# Tajikistan

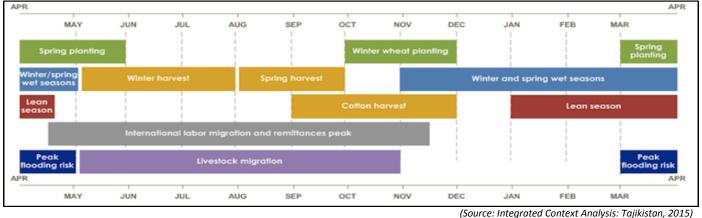
**Food Security Monitoring** 

# Highlights

- The food security situation presents expected seasonal variation better in December after the harvest, worse in May at the end of the "lean season".
- The percentage of the food insecure groups appeared to be relatively stable across seasons and not improving (1 out of 5 interviewed households), with a peak registered in May 2016 (1 out of 4 —food insecure).
- The difference in food insecurity between households headed by women and men was decreasing until December 2015. However, following the economic shock in 2015, the increase in food insecurity in December 2015 had a much greater impact on women headed households. In December 2016, food insecurity prevalence was 33 percent for households headed by a woman, while it was 20 percent for household headed by a man.
- A record number of household reported that they had stock of wheat, potatoes, oil, fruit and rice in December 2016. Overall, 73 percent of the surveyed household had some stocks, compared to 53 percent in May 2016 and 64 percent in December 2015.
- Malnutrition rates among surveyed households remain stable, and at a level of concern. Among surveyed children, over 8 percent children were wasted, 11 percent underweight and 33 percent stunted.

**Methodology**: Under Food Security Monitoring System, 1,300 households from 13 livelihood zones were interviewed. As households are generally revisited, the sample size is sufficient to be representative for trend analysis, but data are not representative for the entire population of the zone or other administrative unit.

**Indicators**: The Food Security Index is based on the household's **current food security status** (the food consumption score) and their **coping capacity**, based on indicators of economic vulnerability (share of expenditure used on food) and asset depletion.



# [Figure 1] Seasonal Calendar







# **Context and recent developments**

Tajikistan is a landlocked, lower-middle income, food deficit country with a population of approximately eight million, three guarters of whom live in rural areas. The mountainous landscape confines the arable area to just seven percent of the country's surface and poses enormous challenges to food security during the winter period.

According to the 2016 Global Hunger Index (GHI) analysis and FAO statistics, 33 percent of Tajikistan's population is suffering from undernourishment. Malnutrition remains a serious challenge in Tajikistan. It is the poorest in the Commonwealth of Independent States, and according to World Bank, its poverty headcount ratio at national level was recorded at 31 percent in 2015.

Remittances constitute 43 percent of the GDP in Tajikistan<sup>1</sup>, mostly from migrants working in Russia, making Tajikistan one of most remittance reliant country in the world. The contraction of the Russian economy in 2015, and the devaluation of the Rouble caused a shock to the Tajikistan economy. In particular, according to WB, lower remittances and terms of trade effects caused a deterioration in economic growth in Tajikistan in 2015.

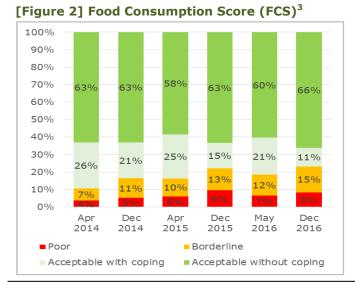
The inflation rate in 2016 is reported at 6 percent (National Bank of Tajikistan 2017). Economic forecasts for Central Asian countries done by the Asian Development Bank foresee a 4 percent growth for the GDP in 2017, while the inflation rate may reach 7.5 percent in the same year.

#### **Overall Food Security** Food Security Index:

Food Consumption Score

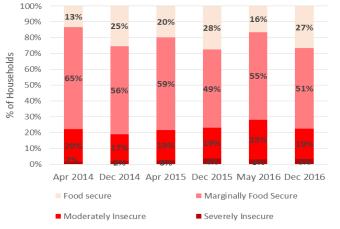
Food Security in Tajikistan follows seasonal variation with higher percentage of food secure households in December and lower percentage in April/May. The prevalence of food insecure group (moderately and severely insecure households) remains relatively stable.

