## CAMP PROFILING ANALYSIS - SALE OF IN-KIND ASSISTANCE

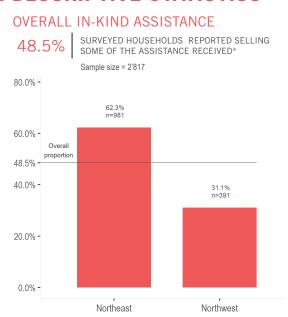
September 2019 - October 2020

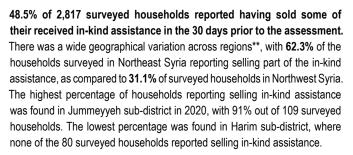


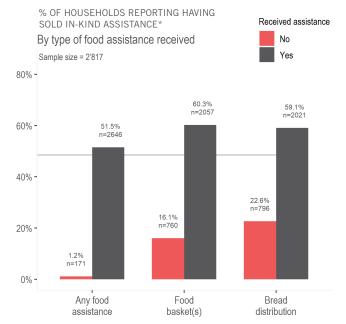
# 1. SUMMARY

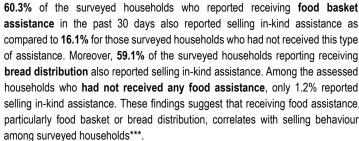
To inform the humanitarian response, REACH Initiative conducts Camp Profiling assessments to provide an overview of humanitarian conditions in camps through household level surveys. This specific meta-analysis provides insights on in-kind assistance selling to support decision making of humanitarian actors on distribution and modality of assistance choice. It investigates to which extent surveyed households sold the in-kind assistance they received and what household characteristics and contextual variables might predict this behaviour for the surveyed households. Overall, 48.5% of the surveyed households reported having sold some of the in-kind assistance received in the 30 days prior to data collection. The type of food assistance received and the reporting of shelter needs emerged as significant predictors of in-kind assistance selling, while controlling for geographical variation. The analysis was based on data from five Camp Profiling assessments conducted by REACH between September 2019 and October 2020 across Northwest and Northeast Syria. Findings presented are based on randomly selected households at the camp level hence should be considered representative of the assessed camps only.

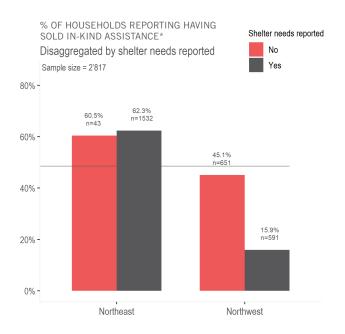
## 2. DESCRIPTIVE STATISTICS











In Northwest Syria, surveyed households who reported having at least one type of shelter need were found to report selling in-kind assistance significantly less frequently (15,9%) than households without shelter needs (45.1%). Meanwhile, the vast majority (97%) of surveyed households in Northeast Syria reported having shelter needs, and the proportion of surveyed households reporting selling in-kind assistance was not significantly correlated with reported shelter needs for this region.

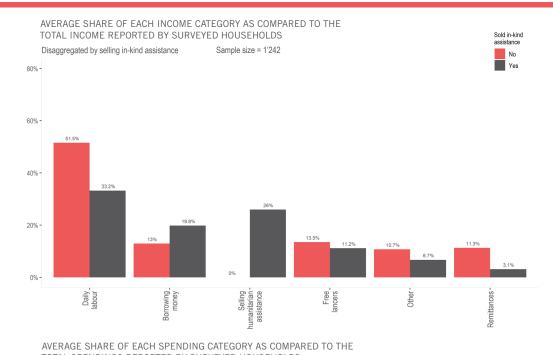
<sup>\*</sup> In-kind assistance selling indicator is defined over the period of 30 days prior to data collection date.

