A nutrition analysis conducted by a HARP-F partner

Dietary Diversity Evolution in Northern Rakhine State in 2020

Methodology

The following data shows the evolution of dietary diversity over the course of the 11 months (February 2020 to December 2020), based on four rounds of monitoring (February, June, September and December 2020). All of the respondents are current beneficiaries of food assistance programming, and therefore received monthly food kit rations as part of blanket distributions. In order to calculate the Food Consumption Score (FCS) indicator, respondents were asked to recall how many times per week their household had consumed each of the 16 standard food groups, in the week preceding the monitoring exercise. As the assessment was focused on consumption frequency, and not consumption quantity or quality, it should be noted that this is not a perfect representation of the food security situation, but it can nonetheless provide an indication of average dietary patterns.

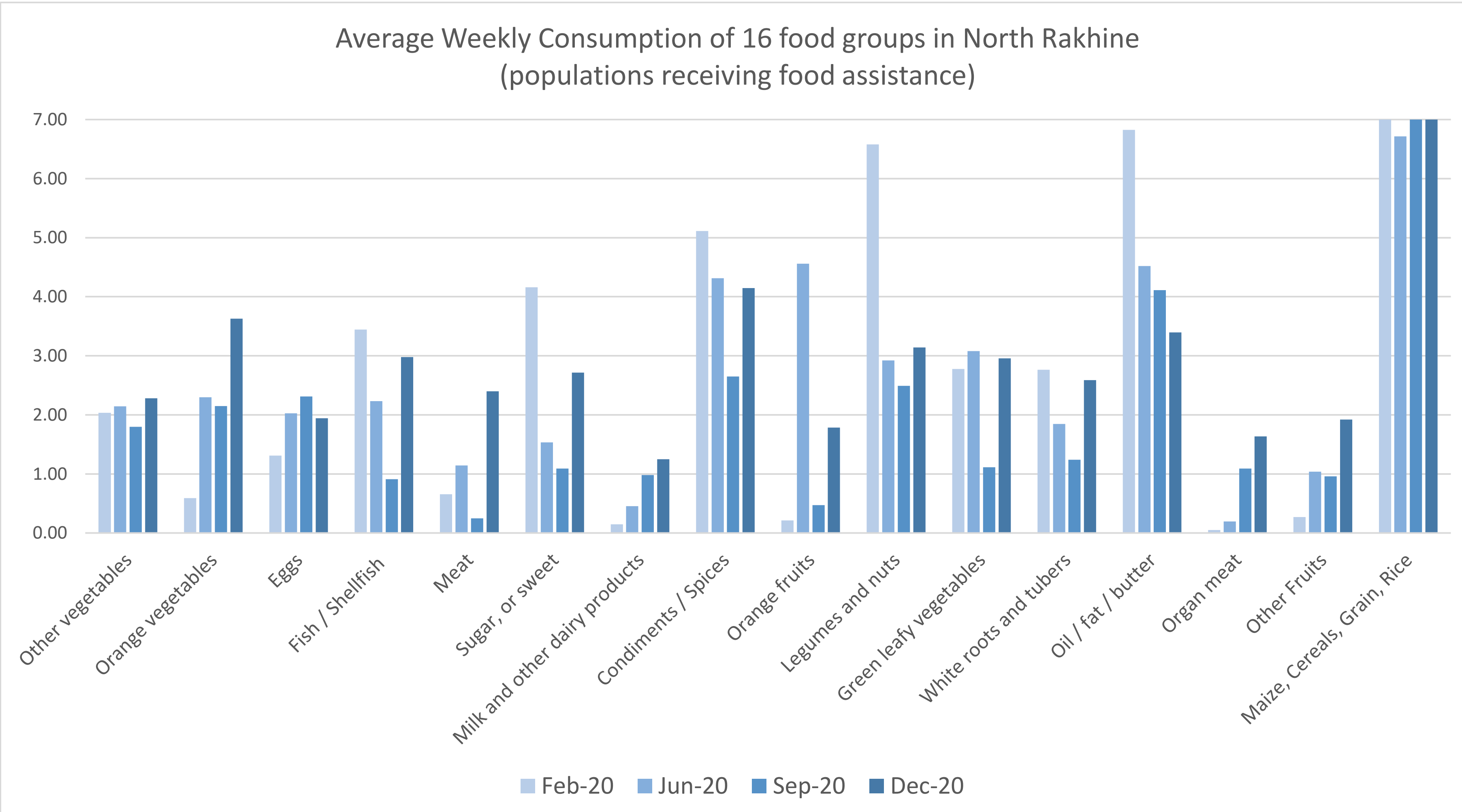
Each survey used a two-stage cluster sampling methodology which was representative of the beneficiary population in each operational area. The sample was drawn from the complete list of villages receiving food assistance under the humanitarian program. Households were selected using systematic sampling with probability proportional to population size. In each selected village, households were selected with simple random sampling amongst all beneficiaries receiving food assistance.