In December 2016, 3 percent of the surveyed households were severely food insecure, while 19 percent were moderately food insecure. This is an improvement compared with May 2016, while it is about the same level as December 2015.



### 100%

[Figure 1] Food Security Index<sup>2</sup>



The Food Consumption Score (FCS) shows that 23 percent of household experienced poor or borderline food consumption in December 2016. The FCS tends to be worse in the lean period, when less vegetables and fruits are available and the diet is less diversified. Although households are in general better off in April/May, figure 13 shows that a larger share of households are using coping strategies to obtain an acceptable diet. Following the economic shock in 2015, the share of households with poor or borderline consumption in December 2016 increases by 7 percent compared to December 2014.

<sup>1</sup> IMF's Annual 2015 Spillover Report, titled: "Spillovers from Russia's Slowdown on Neighboring Countries."

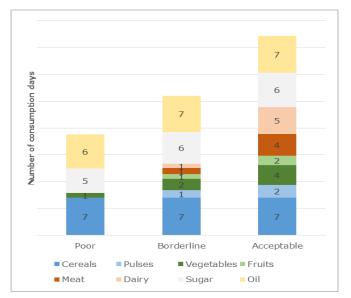
<sup>2</sup> Food Security Index takes into account (1) food consumption score, (2) coping strategies and (3) food expenditure share.

https://resources.vam.wfp.org/sites/default/files/CARI%20Factsheet\_0.pdf

<sup>3</sup> Food Consumption Score takes into account (1) dietary diversity, (2) food frequency and (3) relative nutritional importance of various food groups.

#### Frequencies of Food Group Intake

#### [Figure 3] Frequencies of Food Group Intake



Households classified as 'poor' have a diet that consist of food groups with high amount of calories but low on macro- and micronutrients. Further breakdown of the food consumption score shows that households that are classified as 'poor' have, on average, a diet limited to only four food groups: cereals, oil, sugar and vegetables. In addition, poor group eats vegetables only once a week, and they do not consume meat, pulses or dairy, in the week before the survey. Households with borderline food consumption consumed all eight food groups but pulses, dairy, meat and fruits were consumed only one time per week. The low consumption of fruit and vegetables is due to the higher prices of these commodities in the winter season.

## **Income and remittances**

13%

17%

Daily Wage labour

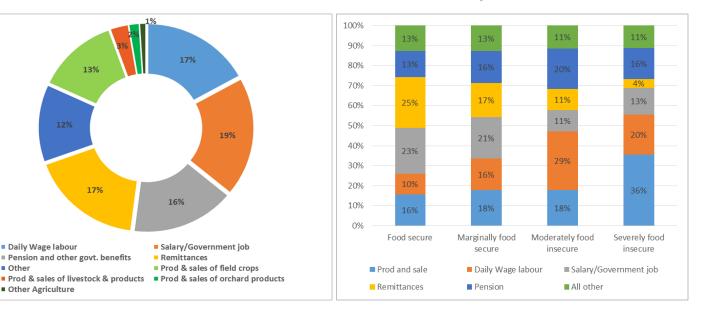
Other Agriculture

Other

Pension and other govt. benefits

#### Household Income and Food Security

#### [Figure 4] Household Income Source Strategies



#### [Figure 5] Household Primary Income Source and Food Insecurity

Among the interviewed households, the primary income source was reported as salary/government jobs (19 percent), followed by remittances (17 %) daily wage labour (17 %) and pension and other government benefits (16 %).

Figure 5 shows the relationship between primary income source and food security. Households with remittances and salary as primary income source appeared to be more food secure. On the other hand, those households who primarily rely on daily wage labour and production and sales as income source are more likely to be food insecure.

