulnerable households are 4 times higher than the excluded , followed by food security (3.3 times higher in the re-included households), and WASH (3 times higher in the re-included households). The difference in percentage of moderate and severe vulnerability between re-included and excluded households reached 41 percent on average, with higher values among the re-included. The difference ranged from 26 percent, for the health sector up to 48 percent for the WASH, shelter and NFI sectors.

Among the re-included households, the sectors with higher proportions in the categories of moderate and severe vulnerability were: economic (96 percent), protection (78 percent), WASH (72 percent), Shelter (64 percent), NFI (64 percent), education (62 percent), food security (55 percent) and health (47 percent). On the other hand, among the excluded households, the percentage of moderately and severely vulnerable households followed a slightly different order: economic (57 percent), protection (33 percent), WASH (24 percent), education (24 percent), health (21 percent), shelter (17 percent), NFI (16 percent) and food security (16 percent).

In the following sections, a more detailed description and discussion of the results is presented by sector.

7.1 Food Security

Food security is estimated according to three indicators: food consumption, food expenditure share and coping strategies. Each of these indicators is categorized into four vulnerability subgroups: low, mild, moderate and severe.

Figure 9 shows the vulnerability profile for food security of all the visited households by re-inclusion status. These results highlighted that 90 percent of the overall families visited disclose some degree of food insecurity, most of them being mildly food insecure. Twenty five percent of the total households assessed were classified as moderately food insecure and only 13 cases (less than 0.01 percent) as severely food insecure. The food security status of these households varied significantly according to their re-inclusion status: among the re-included beneficiaries 55 percent are moderately food insecure compared to 16 percent of the excluded.

While food consumption seemed to be acceptable for almost all visited households, the food expenditure share appeared to be the major factor for food insecurity, followed by the coping strategies. As discussed previously, food expenditure share might be overestimated given the fact that the total expenditure of the households had been misunderstood as the sum of the food and rent expenditure exclusively. The re-included households spent relatively more on food than the excluded ones, which may mean a higher risk of compromising other non-food essential needs and apply more severe coping strategies.



Figure 9: Proportion of households by food security situation and re-inclusion status

Table 24: Food vulnerability profile by re-inclusion status and for each food security indicator

	FOOD SECURITY	MILD FOOD INSECURITY	MODERATE FOOD INSECURITY	SEVERE FOOD INSECURITY
Excluded	14%	69.6%	16.4%	.0%
Re-included	1.5%	43.7%	54.7%	.1%
Total	11.2%	63.8%	25%	.0%
Food Consumption	Acceptable	Acceptable with coping strategies	Borderline	Poor
Excluded	24%	74.7%	1.3%	0%
Re-included	8.2%	89.1%	2.7%	0%
Total	20.5%	77.9%	1.6%	0%
Food Expenditure Groups	< 50%	>=50- 65%	>=65 -75%	>=75%
Excluded	44.2%	21.5%	13.1%	21.2%
Re-included	17.5%	12.4%	16%	54.1%
Total	38.1%	19.4%	13.8%	28.6%
Coping Strategies	HH not adopting coping strategies	Stress coping strategies	Crisis coping strategies	Emergencies coping strategies
Excluded	32.2%	45.9%	18.6%	3.4%
Re-included	14.3%	46.6%	29.5%	9.5%
Total	28.2%	46%	21%	4.8%
Coping Capacity Indicator	High coping capacity	Moderate coping capacity	Mild coping capacity	Low coping capacity
Excluded	15.1%	47.5%	33%	4.4%
Re-included	3.3%	21.9%	54.9%	19.8%
Total	12.5%	41.8%	37.9%	7.8%

Table 24 shows the proportion of households per vulnerable categories and re-inclusion status, for each food security indicator.

Ideally, the vulnerability score would lead to the inclusion of moderate and severe vulnerable people, while the mild or low vulnerable population would be excluded from assistance. Results showed that out of the 13 cases with severe food insecurity 6 were re-included as well as half of the 25 percent moderately food insecure, leading to an exclusion error of about 50 percent.



7.2 Economic Vulnerability

The classification of households according to their economic vulnerability is also based on food expenditure share and food security-related coping strategies. However, instead of considering food consumption, the proportion of the Minimum Expenditure Basket (MEB) covered by the total monthly expenditure as well as the total amount of debt are considered. Just like for the food security, each indicator is categorized into four subgroups from less to more vulnerable: low, mild, moderate and severe.

Figure 11 shows the proportion of households per level of vulnerability and re-inclusion status. More than 95 percent of the re-included households were moderately or severely economically vulnerable. This proportion was significantly lower among the excluded (57 percent).

The findings highlighted that households' monthly expenditure was the main determinant of severe vulnerability, followed by food expenditure share for the re-included households as well as by the total amount of debt for the excluded, and finally by the emergency coping strategies. In the case of moderate vulnerability, debt was the major driver, followed by total expenditure for the excluded and crisis coping strategies for the re-included.

Due to the reasons previously mentioned on the limitations of data quality for the expenditure module, the proportion of households that were moderately or severely vulnerable might be overestimated.



Figure 11: Proportion of households by economic vulnerability category and re-inclusion status

Table 25: Economic vulnerability profile by re-inclusion status and for each economic vulnerability indicator

Excluded	5%	37.6%	51.7%	5 7%
Re-included	1%	4 1%	57.1%	38.7%
	2.00/	20.10/	57.170	12 10/
	5.9%	50.1%	52.9%	13.1%
expenditure	> 125% MEB	100-125% MEB	75%-100% MEB	<75% MEB
Excluded	9.2%	32.3%	23.4%	35.1%
Re-included	.3%	6.8%	16.4%	76.5%
Total	7.2%	26.6%	21.8%	44.4%
Food Expenditure Groups	< 50%	>=50- 65%	>=65 -75%	>=75%
Excluded	44.2%	21.5%	13.1%	21.2%
Re-included	17.5%	12.4%	16.0%	54.1%
Total	38.1%	19.4%	13.8%	28.6%
Total amount of debt	0	0-200\$	200-600\$	>600\$
Excluded	17.8%	25.8%	34.3%	22.2%
Re-included	8.2%	22.9%	40.6%	28.2%
Total	15.6%	25.1%	35.7%	23.5%
Coping Strategies	HH not adopting coping strategies	Stress coping strategies	Crisis coping strategies	Emergencies coping strategies
Excluded	32.2%	45.9%	18.6%	3.4%
Re-included	14.3%	46.6%	29.5%	9.5%
Total	28.2%	46.0%	21%	4.8%
Coping Capacity Indicator	High coping capacity	Moderate coping capacity	Mild coping capacity	Low coping capacity
Excluded	12%	54.6%	31.4%	2%
Re-included	2.4%	26.8%	62%	8.8%
Total	9.9%	48.3%	38.3%	3.5%

Table 25 shows the proportion of households included and excluded per vulnerability category. The criteria applied to determine the inclusion status of a household had a high specificity for this sector, as 4 percent of the 34 percent considered as households with low and mild vulnerability were re-included. Furthermore, severely vulnerable households were significantly more likely to be re-included, but this was not the case for the moderately vulnerable. As observed in the Figure 12, more than 75 percent of the moderately vulnerable households were excluded due to their overall vulnerability classification.