Findings

Based on the evolution of average weekly consumption of each food groups, a deterioration of dietary diversity is observed between the start and the end of 2020. A clear decrease across nearly all food groups is observed in September 2020, which most likely coincided with the COVID-19 outbreak in the country and the height of movement restriction, commodity price increases, and market closures in Rakhine. By the time of the December 2020 assessment, several food groups saw improvements in terms of regular consumption; but levels remained much lower as compared with the diets reported in February 2020.

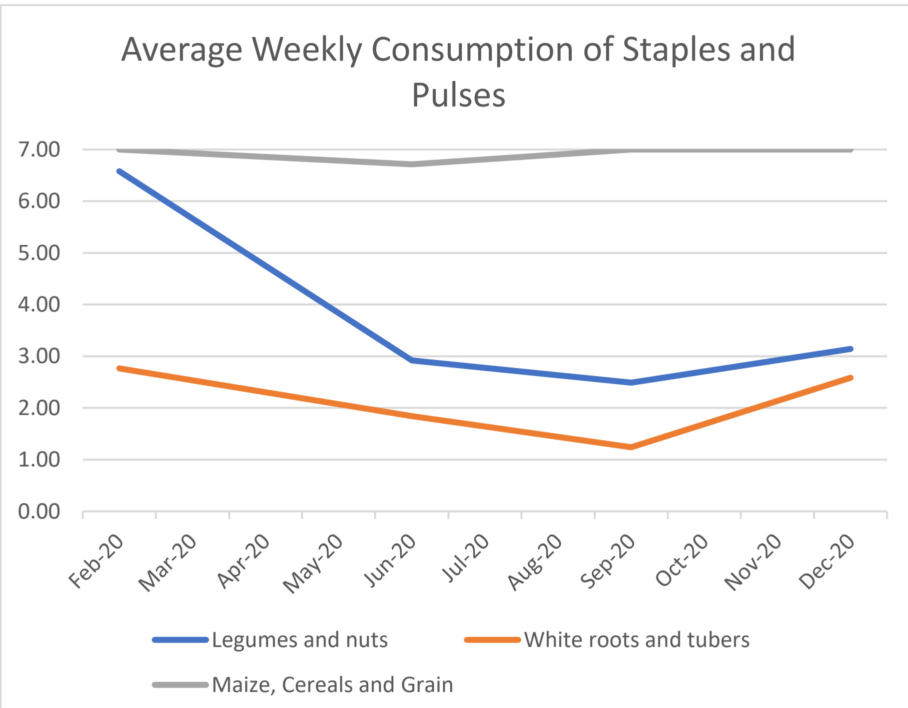
Compared with February 2020, households are more reliant on rice for their daily food intake in December 2020, as the 2nd most consumed food group (condiments/spices – which has a 0 weight value in the consumption of the FCS) is only consumed 4.1 days a week. In December, only 5 of the 16 monitoring food groups were consumed at least 3 times per week on average.