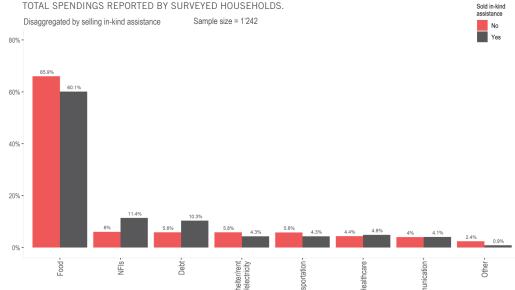
<sup>\*\*</sup> All proportion differences mentioned in the text are significantly different one from each other at a level of 5%

<sup>\*\*\*</sup> We cannot however affirm that surveyed household reporting food assistance on average sell this type of assistance more frequently, as the dataset doesn't allow to determine the type of assistance sold.

Moreover, type of assistance and in-kind selling could be both correlated with another common explanatory variable affecting both type of assistance received and in-kind selling behaviour. The logit model presented in the predictive analysis section tries to control for other dimensions that might predict in-kind selling.

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#### **SOURCE OF INCOME\***

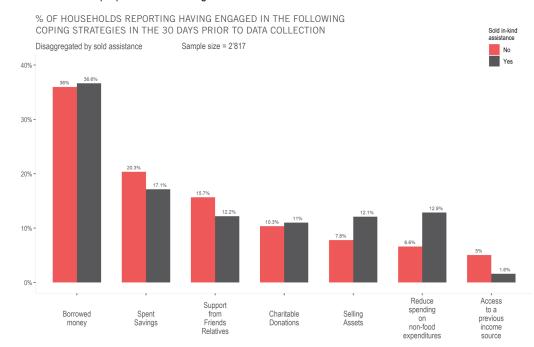
Surveyed households reporting selling in-kind assistance earned on average 26% of their income from this strategy, relying on average significantly\*\* more on debt (19.8% of total reported income against 13%) and less on daily labor income (33.2% against 51.5%) and remittances (3.1% against 11.3%) as compared with surveyed households who did not report selling in-kind assistance.

#### SPENDING DISTRIBUTION

While food spending accounts for the largest spending share among all surveyed households, surveyed households reporting selling in-kind assistance spent on average significantly less on food (60% as compared to 66%), and more on non-food items (11.4% as compared to 6%) and debt repayment (10.3% as compared to 5.8%).

#### **COPING STRATEGIES**

Surveyed households reporting selling in-kind assistance also more frequently reported selling assets (12.1% against 7.8%) and reducing spending on non-food expenditures (12.9% against 6.6%) as a coping strategy. There was no significant difference in the proportion of surveyed households reporting borrowing as a coping strategy when disaggregating between surveyed households reporting selling in-kind assistance and the others. Moreover, surveyed households reporting selling in-kind assistance seemed to also report less frequently relying on savings and support from friends and relatives, however the difference in proportion was not significant.



<sup>\*</sup> We were able to retrieve income from sale of in-kind assistance only using data from Northwest Syria 2020 camp profiling, as the survey changed. Thus all figures on income and spending shares are based on this sample of 1242 individuals. To facilitate comparison, we also limited the spending analysis to the same sample from Northwest Syria 2020 camp profiling.

<sup>\*\*</sup> Only income and spending categories that where significantly different at a significance level of 5% when disaggregating by households selling in-kind assistance were mentioned in the narrative. Any difference in proportions mentioned in the narrative as significant refers to a proportion t-test at a significance level of 5%.

## 3. PREDICTIVE ANALYSIS

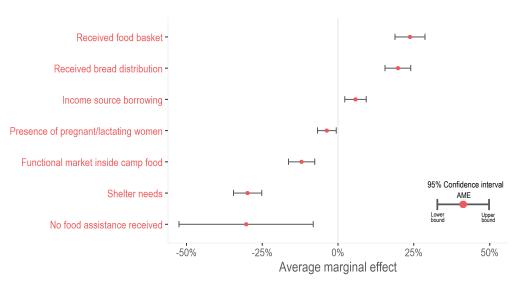
In order to account for geographical variation in reported selling of in-kind assistance, a logit model was used to identify variables significantly predicting in-kind selling assistance across all surveyed households.