Figure 12: Proportion of re-included and excluded households by economic vulnerability

7.3 Health

Health vulnerability is estimated on the basis of the probability for a household to require health care, that is, the probability of having extra health expenditure needs that either cannot be covered or are compromising other essential expenditures. Indirectly, it also serves as a proxy for a household's capacity to generate income. The indicators used to determine the health vulnerability include: the number of children under 5 years old, elderly members and pregnant and lactating women (PLW), as well as the number of members with specific needs.

Table 26 shows the proportion of households according to the number of family members corresponding to each indicator, as well as the re-inclusion status. The results showed that 47 percent of the re-included households with 3 or more members who can be considered as more vulnerable, while excluded households have less than half of this value (21 percent). On average people with specific needs influenced health vulnerability score the most, followed by the children under 5, PLW and elders.



Figure 13: Proportion of households by health vulnerability situation and re-inclusion status

Table 26: Health vulnerability profile by re-inclusion status and for each health vulnerability indicator

	LOW VULNERABILITY	MILD VULNERABILITY	HIGH VULNERABILITY	SEVERE VULNERABILITY
Number of children under 5 years old	≤1	2	3	≥4
Excluded	86%	12.4%	1.1%	.5%
Re-included	76.7%	16.8%	4%	2.4%
Total	83.9%	13.4%	1.8%	.9%
Number of elders	≤1	2	3	≥4
Excluded	98.4%	1.3%	.1%	.2%
Re-included	95.4%	3%	.4%	1.2%
Total	97.7%	1.6%	.2%	.4%
Number of PLW	≤1	2	3	≥4
Excluded	99.2%	.5%	.1%	.1%
Re-included	98%	1.3%	.1%	.6%
Total	98.9%	.7%	.1%	.2%
Number of people with specific needs	≤1	2	3	≥4
Excluded	85.3%	10.8%	2.4%	1.4%
Re-included	67.9%	20%	7.6%	4.4%
Total	81.4%	12.9%	3.6%	2.1%



Figure 14: Proportion of re-included and excluded households by health vulnerability

Figure 14 shows the percentage of excluded and re-included households in relation to their vulnerability situation: the more vulnerable members within a household, the more likely to be re-included. Forty eight percent of the households who were found to be severely vulnerable and 31 percent of those who were moderately vulnerable were re-included for assistance. Moreover, 13 percent of the households with low vulnerability and 20 percent with mild vulnerability were also re-included.

7.4 Shelter

Household classification for shelter vulnerability is based on six indicators: type of housing, occupancy, crowding index (density), toilet facilities, access to bathroom and access to enough water to cover their basic needs (WFP 2013)¹⁰.



Figure 15: Shelter vulnerability situation by re-inclusion status

¹⁰ WFP 2013. Targeting verification criteria.

Figure 15 shows the vulnerability profile for shelter of the households verified by their re-inclusion status. The percentage of severely and moderately vulnerable was 4 times higher among the re-included households (64 percent) than among the excluded ones (16.5 percent). The main determinant of shelter vulnerability is the number of people per square meter (density), due to the relative high percentage of households with less than 7m² per person (40 percent of the excluded households and 75 percent of the re-included).

	LOW VULNERABILITY	MILD VULNERABILITY	MODERATE VULNERABILITY	SEVERE VULNERABILITY
Density	>10.5 m²/person	7-10.5 m²/person	3.5-7 m ² /person	<=3.5 m ² /person
Excluded	37.4%	23.2%	26.4%	13.1%
Re-included	8.9%	16.2%	37.5%	37.4%
Total	30.9%	21.6%	28.9%	18.6%
Toilet facilities	Improved latrine with cement slab / Flush latrine	Traditional pit latrine/ without slab/ open pit shared with less than 15 people	Latrine with 15 people or more	Open air (bush, stream)/ corner place in the compound
Excluded	49.7%	39.1%	10.8%	0.3%
Re-included	20%	47.7%	29.3%	3%
Total	44%	40.8%	14.3%	0.9%
Type of housing				
Excluded	59%	25.7%	15.1%	0.2%
Re-included	24.8%	30.5%	43.7%	1.1%
Total	51.3%	26.7%	21.5%	0.4%
Type of occupancy				
Excluded	20.5%	69.2%	9.9%	0.5%
Re-included	9.8%	59.5%	26.9%	3.8%
Total	18.1%	67%	13.7%	1.2%
Bathroom	Yes		No	
Excluded	92.6%		7.4%	
Re-included	66.9%		33.1%	
Total	86.8%		13.2%	
Access to water	Yes		No	
Excluded	84%		16%	
Re-included	63.7%		36.3%	
Total	79.4%		20.6%	

Table 27: Shelter vulnerability profile by re-inclusion status and for each shelter vulnerability indicator



Figure 16 shows the percentage of households re-included and excluded by the shelter vulnerability category. Seventy three percent of the households who were found to be severely vulnerable for shelter, as well as 37 percent of moderately vulnerable families were all re-included. Some households who were classified as low and mildly vulnerable were also re-included, 5 percent and 17 percent respectively. The high level of re-inclusion of severely vulnerable households highlighted a potential strong correlation of the severe vulnerability for shelter with other sectors vulnerability.

7.5 WASH

WASH (Water Sanitation and Hygiene) vulnerability is determined by availability and type of toilets and access to water and hygiene items, as well as the presence of children under 5 years old. WASH vulnerability profile for the total number of households visited is presented in the graph 17 by re-inclusion status. The percentage of severely and moderately vulnerable households for WASH was 3 times higher among the re-included households.



Figure 17: WASH vulnerability situation by re-inclusion status

Considering the proportion of the households in the vulnerable categories per indicator (table 28), the highest values were found among the households with children under 5, followed by those who did not have access to enough hygiene items, who faced difficulties with access to water and toilet and those without access to bathrooms.

The highest differences observed were the access to bathrooms and types of toilet facilities. Among the reincluded group, the percentage of households without bathrooms was 4.5 times higher than among the excluded. Furthermore, the percentage of the re-included households with no toilet facilities was 10 times higher, while for those sharing the toilet with more than 14 people was almost 3 times higher among the re-included compared to the exclude. These results revealed that bathroom access and type of toilet were good proxies for vulnerability.