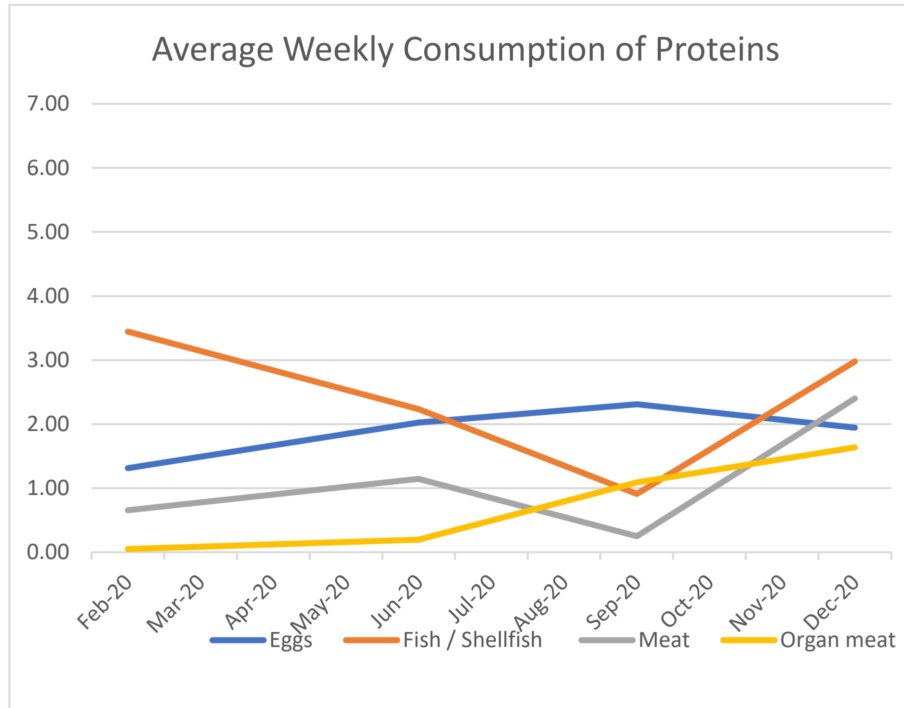
With fruits and vegetables consumption varying based on the seasonality of ingredients, they remain stable dietary options for households in the context of the COVID-19 pandemic. Increase and decrease in consumption seems to linked to harvest periods, and the availability and seasonality of certain crops, due to high local reliance on agriculture, home-gardening, and foraging.



- **Maize, Cereals and Grain**, which includes rice, has remained consistent through time, with consumption remaining on a near daily basis for all households. Consumption of white root and tubers, and of legumes and nuts, saw a drastic decrease throughout the decrease throughout the year. While consumption frequency has slightly improved as of the end of 2020, this is still much lower than levels observed at the start of the year.

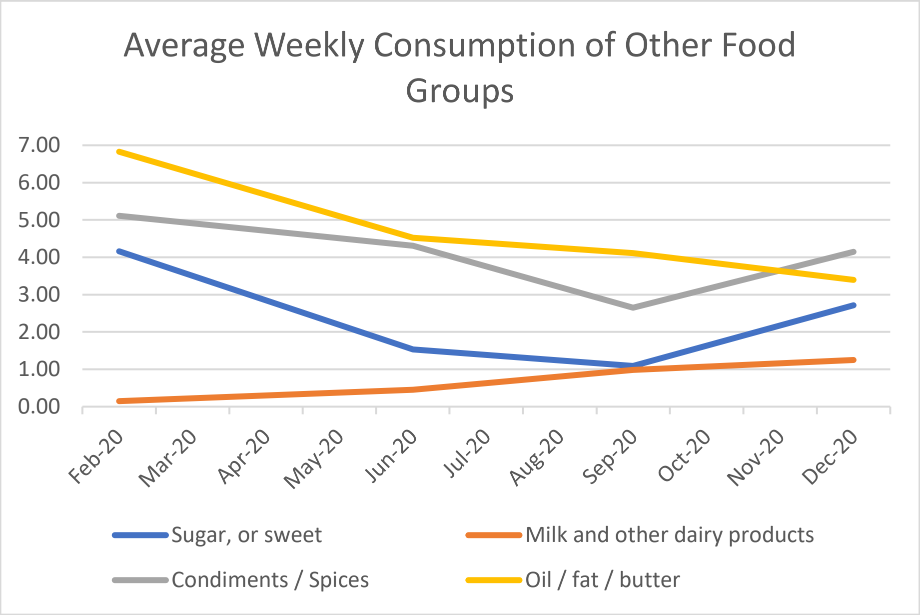
- **Protein** intake saw some of the biggest fluctuations, throughout the year, with an overall dip observed around September and an improvement thereafter. As the weekly consumption is based on frequency and not quantity, it is difficult to make conjectures; but the rise of organ meat consumption throughout the year is notable, and could indicate an increased consumption of 'cheaper' proteins. Fish remains the most important source of protein, due to the local coastal access and important fishing economy in Rakhine.