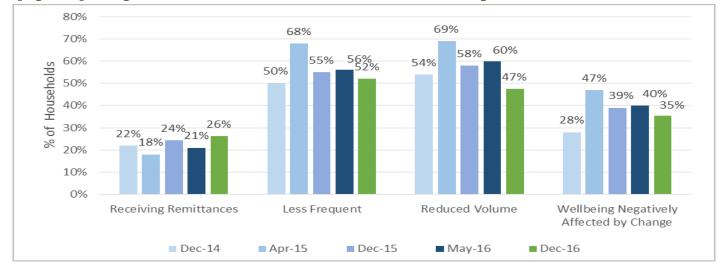
# Remittances

32.5 percent of the interviewed households responded that they have at least one household member working outside the country to earn money to support the household. Among those, 27.5% of the interviewed households said that only male members were working outside; 1.7% said that only female members were sending remittances and 2.4% stated that both male and female members were working outside of the country.

The percentage of households that reported to have received remittance for the past three months was 26% in December 2016. This is an increase of 5 percentage points since May 2016 and 2 percentage points compared to December 2015.

Of the households receiving remittances, more than a third of the sampled households answered to have been negatively affected by remittance reduction in the last three months. Although about half of the households have experienced less frequent or reduced volume of remittance received, the situation has improved since April 2015. Due to the contraction in Russia's economy in 2015, remittances from Russia fell by 32 percent in the first six months of 2015 according to the National Bank of Tajikistan.

Of households receiving remittances, one third reports that it is their only source of income.



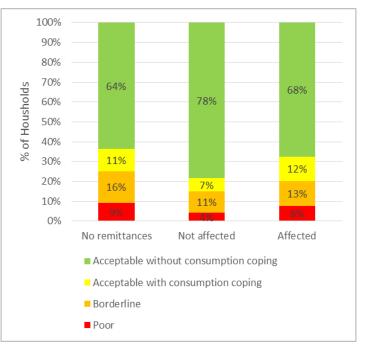
#### [Figure 6] Changes in Remittances received and Household Wellbeing

#### Remittances and Food Consumption Score

Households receiving remittances are less likely to be food insecure (14 %) compared to households who do not receive remittances (25 %). The remittance receiving households can be divided by those who are negatively affected by change in remittances, and those who have not been affected by a change in the last three months. From the first group, 22 percent of household had poor or borderline food consumption score in comparison with 15 percent of the households who said that they were not negatively affected by the change.

The importance of remittance to households' food security is underlined by the high percentage of household, 83 percent, reporting that remittances is mainly used to buy food.

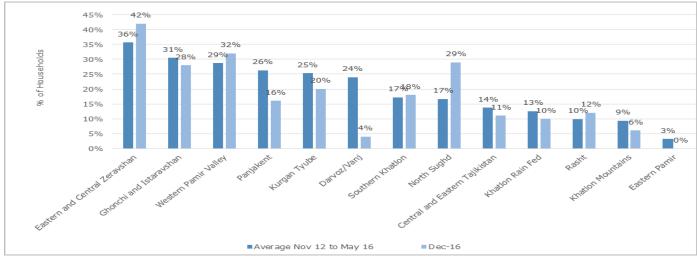




#### Household Remittance by Livelihood Zones

There are significant differences in the level of reliance on remittances in different livelihood zones. The share of households reporting that remittance was their primary income source was particularly high in Eastern and Central Zeravshan (42 percent), Western Parmir Valley (32 percent), and North Sughd (29 percent). These livelihood zones also have a higher reliance on remittances when compared to the average for November 2012 to May 2016.

The majority of the livelihood zones have seen a fall in the percentage of households relying on remittances as their primary income compared with previous rounds of the survey. Darvoz (Livelihood Zone 3) and Panjakent experienced significant decline in the remittance reliance compared to that of average from November 2012 to May 2016.



#### [Figure 8] Household Remittance Reliance by Livelihood Zones

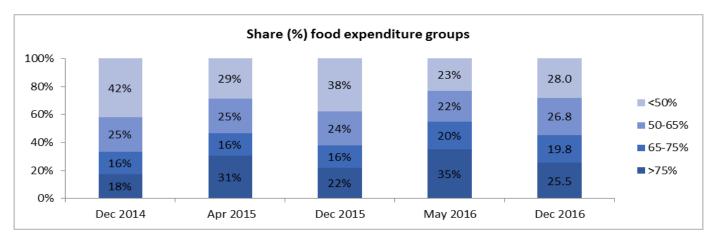
#### **Expenditure and stocks**

#### Household expenditure on food

A household's share of food expenditure over total expenditure is used as an indicator of economic vulnerability. Household with a high share of expenditure of food, are more vulnerable to economic shocks like price increases or reduction in income. The average food expenditure share in Tajikistan is 61 percent. Spending more than 75% of expenditure is considered very high, while 65-75% is considered high.