	Low WASH	Mild WASH	Moderate WASH	Severe WASH
Toilet facilities	Improved latrine with cement slab / Flush latrine	Traditional pit latrine/ without slab/ open pit shared with less than 15 people	Traditional pit latrine/ without slab/ open pit shared with 15 people or more	Open air (bush, stream)/ corner place in the compound
Excluded	49.7%	39.1%	10.8%	0.3%
Re-included	20%	47.7%	29.3%	3%
Total	44%	40.8%	14.3%	0.9%
Bathroom	Yes		No	
Excluded	92.6%		7.4%	
Re-included	66.9%		33.1%	
Total	86.8%		13.2%	
Access to hygiene	Yes		No	
Excluded	77.3%		22.7%	
Re-included	50.4%		49.6%	
Total	71.2%		28.8%	
Access to water	Yes		No	
Excluded	84%		16%	
Re-included	63.7%		36.3%	
Total	79.4%		20.6%	
Children under 5	No		Yes	
Excluded	55.5%		44.5%	
Re-included	47%		53%	
Total	53.6%		46.4%	

Table 28: WASH vulnerability profile by re-inclusion status and for each WASH vulnerability indicator

Graph 18 shows the proportion of households by wash vulnerability level and re-inclusion status. Among the households who were found to be severely vulnerable for WASH, 63 percent were re-included, as well as 35 percent of the moderately vulnerable families. Most of the low and mildly vulnerable families for WASH were

excluded (97 percent and 89 percent, respectively). The likelihood to be re-included increased proportionally with the level of vulnerability observed for WASH. Severely vulnerable households were 24 times more likely to be re-included than those with low vulnerability, who were almost 6 times more than mildly vulnerable households and almost 2 times more than those moderately vulnerable for WASH.



7.6 Non-Food Item (NFI) sector vulnerability

The classification for NFI sector vulnerability is based on households' accessibility to assets and on their ability to purchase these assets which is estimated by the total household expenditure compared to the MEB and on the dependency ratio.

The percentage of severely vulnerable households for NFIs was significantly higher (4 times) among the reincluded households than the excluded (Figure 19).



Figure 19: NFI vulnerability situation by re-inclusion status

Among other indicators, the relation between the total monthly expenditure and MEB revealed a higher percentage of households in the high and severe categories. The number of NFIs that the household had access to seemed to be the second most influencing indicator of the vulnerability level, followed by the dependency ratio (Table 29). However, the difference between the re-included and excluded households was as follows: the household was more vulnerable as the dependency ratio was higher and the total expenditure score increased. The proportion of the households with a dependency ratio higher than 1.5 (3 dependents for every 2 nondependents) among the re-included households was 4.6 times higher than among the excluded ones. The percentage of the households with access to less than 5 items was 2.6 times higher among re-included than excluded households.

	Low NFI	Mild NFI	ModerateNFI	Severe NFI
	vulnerability	vulnerability	vulnerability	vulnerability
NFI items	>4			≤4
Excluded	77.6%			22.4%
Included	42.8%			57.2%
Total	69.8%			30.2%
Total Expenditure per	> 125% MER	100-125% MER	75%-100% MER	~75% MER
capita	> 125 /0 MED	100-125 /0 MED	75 /0-100 /0 MEB	
Excluded	27%	14.6%	23.4%	35.1%
Included	3.9%	3.2%	16.4%	76.5%
Total	21.8%	12%	21.8%	44.4%
Dependency ratio	≤1	1.1 - 1.5	1.6 - 2	>2
Excluded	86.9%	8.5%	2.3%	2.3%
Included	61.3%	17.7%	9%	12%
Total	81.1%	10.6%	3.8%	4.5%

Table 29: NFI vulnerability profile by re-inclusion status and for each NFI vulnerability indicator

Eighty one percent of the severely vulnerable and 49 percent of moderately vulnerable households for NFIs were re-included, which means that there was a high correlation of these vulnerable groups with other vulnerability sectors. The NFI vulnerability had the lowest exclusion error among all sectors. Almost all of the households in the low vulnerability category and 85 percent of the mildly vulnerable households were excluded (Figure 20).



Figure 20: Proportion of re-included and excluded households by NFI vulnerability

7.7 Protection

The categorization of households for protection vulnerability is based on the demographic categories proposed by UNHCR for the burden score (female and child headed households, disability, etc.) added to the crisis and emergency coping strategies (begging, illegal/exploitative jobs, early marriage, child labor, etc.), the main livelihood source, the dependency ratio and economic vulnerability¹¹.

As shown in Figure 21 below, less than 2 percent of the households visited were classified as having low vulnerability for protection and 55 percent of them were classified as mildly vulnerable (65 percent for the excluded). Although these percentages were consistent with those found in the 2013 VASyR (3 percent of low vulnerability and 41 percent of mild vulnerability) they could reflect insufficient sensitivity, in other words low capacity to detect the different levels of low vulnerability for this sector. However, the possibility that most of the population presents some degree of vulnerability in relation to these indicators cannot be ruled out. Among the re-included households, 78 percent were moderately or severely vulnerable, which represented 45 percent more than among the excluded.



Figure 21: Protection vulnerability situation by re-inclusion status

Table 30: Head of the household by re-inclusion status	
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Vulnerability categories	Excluded		Re-included		Total	
vullerability categories	N	%	N	%	N	%
Female HHH	3043	13.2%	1057	16%	4100	13.9%
HH size ≥7	1439	6%	1650	24%	3089	10.1%
Elderly HHH	864	3.6%	348	5.1%	1212	4%
Single HHH	1289	5.5%	727	10.7%	2016	6.7%
Disabled adult	624	2.6%	444	6.5%	1068	3.5%
Unaccompanied or separate child	438	1.8%	221	3.2%	659	2.1%
More than 2 disabled members	106	.4%	106	1.5%	212	.7%
HH with no employment	6031	26%	2619	39.4%	8650	29%

¹¹ WFP 2013. Targeting verification criteria.

Table 31: Head of the household and Copying Strategy (CS) by re-inclusion status							
Determinant	Excluded		Re-in	Re-included		Total	
variables for severe	N	%	Ν	%	N	%	
Child HHH	34	0.1%	49	0.7%	83	0.3%	
Begging as main livelihood source	4728	20.7%	2603	38.7%	7331	24.8%	
Early Marriage (CS)	119	.5%	100	1.5%	219	.7%	
Begging (CS)	113	.5%	201	3%	314	1%	
Illegal, exploitative job (CS)	162	.7%	123	1.9%	285	.9%	
Child labor (CS)	268	1.1%	340	5.2%	608	2%	

The economic vulnerability had the biggest proportion of households in moderate or severe category (66 percent). The difference of moderately and severely vulnerable proportions between the re-included and excluded households was higher for the dependency ratio indicator (4.6 times higher among the re-included) and lower for the economic vulnerability indicator (less than double).