### Identified variables predicting selling of in-kind assistance

When controlling for geographical effect and other predictors, the estimated probability of selling in-kind assistance is on average 24 percentage points higher\* for surveyed households reporting receiving food basket assistance while for surveyed households receiving bread assistance, the estimated probability is 20 percentage points higher than for other surveyed households. The predicted probability of selling in-kind assistance for surveyed households reporting shelter needs is on average 30 percentage points lower than for other surveyed households.

In the logit model used, receiving food basket assistance, receiving bread and reporting borrowing as source of income were all identified as significant predictors increasing the probability of in-kind assistance selling, while reporting shelter needs, receiving no food assistance, presence of functional market for food inside the camp as well as presence of pregnant or lactating women in the household were identified as significant predictors decreasing the probability of in-kind assistance selling. Apart from the presence of pregnant or lactating women in the household, no consistent and significant link has been identified between the probability of in-kind selling and various vulnerability criteria as women, children headed or large households, etc.

### In-kind assistance selling - Logit Model



The AME is the increase/decrease in the estimated probability of in-kind selling when increasing the value of a predictor by one. The graph shows in red the AME as well as 95% confidence interval for each of the predictors used in the logit regression. Geographical control has been done at sub-district level.

### **Logit Regression - Methodological Box**

The present logistic regression aims at predicting the probability of reporting selling some of the received assistance in the 30 days prior to data collection with a set of variables, or "predictors". The present analysis relies on the set of available predictors that turned out to be significantly different from zero. The main benefit from this approach is that it enables identifying variables predicting in-kind selling, "controlling" for other variables as geographical specific effects at the sub-district level.

The estimated average marginal effect (AME) refers to the increase in the estimated probability of engaging in in-kind selling when increasing one predictor by one unit while keeping other predictors at their average value.

The proposed model can only identify correlation and proposes a predictive framework, but in no means suggests that the identified predictive variables have a causal effect on in-kind assistance selling. Predictors cannot be considered exogenous and might be affected by other omitted variables. Some variables that might also play an important role in the decision of selling in-kind assistance are not available, hence these omitted variables might thus bias the estimated average marginal effects.

### Methodology and coverage:

This analysis is based on the past five camp profiling exercises conducted in Northwest and Northeast Syria in 2019 and 2020. Each camp profiling assessment is done through individual interviews among randomly sampled households in order to obtain statistically representative data at the camp level with a margin of error ranging from 5 to 10% depending on the camp profiling dataset, at a 95% confidence level.

Camp Profiling assessment	Number of camps	Date	Sample
Northeast Syria Camp Profiles	9	<u>Sept 19</u>	880
Northwest Syria Camps and Site Assessment	13	<u>Feb 20</u>	1242
Ar-Raqqa Camp Profiles	4	<u>Jul 20</u>	460
Roj-Newroz Camp Profiles*	2	Oct 20	129
Areesha Camp Profile*	1	Oct 20	106

<sup>\*</sup>The two datasets are not published and available upon request.

### **Caveats and limitations:**

The analysed dataset does not differentiate between the different types of in-kind assistance received by households as only food assistance modality and cash support were monitored. The analysed dataset does not include indicators on the motivations behind in-kind selling or on the type of in-kind assistance sold by surveyed households. The analysed data set does not capture the extent to which surveyed households sell in-kind assistance, both in terms of frequency and generated income. Reporting of in-kind assistance selling received might be sensitive and hence subject to under-reporting, and findings should be triangulated with other sources as much as possible.



<sup>\*</sup> All differences in predicted probability mentioned in the narrative also referred to as the estimated average marginal effect (AME). See the Logit regression methodological box and the graph below for more details. The model has been run over the whole sample of 2'817 observations.