One quarter of the household in the survey spends more than 75 percent of their expenditure on food. The share of food expenditure seems to have been increasing in both the winter and spring seasons in 2016, while the food expenditure share is highest in the spring.

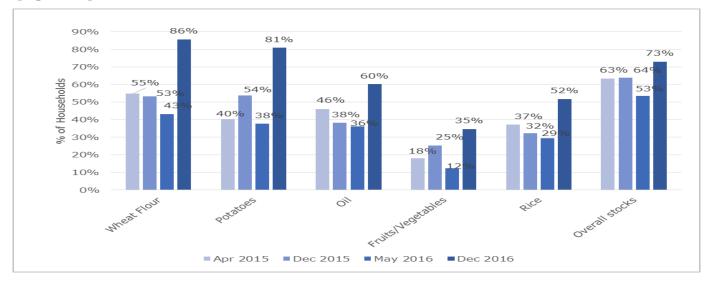
The percentage of households spending over 75 percent of their expenditure on food has decreased since May 2016 following the typical seasonal pattern for this time of the year.



#### [Figure 9] Household Income Source and Food Insecurity

#### Food Stocks

More households reported to have food stocks in December 2016 than in the past, for all five types reported. Considering that the lean season starts in January, it could indicate that households are building up food stock in case of emergencies or shocks.

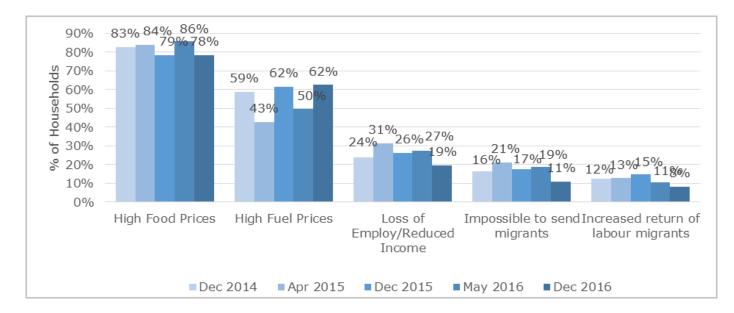


#### [Figure 10] Household Food Stocks

# **Economic and natural shocks**

#### Household Remittance by Livelihood Zones

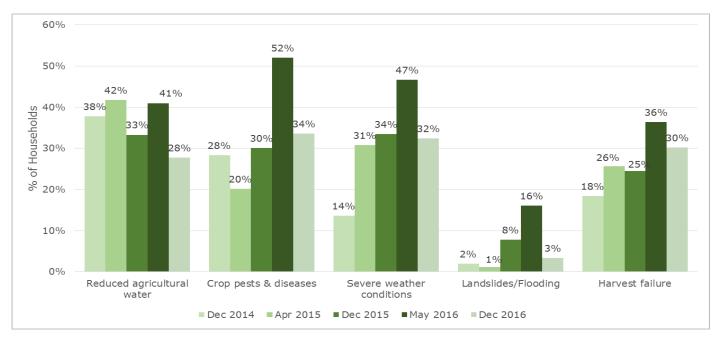
Households were asked which type of shock they have experienced in the last three months. With regards to economic shocks, as in previous periods, high food prices and high fuel prices were identified as the main two shocks. 78 percent and 62 percent of the interviewed households had experienced high food and fuel prices respectively. On the other hand, according to Tajstat, Consumer Price Index both for food and electricity, gas and other fuels have been stable 2015-2016.