Among the vulnerability categories that are considered for the calculation of the score called "sum of vulnerabilities", the variables that present a higher proportion of households are unemployment, female headed households and the family size of 7 or more members (Table 32). However, these high proportions of households will differ between re-included and excluded households: the household size as well as the presence of two or more members with disabilities in a household were the two indicators showing the highest results, with a percentage among the re-included almost 4 times of the percentage of the excluded. This difference by re-inclusion status was lower than other indicators, such as the percentage of the households without employment, female-headed households or elderly headed households considered.

As for variables considered as determinants of severe vulnerability for protection, the main one is the begging/assistance/gifts as main livelihood source. It is, at the same time, the one that shows less difference between the re-included and excluded households. This result was probably due to the fact that these livelihood sources were considered as a package. It would be strongly recommended to disaggregate them into separate livelihood sources. The variables showing higher discriminant power, by re-inclusions status, were: child-headed households, begging as coping strategy, and child labor. For these variables, the percentage among the re-included was respectively 7, 6 and almost 5 times, higher than among the excluded households.

	Low Protection vulnerability	Mild protection vulnerability	Moderate protection vulnerability	Severe protection vulnerability
Sum of vulnerabilities	0	1	2	>=3
Excluded	52.3%	35.6%	10%	2.1%
Included	27.3%	42.1%	22%	8.7%
Total	46.7%	37%	12.7%	3.6%
Determinant variables of SPV	No			Yes
Excluded	78.1%			21.9%
Included	55%			45%
Total	72.9%			27.1%
Economic vulnerability	Low vulnerability	Mild vulnerability	Moderate vulnerability	Severe vulnerability
Excluded	5%	37.6%	51.7%	5.7%
Included	.1%	4.1%	57.1%	38.7%
Total	3.9%	30.1%	52.9%	13.1%
Dependency ratio	≤1	1.1 - 1.5	1.6 - 2	>2
Excluded	86.9%	8.5%	2.3%	2.3%
Included	61.3%	17.7%	9%	12%
Total	81.1%	10.6%	3.8%	4.5%

Table 32: Protection vulnerability profile by re-inclusion status and for each protection vulnerability indicator

SPV: Severe protection vulnerability

The likelihood of being re-included was similar for moderate and severely protection-vulnerable households. Similar to the economic vulnerability sector, the overall vulnerability for this sector was one of the highest (the second after economic vulnerability) whereas its sensitivity is one of the lowest, together with economic vulnerability and health. This result would indicate that low and mild protection vulnerability categories were good proxies of the welfare of households. However, as previously mentioned, interpretation of the results strongly related with expenditures were limited by the quality of the expenditure module.



7.8 Education

The household vulnerability for education estimates the risk of the household to have children who do not attend school as a coping mechanism or due to specific needs. The vulnerability score for education is based on:

1) Number of school aged children in the household,

2) Specific coping mechanisms (withdrawal of children from school, child labor, early marriage and reduction in non-food essential expenditures),

3) Specific needs of children under 16 years old,

4) Economic vulnerability,

5) Dependency ratio,

6) Specific cases of child-headed households that automatically classify the household as severely vulnerable for education sector.

Figure 23 shows the vulnerability profile for education by re-inclusion status. Thirty two percent of the verified households were classified as moderately or severely vulnerable for this sector. Among the re-included households the percentage reaches 62 percent, which was more than twice the proportion among the excluded (24 percent). The difference between the re-included and excluded was bigger for the severe category: the percentage among the re-included households was 6 times high of the excluded.



Figure 23: Education vulnerability situation by re-inclusion status

Table 33 shows the proportion of households per category of vulnerability for each indicator considered for the calculation of education vulnerability score. The overall risk factor for school attendance is the indicator considered for the calculation of this score that contributes with the highest percentage of households in the moderate and severe categories (76 percent). This is due to the fact that this indicator includes all the moderate and severe cases of the risk factors considered (economic vulnerability, dependency ratio, coping risk factor and specific needs risk factor). Out of these risk factors, economic vulnerability would be the indicator that contributed to the highest proportion of households in the moderate and severe vulnerability categories (66 percent). However, as in other sectors, the biggest difference in the percentage of severely and moderately vulnerable households between the re-included and excluded –always higher among re-included households-was found for child-headed households (7 times higher), dependency ratio (4.6 times higher), followed by the number of school age children (the percentage of households with 3 or more children in this age group is 3.1 times higher among re-included) and children under 16 years old with specific needs (2.1 times higher). Coping risk factors, economic vulnerability and overall risk factors showed the lowest difference (1.4 - 1.7 times higher), although still statistically significant.

	Low education vulnerability	Mild education vulnerability	Moderate education vulnerability	Severe education vulnerability
Number of school children	≤1	2	3	>=4
Excluded	77.4%	13%	7.6%	2%
Included	52.7%	18%	16.5%	12.9%
Total	71.8%	14.1%	9.6%	4.4%
Overall risk factor				
for school	1	2	3	4
attendance				
Excluded	3.8%	27.1%	55.3%	13.8%
Included	0%	1.2%	41.6%	57.2%
Total	3%	21.3%	52.3%	23.5%
Number of children <16 with specific needs	0		1	>=2
Excluded	90.2%		8.1%	1.7%
Included	79.8%		14.5%	5.7%
Total	87.8%		9.6%	2.6%
Coping risk factor	0	0	1 strategies	>=2 strategies
Excluded	76.8%		17.7%	5.5%
Included	61.9%		23.1%	15%
Total	73.4%		18.9%	7.7%
Economic vulnerability	Low vulnerability	Mild vulnerability	Moderate vulnerability	Severe vulnerability
Excluded	5%	37.6%	51.7%	5.7%
Included	.1%	4.1%	57.1%	38.7%
Total	3.9%	30.1%	52.9%	13.1%
Dependency ratio	≤1	1.1 - 1.5	1.6 - 2	>2
Excluded	86.9%	8.5%	2.3%	2.3%
Included	61.3%	17.7%	9.0%	12%
Total	81.1%	10.6%	3.8%	4.5%
Child HHH	No			Yes
Excluded	99.9%			0.1%
Included	99.3%			0.7%
Total	99.7%			0.3%

Table 33: Education vulnerability profile by re-inclusion status and for each education vulnerability indicator

Out of the coping strategies considered, the most common was reducing non-food essential expenditures such as education or health (22 percent), followed by withdrawal of children from school (12 percent), child labor (2 percent) and early marriage (1 percent) (Table 34). In terms of discriminant power based on the difference in percentage between the re-included and excluded, child labor as the coping strategy showed the highest difference (4.6 times higher among the re-included), followed by early marriage (2.9 times higher among the re-included). Reducing essential non-food expenses had the lowest difference between the re-included and excluded.