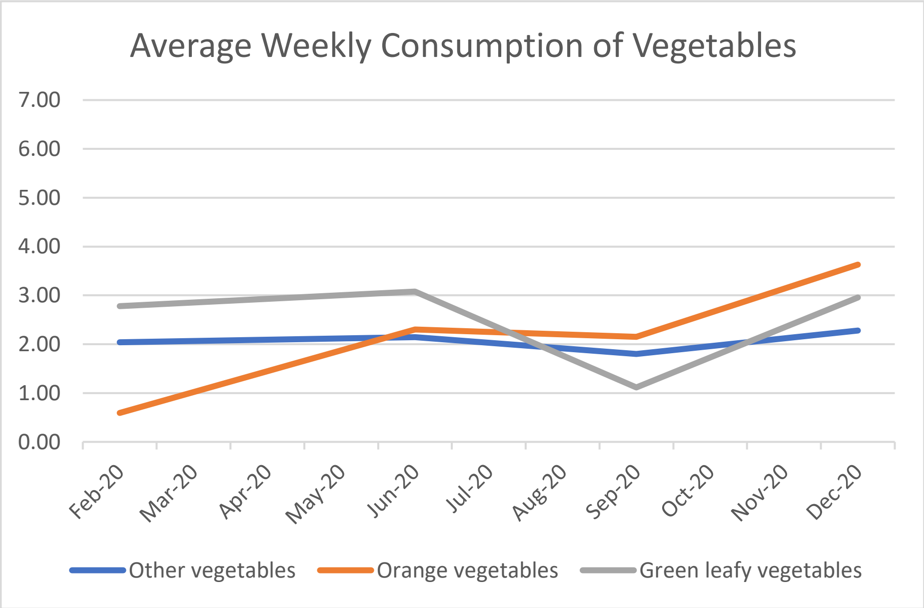


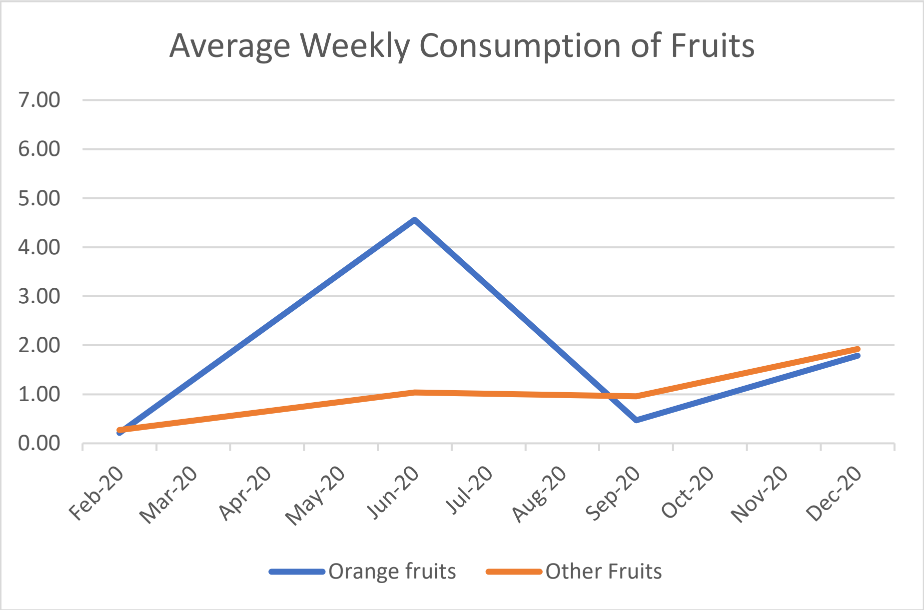


- Vegetable consumption peaked in June 2020, notably the consumption of orange vegetables and fruits, which saw a steady increase throughout the year. **Vegetable and fruit** trends continue to increase and decrease base on the seasonality of crops.