#### [Figure 11] List of Economic Shocks

#### Natural Shock Experienced

#### [Figure 12] Natural Shocks

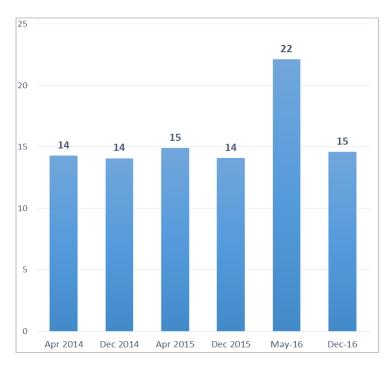


In terms of natural shocks, the percentage households who reported having experienced natural shocks in the last three months before December 2016 is significantly lower compared to May 2016. As of December 2016, 28 percent of the interviewed households responded to have experienced reduced agriculture water, 34 percent crop pest and diseases, 32 percent severe weather conditions, 3 percent landslides/flooding and 30 percent harvest failure.

### **Coping Strategies**

#### Household Reduced Coping Strategy Index<sup>4</sup>

#### [Figure 13] Household Reduced Coping Strategy Index



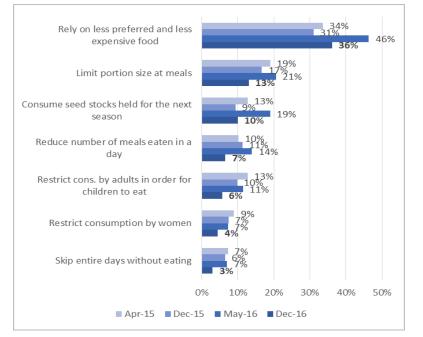
In spring 2016, many households experienced natural shocks as seen in figure 12 above, including failure of harvests, crop pests and disease, and bad weather conditions.

In response, many households used coping strategies, which is reflected in the reduced coping strategy index in figure 13. The rCPI score reached its peak in May 2016, while it appears to be back to similar level of the scores from December 2015. Coping strategy index score decreased from 22 per cent in May 2016 to 15 percent in December 2016. It may be due to the more stabilized situation in terms of shocks. Also, as mentioned above, the percentage of households with food stock increased compared to December 2015.

<sup>4</sup> Reduced coping strategy index is based on the most common set of coping behaviours across countries, such as reduced number of meals, limit portion size, and reflects the stress level of the household (the higher the score, the higher the stress level).

#### Food Consumption Coping Strategies

#### [Figure 14] Food Consumption Coping Strategies



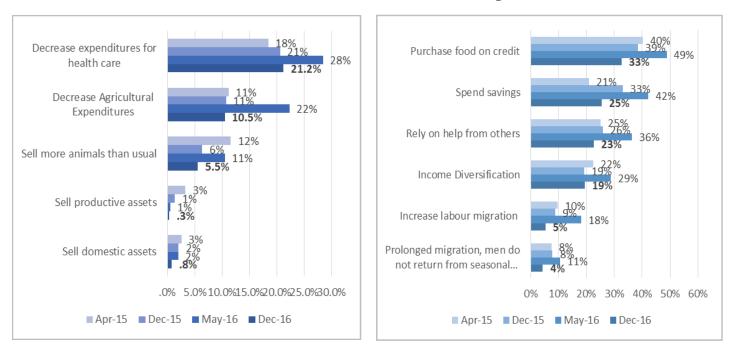
In line with the decrease in the rCSI, less households resorted to the use of food consumption related coping strategies in December 2016, compared to previous rounds of survey.

The coping strategies most commonly adopted by households involved modifying food intake habits, such as buying less preferred and less expensive food (36 percent), limiting the portion sizes (13 percent) and reducing the number of meals eaten in a day (10 percent).

#### Household Asset Depletion Strategies and Livelihood Diversification Strategies

The percentage of households resorting to asset depletion strategies and livelihood diversification strategies was very high in May 2016, but for most strategies, the figures has declined significantly in December 2016. Moreover, for strategies like sale of productive and domestic assets, the prevalence is at the lowest level since May 2015, which could also reflect that the household has exhausted these coping strategies.

A third of the surveyed households are purchasing food on credit and a quarter are spending their savings due to lack of money to buy food or other basic needs.