Regarding the risk factor related to specific needs of children under 16, chronic illness was the indicator with the highest percentage of children in this situation, followed by pregnant and lactating women (PLW) and serious

medical conditions. The lowest percentage was for children with disabilities (Table 35). The major differences between the re-included and excluded households were found in the proportion of children with disabilities (3 times higher among the re-included), followed by children with serious medical conditions (2.5 times higher) and chronic illness (2.4 times higher). Young PLW did not seem to have a high The presence of young PLW did not seem to have a high discriminant power between the re-included and excluded, not much affecting re-inclusion status.

Table 34: Copying Mechanisms by re-inclusion status										
Coning mochanisms	Exclu	ıded	Re-incl	uded	Total					
Coping mechanisms	Ν	%	N	%	N	%				
Withdrew children from school	2135	9.3%	1325	19.9%	3460	11.7%				
Reduced essential non-food expenditures (education, health, etc)	4366	19.1%	2038	30.6%	6404	21.7%				
Early Marriage	119	.5%	100	1.5%	219	.7%				
Child labor	260	1.1%	348	5.2%	608	2%				

Table 35: Specific needs by re-inclusion status										
Specific needs children <16		Exclu	ded	Re-in	cluded	Total				
		N	%	Ν	%	N	%			
PLW		491	2.5%	210	3.4%	701	2.7%			
Disability		224	1%	180	2.9%	404	1.5%			
Chronic illness		982	4.5%	663	10.6%	1645	5.9%			
Serious conditions	medical	304	1.4%	217	3.5%	521	1.9%			

As shown in Figure 24, 65 percent of the households who were found to be severely vulnerable and 33 percent of those moderately vulnerable were re-included, pointing out a relatively high correlation between the severe category with other sector vulnerabilities, therefore a high sensitivity of the overall score for this category. On the other hand, relatively low proportion of re-inclusion of the moderately vulnerable households in addition to the relatively high ones for the low and mild categories, indicated a limited discriminant power of vulnerabilities among these categories which does not affect much the re-inclusion status.



8 CONCLUSION

- Results showed that some of the households in need of assistance were excluded by the burden score, confirming the need for a review process to verify the vulnerability of the households and reducing the exclusion error that unavoidably occurred when the burden score was applied for targeting. Out of the 30,000 cases reviewed, 23 percent of them were re-included based on the verification criteria and 5.5 percent of them were re-included by the Multi-Functional Teams (MFTs) that also used qualitative information gathered during the review process.
- According to all indicators, the vulnerability of re-included households was significantly higher than the vulnerability of excluded households confirming that the applied criteria allow for the identification of vulnerable households.
- Cases with specific vulnerabilities could be found among excluded households confirming that targeted assistance was selecting the households most in need. Specific types of assistance-health, shelter, WASH or protection, among others may be needed by the excluded households, especially for those close to the threshold for re-inclusion.
- The sensitivity and specificity of the original verification criteria cannot be completely verified with the results of the current analysis for two reasons. First, the original criteria was based on the household as unit of observation and analysis, whereas the data collected for the verification analysis considers UNHCR registration cases as units. In addition, due to the limited quality of the data collected for the expenditure module, moderately and severely food insecure and economic vulnerable cases were not automatically re-included in order to reduce the impact of the limitations of the data in the overall result.
- According to the overall vulnerability score, 29 percent of the reviewed cases were classified as having low vulnerability, 49 percent as mildly vulnerable, 20 percent were found as moderately vulnerable and 2 percent as severely vulnerable.
- Economic, protection and WASH vulnerability were the sectors that contributed to the highest percentage of households classified as moderately or severely vulnerable.
- The proportion of moderately and severely vulnerable households among the re-included was on average almost 3 times higher than among the excluded for all sectors. NFI and shelter showed the biggest difference as their percentage which was 4 times higher for the re-included, followed by food security (3.3 percent) and WASH (3 percent). Economic vulnerability was the sector that showed the least difference between the re-included and excluded, with a proportion of moderately and severely vulnerable 1.7 times higher among the re-included than the excluded.
- NFI and shelter, followed by food security, were the sectors that were better captured by the overall vulnerability classification, with the highest proportion of severely and moderately vulnerable households included. On the other hand, the global vulnerability score is less sensitive to economic vulnerability followed by health.
- Considering the proportion of low and mildly vulnerable households who were re-included, economic vulnerability was the sector that better identified these categories of welfare, resulting in a lesser proportion of households re-included.
- Considering sensitivity and specificity, NFI and WASH were the sectors that better identified global vulnerability whereas health sector would have the least determining power, not much affecting the reinclusion status.

- Economy and NFI were the sectors that show better correlation with other sectors affecting the vulnerability levels of the other sectors, followed by shelter and food security. The lowest correlation is found for health.
- The indicators that show the highest difference in percentage between the re-included and excluded, therefore appeared to be potential good proxies of vulnerability and were as follow: child-headed households, begging, children involved in income generation, early marriage and accepted illegal and high risk jobs as coping strategies, big household size, disability, dependency ratio, households with more than 2 children under 5, school-age children, elders or people with specific needs, more than 1 member under 18 with disability, access to bathroom, type of toilet, type of housing and occupancy, NFI items, as well as expenditure per capita/MEB and sum of vulnerabilities for protection.
- Although these indicators captured a high proportion of the differences on vulnerability, the model allowed for the correct identification of 68 percent of the vulnerable cases. The inclusion of other indicators although less individually powerful increased the probability of adequately identifying a higher percentage of vulnerable cases.
- Given that the main purpose of the review process was the confirmation of household vulnerability, the best criteria would be one that optimizes sensitivity and specificity, but giving relatively more importance to sensitivity to reduce the exclusion error as much as possible.
- Special vulnerable cases like child headed households, homeless households, the households with no access to toilet facilities, or that have resorted to begging as coping strategy or main livelihood source could be found among the excluded households.

RECOMMENDATIONS

- Apply the verification tool to the households selected by the burden score and currently receiving assistance in order to estimate the inclusion error and identify households wrongly included.
- Continue with the review of households excluded by the burden score that apply for re-inclusion as well as referred cases.
- Increase the efforts and resources to improve the quality of collected data through closer supervision of data collection and by developing a minimum standard training mandatory for all enumerators and supervisors participating in data collection.
- Revise the variables and weights included in the criteria to ensure that they reflect the relative discriminant power of the sectors and indicators identified as best proxies without reducing the sensitivity of the overall criteria to global vulnerability.
- Consider household as a unit of observation and analysis instead of the UNHCR registration case, in order to ensure that the data collected reflects the real living conditions of the members, especially in terms of dependency ratio, expenditure module, coping strategies and food consumption.
- Replicate the analysis with the VASyR database to check whether the limitations observed in the verification questionnaire especially those related with the exclusion of special vulnerable cases are due to the limitations on the household issue and quality of data collection for the expenditure module or are part of the criteria.