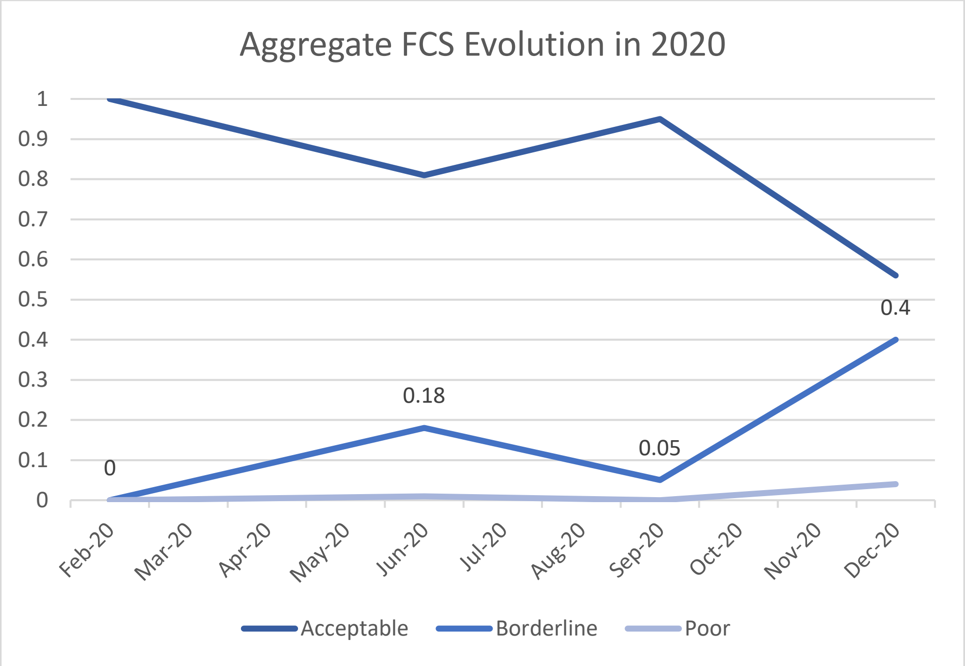
- Consumption of **1) oil, fat, butter; 2) condiments, spices; 3) sugar**; which were among the top-5 most frequently consumed food groups in February 2020, have seen a significant drop in consumption. While condiments/spices and sugar saw a recovery in consumption at the end of the year, oil consumption has continued to decrease in frequency (almost 4 days fewer than in Feb). **Dairy** consumption has seen a slight increase in consumption over time.







Based on the weight of each food group, and their individual contribution to the calculation of the Food Consumption Score (higher coefficients for more nutritious food groups), we observe an overall deterioration of the FCS over time. In December 2020, only 56% of households had an acceptable consumption score, whereas the share of households with borderline consumption had risen significantly. For the first time, we also observed households with poor consumption scores.

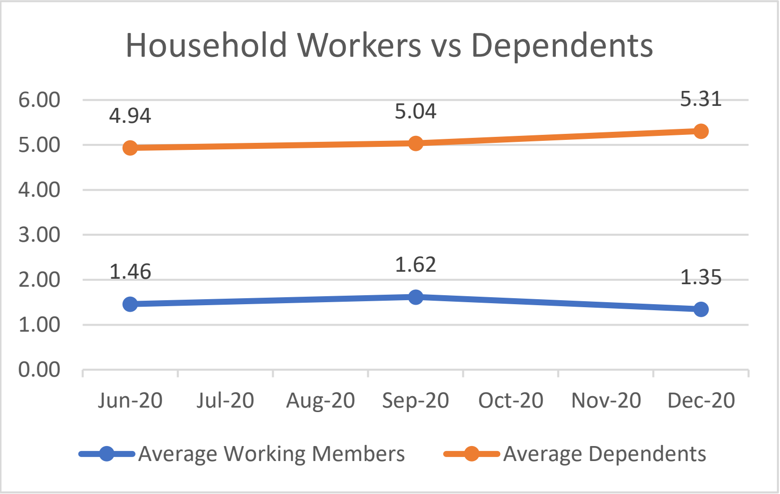


Considering that the average weekly consumption of each food groups seemed to indicate an improvement of average weekly consumption in December, this is indicative of increasingly 'extreme' values in the dataset. The increased consumption of a few households is bringing the average consumption value up, despite the fact that overall fewer households are consuming most sub-groups.

For example, while meat was only scarcely consumed in September (0.25 times a week), it was consumed by 67% of households (around two-thirds). In December, however, meat consumption has risen to 2.4 times a week, but only among 55% (just over half). Between September and December 2020, 14 out of 16 sub-groups have increased in average weekly consumption; however, in 12 out of 16 sub-groups fewer households consumed reported consuming the item at all.

It is difficult to extract conclusions with high certainty when calculations of the FCS rely only on frequency, and do not account for quantity and quality of food items, but the findings for this quarter could indicate increased disparity among households. A few households seem to be doing better off than in the last 3 months, whereas the majority seem to be worse off. This could tentatively be linked with the COVID-19 situation, and the fact that while the stay at home orders in December 2020 are not observed which means that more people can access markets, livelihood opportunities continue to be severely impacted, and only a few households can afford to procure the food items they need in sufficient quantity.

Overall, a slighter higher number of dependents and a lower number of working household members was noted, despite the fact that the household size was exactly the same across all samples[1].



[1] Data was not initially collected in February 2020 for this, so we do not have a source of comparison for the start of the year.