#### [Figure 15] Households' Asset Depletion Strategies

[Figure 16] Households' Livelihood Diver-

sification Strategies

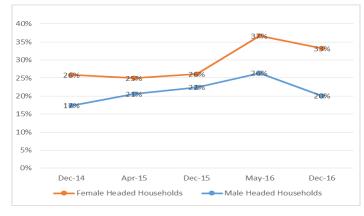
# **Gender**<sup>5</sup>

The majority of the interviewed households are headed by men, 82 percent, versus 18 percent of household headed by women.

#### Food Insecurity Prevalence in Trend

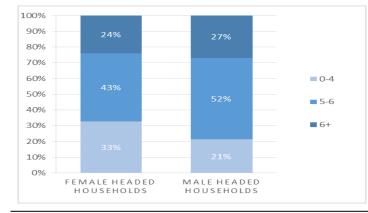
**Women headed household exhibit a higher rate of food insecurity and less resilience to shock.** 33 percent of women-headed households are food insecure while the rate is lower among the male-headed households at 20 percent. The gap in the food insecurity prevalence by sex of head of household had been narrowed down to 4 percentage point in December 2015, but it has widened in 2016. The overall percentage of food insecure households peaked at 28 percent in May 2016. Figure 17 shows that the increase in food insecurity in May 2016 was more severe among households headed by a woman, 33 percent, compared to 20 percent for households headed by a man.

#### [Figure 17] Food Insecurity Prevalence in Trend;Household Headship

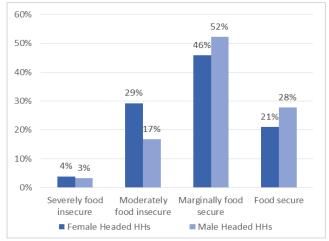


Similar pattern is also observed both in food consumption score and dietary diversity score analysis. As shown below, a higher percentage of female headed households are categorized into poor or borderline food consumption score group than male headed households. For the dietary diversity score, 33 percent of the surveyed female headed households responded to have consumed four or less food groups, compared to 21 percent of the surveyed male headed households.

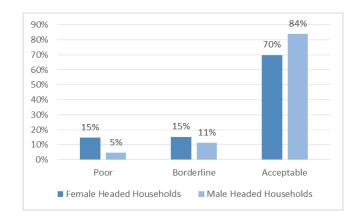
# [Figure 19] Dietary Diversity Score by sex of head of household



The gap between household headed by women and men was largest for the moderately food insecure group. While 29 percent of households headed by a woman were moderately food insecure, only 17 percent of the households headed by a man were included in this category.



# [Figure 20] Food Consumption Score by sex of head of households

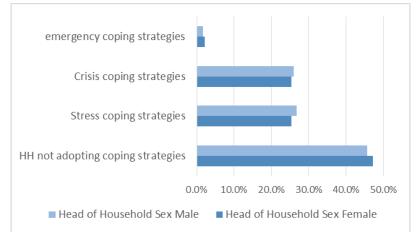


9

<sup>5</sup> FSMS is an analytical monitoring tool for the food security trend of the relevant factors, rather than representative analytical tool. Among the interviewed households 17.6% were female-headed while 82.4% male headed.

# [Figure 18] Food Insecurity Index by sex of head of household (December 2016)

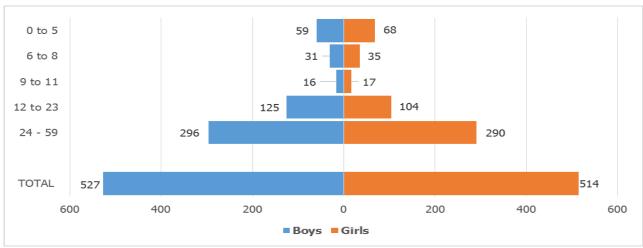
#### [Figure 21] Coping Strategies by sex of head of household



Coping strategy patterns by sex of head of household show that a larger share of female headed households tend to not use coping strategies in response to economic and natural shocks. However, emergency coping strategies are used more by household headed by women. Given that a higher percentage of female headed households fall into food insecure group, this might imply that there is less coping capacity in female headed households.

## **Child Nutrition Status**

A total of 1,041 children under the age of five were covered in the second round of 2016 survey. The number of boys and girls in the five age categories are similar, in total 51% boys and 49% girls were included.