- Given the objective of the review process and the implications for refugee households, it is recommended that while ensuring operational feasibility the verification criteria should optimize sensitivity and specificity¹² of vulnerability, giving more relative importance to sensitivity in order to reduce exclusion error as much as possible.
- Include the indicators identified as good proxies of overall vulnerability in the model, unless its inclusion implies a lower accuracy, especially in terms of sensitivity.
- Pay special attention to the re-inclusion of specific vulnerable cases, such as child headed households, homeless households or those without access to toilet facilities, the households who have resorted to begging as coping strategy or main livelihood source, or the severely and moderately food insecure. An in-depth analysis of these special cases is recommended to understand if they should constitute cases of automatic re-inclusion independently of the vulnerability score obtained or imply a reduction on the threshold for re-inclusion.
- Additional analysis on the vulnerability profile of verified households by region is recommended for better understanding of the geographical differences in re-inclusion rate and informing the fine-tuning of the criteria.

¹² The capacity of the indicator to detect vulnerability and non-vulnerability.

ANNEX 1- Verification questionnaire

املا قبل المقابلة										
Date : التاريخ Location ريف المكان	/ Month الشهر n ID محافظة isent: We are y	/] Day Year السنة اليوم morate/]] shold/]] working for a hum	Organization هوية المنظمة District/ إ مnitarian organiz	n ID: <i>Location</i> المكان ration and we wou	Interv سم الباحث Id like to as	iewer إس	Name :	الأسرة s about your family v	/ith the	
aim of naving a better understanding of your living conditions. The survey usually takes about 20 minutes to complete. Any information that you provide will be kept strictly confidential. This is voluntary and you can choose not to answer any or all of the questions. However we hope that you will participate since the information you will provide is essential to evaluate your situation. If you don't however we hope that you will begin now? YES NO										
A house	ehold is defined	l as a group of p	eople who rout	inely eat out of : ي نفس المجمع .	same pot a لوعاء وتعيش ف	nd liv ن نفس ا	e in the same وتيني التي تأكل مز	structure. مجموعة من الناس بشكل ر	يتم تعريف الأسرة بأنها	
1.1	What is the set head? CIRCLE the a	x of the household ما هو جنس رب الأسر nswer م <i>نوانرة</i>	l Male Female	e = 1= نکر = 1 انٹی= 2 = 2	What is t (<i>in years</i>	:he ag ;) १ व	e of the househ ما هو عمر رب الأسرة	old head?	years أعوام/	
2.1. UN	HCR Refugee R	egistration num	ber: ا			2.1.a.	Relationship w	ith Household head ما هي الصلة برب الأسرة	<u> </u>	
	مي رجين العمر Age	a. 0-23 أشهر months	b. 24 – 59 أشهر months	c. 5-15 سنواتyears	d. 16 -17 yearsسنوات		e. 18-59 بىنواتyears	سنوات f. ≥60 years	g. TOTAL مجموع	
2.1.1	# HH members عدد أفراد الأسرة							II	II	
	العمر Age	a. Pregnant or lactating women نساء حوامل والمرضعات	b. Disability لديهم إعاقة	c. Temporary injured إصابة مؤفتة	d.Chronic صابين ill اض مزمنة	cally م بأمر	e. Serious medical conditions ظروف صحية خطيرة	f. People in need of support to daily activities الناس الذين مو حاجة للمساعدة للقيام بالأنشطة اليومية	g. TOTAL مجموع	
2.1.2	0 – 17 years حتى السابعة عشرة	II	II	II		_1	اـــــــــــا			
	18 – 59 بين الثامنة عشرة و التاسعة وخمسون	II	۱۱		I	_1	II	II	١١	
	60 years من ک ثراً سنک ثراً سدنة ستون	II	II			_1	۱۱		اــــــا	
2.3. Members non registered: المالة برب الأسرة ما هي الصلة برب الأسرة الموال المالة برب الأسرة										

	العمر Age	a. 0-23 أشهر months	b. 24 – 59 أشهر months	c. yea	5-15 سنوات rs	d. ye	16 - 17 سنوات ars	e. 18-59 بنوات years	f. ≥60 years	سنوات	g. TOTAL مجموع		
2.3.1	HH # members عدد أفراد الأسرة		II	I		I_		II	I		II		
	العمر Age	a. Pregnant or lactating women،نساء حوامل والمرضعات	b. Disability لايهم إعاقة	c. Ter inj وقتة	mporary jured إصابة م	d.Cl il منة	nronically مصابین ا بأمراض مز	e. Serious medical conditions قروف صحية خطيرة	f. People in need of support to daily activities الناس الذين هم في حاجة للمساعدة للقوام بالأنشطة اليومية		g. TOTAL مجموع		
2.3.2	0 – 17 years حتى اللسنة السابعة عشرة	١١		I]	I_		II	II II		II		
	59 – 18 years بين الثامنة عشرة و التاسعة وخمسون	= 59 ears بين الثامنة و التاس		I		I_		II	II		١١		
	≥60 years من کٹر آ سنون سنة			I		I_							
3.	Are you taking care of any child under 18 that is not member of your immediate family? If yes, how many? لليس عضوا في أسرتك " (if yes, how many? المباشرة؛ إذا كان الجواب نعم، كم؟ المباشرة؛ إذا كان الجواب نعم، كم؟ If no, write 0. الذا لا ، اكت صغر الله الذا ال										ليس ضمن الأسرة النواتية/المبائد		
	Type of hous	نوع السكن sing		CIRCI	LE ONLY	ONE O	فقط PTION	ضع دائرة لخيار واحد أ					
4.1	Villa / Indep Apartment/2	Coll	2 Separate room / F Collective shelter / غرفة منفصلة/ المأوى الجماعي			3 Factory/Warehouse/ Worksite Garage/Magasin Unfinished shelter/Tent/خیمة/ مصنع/ موقع عمل/ماری غیر کامل			4 Pedestrian Homeless/ مشردین / دون ماوی				
	Type of occu	نوع الإقامة pancy		CIRC	LE ONLY	ONE O	-ح PTION لم	مسودح ضع داند و لخبار و احد فقط N					
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1		2				3	4				
4.2	Owned apar Furnished re Hosted (for تضافة (دون مقابل)	tment/house ental free) (ملك جار مفروشة بال	Provid یا (- Unfurnished rental Provided by Employer/ الجار غير مفروش/ يؤمنها صاحب العمل				As	So	الاستقطانSquatting			
4.3	If renting, (\$) ل الإيجار الشهري؟	how much per n في حال اجار ما هي قيمة بد	nonth	ﺎﺕ Bathrooms =0 ﻧﻤﻢ=Head \$ يتخدامها من قبل أسرتك			ما ت rooms 1=0 نعم=s ستخدامها من قبل	الحماء Able to use No=لا الممكن إه					
4.5	Living spac <i>HH)</i> مسکن في متر مربع	Occupie (Occupie) : تشغلها أسرتك مساحة اله	d by your (التي	II	4.6	Num المعيشة	ber of pec پتقاسمون مکان	الله المعنون الم معنون المعنون ال					
	What kir	nd of toilet facility	does your hou	sehold us	e? C IRC: د فقط	LE ONL ، خيار واد	Y ONE OP ع دائر ة حول	PTION ض	ستخدمه في منز لك؟	الذي ت	ما هو نوع المرحاض		
5.		1			2			3					
	Improved latrine with cement slab / Traditional pit latrine Flush latrine مراحيض محسنة مع بلاط من slab/ open pi ي/ بدون بلاط / حفرة مفتوحة مرحاض مع دافق / الإسمنت					ine/ witl n pit ض بل <i>دي/</i> بد	nout 0 مرحاء	ipen air (bush, st →	ream)/ corner pla زل if 3, skip to ques	ice in ، في المن <i>tion 5</i>	the compound /خلاء (غابة / خور) ركن إذا ثلاثة انتقل الي السؤال.		
5.1	If using latri رة شخصا أو أكثر؟ U=No=V	nes, are they shai هل يتشر اكون مع خمسة عش	ed with 15 or المراحيض: الة استخدام المراحيض:	more peo في ح	ple 1=	عم =Yes	- I_						
5.2	Does your household have access to sufficient water for drinking, cooking washing and toilet purposes?						ل Does the household have soap and hygiene items? (observation) 0 = (هل يتوفر لدى الأسرة الصابون ومواد التنظيف؟ (مراقبة CIRCLE ONLY ONE OPTION) = No =۷ = Yes = نعم		

	هل يتوفر لأسرتك الحصول على مياه كافية للشرب والغسيل والطهي وإحتياجات المرحاض؟							ضع دائرة حول خيار واحد فقط								
	CIRCLE ONLY ONE OPTION															
6. Does	بار واحد فقط the househ	حوں حب nold ha	ضع دائرہ ave acce	ss to	the minin	num a	mount of t	he foll	owing ite	ms? (i	n usa	able condi	tion)	0=no=>	1=	نعم = ves
للإستعمال	؟ (في حالة قابلة	التالية ا	وات والسلع	من الأد	ة العدد الأدنى	ل الأسر ف	(هل يتوفر لدي									,
6.1	Mattress es/فرش	6.2	/Beds أسرة	6.3	Winter clothes ملابس / شتوية	6.4	/Blankets بطانیات	6.5	Refriger براد/	ator	6.6	/Stove kitchen موقد غاز / مطبخ /	6.7	Kitchen utensils أدوات / المطبخ	6.8	Water heater/ سخان المياه
									I							
	What	is the	level of	educ	ation com	plete	d (<i>Write the</i> ستوى التعادم المن	code)			ł	Head of the	house	ب الأسرة hold؛	رى	
7.	0 None/¢ 2 Secondar	لا شي. ry or h	1 Bel فوق / igher	low se وية وما ا	رية /condary المرحلة الثان	جر. حلة الثانو	دون المر دون المر									
8.	How many 30 الماضية؟	y hou: الأيام ال	sehold m ين عملوا في	nembe أسرة الذب	ers have v کم عدد أفراد الأ	vorke s	d in the las	t 30 d	ays?	I	_ →	if 0, skip t	o ques	tion 8.2	ال 8.2	إذا صفر ، إنتقل إلى سؤ
								- 1	70 davia -		Р	ermanen	S	easonal		Temporary
8.1	permanen	y of tr it, sea	isonal or	temp	orry؟ مة،	ie sou بة هي دان	م الثلاثين الماضي	e last .) في الإيا	(مصادر الدخل	re کم من	t	T 11.		موسمية		مؤقتة
	سميه او مؤفّته؟	موس										دائمة				-
	In the las	t 30 d	ays, wha	at was	s the main	n sour	ce of cash/	/incon	ne to sust	ain you	ur ho	ousehold?		11		II
8.2	Use the) ندم الرموز الاتية	codes نك؟ (أستذ	below) فل لإعالة أسرن	النقد / د	ث مصادر رنيسية	ي أهم ثلان	ن يوماً المضو ما ه	في الثلاثير					I-			
1 = Inco	ome from lab	عن /or	الدخل الناتج		2 = Assis	stance,	begging, gi التسول ، الميات	ے، / fts	المساعدا			3	3 = Re	emittances, ة غير الرسم	, inform	nal commerce/ التحويلات المالية
4 = Savi	ings, sale of	assets	الموجودات/	ت , بيع	لمدخرا								-	ون / قروض	= 5 دب	Debts/Loans /
	What is th				t chout h		household	ماريرام	LACT			e fellewin	- it			
9.	what is th	ie est	imateu a	mour	it spent b	y the	nousenoia	auring	LASIMO	ر التالية؟	العناصر	د الماضي على	لال الشهر	15: نفقته أسرتك خا	ي الذي ا	ما هو المبلغ التقدير
	Write 0 if	there	is no ex	pendi	iture. Circ	le the	currency u	ısed				مملة المستخدمة.	رة حول ال	ي نفقات _. ضع دائر	ي ليس هناك أ	اكتب صفر في حال ا
a. TO	مجموع TAL P	 \$	LI	BN	b. FC	DOD (Including vo	ucher) LB	ا في ذلك القسائم NP \$	ا لطعام (به)	c. H	DUSE	ر المنزل RENT P	أجار \$	LBN
10.	How many	days i	in the <u>las</u>	<u>t 7 da</u>	iys has you	ur hou	sehold eater	n the fo	llowing fo	od item	s? Wı	rite the cod ة التالية	e: الأطعما	او لت فیہ عائلتك	لماضی تن	كم يوم في ا لأسبوع ا
а	Nuts and I ، جوز ، بندق	Pulses (لوز :	Beans; le س المكسر ات	ntils; C ،، أخر ي	hick peas, (إليا ؛ الباز لاء	Ground ؛ الفاصو	nut; Ground! الحمص و الفو ل	Bean; I العدس؛ ا	eas, Other ل: الحبو ب؛	Nut/Pu [.] ات والبقو	ilse مکسر ا	ال				
	9	Fruits:	banana, a	pple, a	vocado, citr	us – (n	nandarin, lem	on), me	lon, wateri	nelon, p	omm	e grenade				
b	syrup. براب الرمان.	بطيخ، ش)، شمام، ال	الليمون	. (الماندرين و	ضيات -	الأفوكادو، الحم	التفاح، ا	ا که : الموز،	القو					I	.
с	10 ا	Flesh ı	neat. Be	ef; Goa	at; Pork; Ch مالأغناء	nicken,	turkey, sheep	o, other ناخان	Meat, Live	r, organ	meat,	,				_
11 1	During the	last 30	days, did	you ex	وليني وروي مصام perience la	ck of f	<u>پر ر ، سب ج ورا</u> pod or mone	y to buy	food?	م. س م (ب	· <u> </u>	0= No= `	v →		1	
	ا لشراء الطعام؟ ا مطغ مصنتور	في المال ام 7 خمما	ي الطعام ، أو بد له:له مدها	نقص في مط	<u>اجهت الاسرة</u> مط امامطمون	ضو هل <u>و</u> محد مد	، ال ۳۰ يوما المد اه همه بيماهم	خلال مه مطع ک								- 105
11.2	During the		iays, did y	ourno	usenoid na	ve to e	انه؟ ؟	، المال لشر	الغذاء أو نقص	ا ategies ا امل مع نقصر	الية للتع	الاستراتيجيات الت	تتبع إحدى	بطرت أسرتك أن i	uo buy / سية، هل إخ	الا: خلال الأيام السبع الماض
a . Borrow , أو الأقارب	ved food or re اعدة من الأصدقاء	lied on! على المس	help from أو الاعتماد :	n frienc الغذاء	ls or relativ	اض es	اقتر 0 = No	0 =	c. Reduced	d the nui	mber	of meals eat جبات الطعام	en per: او حجم و	day or porti تي تؤكل يوميا أ	ion size الطعام ال	of meals تخفیض عدد وجبات
b. Sper أكل	 c. Spent days without eating انبقي لأيام كاملة من دون d.Restrict consumption by adults in order to young-small children to eat? تم d.Restrict consumption by adults in order to young-small children to eat? 									dren to eat? تقليل استهلاك البالغي						
11.3	During the it? Read all MAXIMUM	past 30 of thei code if) days, did m. Write 0 any of the	anyor) if "No e strate	ne in your h " or 1 if yes egies below	ouseho or if it was ap	old have to de was not appli pplied. المال لشرانه ؟	o one o ied beco الغذاء أو	f the follov ause it was ب عدم توافر	ving thin already التالية بسب	ngs be done لأعمال	cause there and it is not أسرتك القيام با	was no possibi من أفراد	ot enough fo le to continu) کان علی أحد ا	o <mark>od or r</mark> e doing مضو ، هز	noney to buy it. Circle the خلال الثلاثين يوما اا

	كتب صفر إذا كان "لا" أو واحد إذا كان الجواب نعم أو إذا لم يتم تطبيقه لأنه تم بالفعل، وأنه ليس من الممكن أن يستمر القيام بذلك. ضع دائرة حول رمز كحد أقصى إذا تم تطبيق أي من لاستر اتيجيات أدناه.									
1		2		3			4			
		إنفاق المدخر ات/Spent savings		Sold productive assets/ transport means (sewing machine, bicycle, car, livestock) بيع الموجودات المنتجة / وسائل النقل (آلة الخياطة، (دراجة، سيارة، الثروة الحيوانية		Had school a involved ir سادسة حثامسة عشر لدخل	ge children (6 -15 y) n income generation هل على أطفال المدارس (« سنة) المشاركة في زيادة ال	11		
None لا شيء	s č	Sold goods (TV, jewelry, etc) (بيع المتلكات (التلفاز ، المجوهرات ، الخ	11	Withdrew children from school سحب الأطفال من المدرسة			تسول Begged			
	E E L	Bought food on credit or borrowed money to buy food شراء الطعام بالدين ، أو اقتراض المال من أجل شراء الطعام		Reduced essential non-food expenditures such as education, health, etc تتغفيض النفقات الأساسية الغير غذائية مثّل التعليم والصحة، الخ		Accept high risk, illegal, socially degrading or exploitative temporary jobs? (e.g. theft, prostitution)/ قنول المخاطر العالية، والوظائف المؤقّتة الغير قاتونية أو المهن المستغلة اجتماعيا ؟ (مثّل السرقة، والدعارة				
				Marriage of children under 18 تزويج الفتيات دون سن الثامنة عشرة سنة		Sold house or la	بيع المنزل أو الأرض and	II		
12	[During the past three months, did any member or your household borrow money or receive credit? لا الأشير الثلاثة الماضية، هل قام أي فرد من أسرتك باقتراض المال أو الحصول على انتمان نقدي؟								
	12.1	Total amount of debt u (Circle the answer) حتى الآن (ضع دائرة حول الإجابة)	ip to no الإجمالي للديون .	معند 1: No debt لا ديون 1: No debt المبلغ 2: <=2(00 USD \$	\$ 3: 201-6	600 USD \$ 4	1: >600 USD \$		
	13	Does your household hav	e the po	ssibility to generate in the future income to address your needs? 0 = No=1 ¥ Yes= مل لدى أسرتك الإمكانية في المستقبل لتوليد الدخل لتلبية احتياجاتك الخاصة ؟						
	13.1	If not, why? Circle the a	nswer co اذا؟ ضع دائر	ode I. Lack of job opportunities عدم توفر فرص العمل 2. Serious medical condition (temporary or long tern اعاقة / عجز 3. Disability حالة صحية خطيرة (مؤقتة أو طويلة الأجل)						
	14.	Observations ملاحظات								
	15.	Recommended referrals: تحويلات الموصى بها	a.l 11 Psy		c. Prote مأوی /er	ection / الحماية d.	. Registration/سجيل	التا 🗌 е.		
	16.	Are you living with المعام العليا للاجنين؟	ا other ر غیر اسرتا	registered families? از من تسکن مع اس → if no, don't fill the next table		0 = No=Y	نعم=1= Yes			
	UNHCR Refugee Registration number: رقم تسجيل اللاجنين في المفوضية العليا للاجنين.		Is this family living with you sharing their resources with your family? هل تشارکك هذه الاسرة بمواردها؟		re you sharing y واردك؟	OUT RESOURCES N هل تشارك هذه الأسرة بمو	with them?			
	c		Yes O No O		Y					
Ĺ	c			Yes O No O		Yes O No O				
		C		Yes O No O		Yes O No O				
	CC		Yes O No O		Ye					
Ļ		C		Yes O No O		Ye	es O No O			
Ļ		C		Yes O No O		Ye	es O No O			
Ļ		C		Yes O No O		Ye	es O No O			
		cc		Yes O No O		Yes O No O				