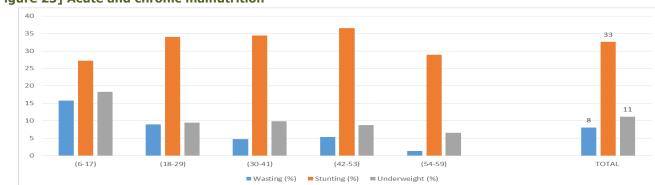




#### Stunting, wasting and underweight

In total 816 children in the age group 6-59 months took part in the anthropometric measurement during this round. Because of the survey design and methods used for the FSMS, robust statement or representation cannot be made on child nutrition status. However, the results are indicative of the situation for the children in the households included in the surveillance.

Aggregated results showed that as in the previous rounds malnutrition continues to be an issue among the surveyed children and some deterioration is noted since the previous round. Specifically, 33 percent of children had the issue of stunting, a slight increase of three percent since the previous round, a slight decrease noted in the proportion of children underweight from 13% in previous round to 11% and a slight increase from 6% to 8% in proportion of children experiencing the issue of wasting. Age wise comparison showed stunting, as the major issue experienced across all the age categories. Details shown in chart below.



#### [Figure 23] Acute and chronic malnutrition

# **Breastfeeding practices**

#### 120.0% 100.0% 80.0% 60.0% 40.0% 20.0% 0.0% 6-8 months 24-59 Under 6 9-11 12-23 months months months months ■ Male ■ Female ■ Total

#### [Figure 24] Percent of children breastfed the before the survey

In total 87% children reported receiving breastmilk the day before the survey, which is a slight increase compared to previous round (88%), and a considerable increase compared to December 2015 (69%).

Age and sex disaggregation shows that a larger percentage of boys received breastmilk compared to girl within the same age groups. The only exception was for children 9-11 month, in which more girls got breastmilk compared to boys.

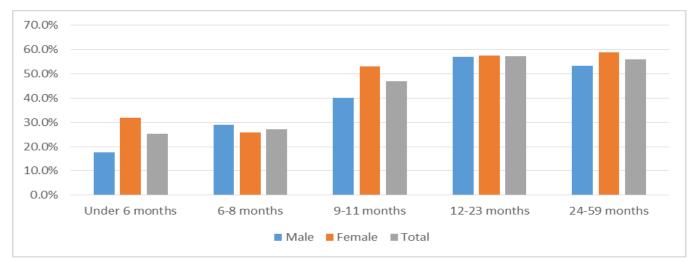
### Exclusive breastfeeding

The WHO guidelines recommends exclusive breastfeeding for children between 0-5 months. The FSMS found that only 32% of children 0-5 months was exclusively breastfed. The results are the same as in May 2016.

#### Animal Milk Feeding

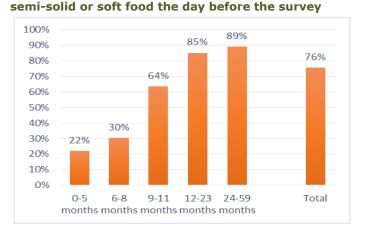
Aggregated results indicated that half of the children under age of five as reported by the respondents got animal milk the day before the survey. Every fourth child under the age of six months has consumed animal milk the day before the survey.

[Figure 25] Percent of children receiving animal milk the day before the survey



#### Children consumption of complementary feeding

Respondents were asked if their child got any solid, semi-solid or soft foods the day before the survey. Aggregated results showed that 76% of children received solid, semi-solid or soft foods. Consumption of complementary feeding grows with the age categories, i.e. the higher the age group, the larger the proportion of children receiving complementary feeding. It is worth noting that over 20% of children 0-5 months also got complementary feeding. It is recommended that introduction of complementary feeding (giving solid or semi-solids to infants in addition to breast milk) starts at the age of 6 months, considering breastmilk is no longer sufficient to maintain the child's growth above six months.



[Figure 26] Proportion of children receiving any solid,

[Figure 27] Proportion of children receiving complimentary feeding from 4 or more food groups of the 7 the before survey

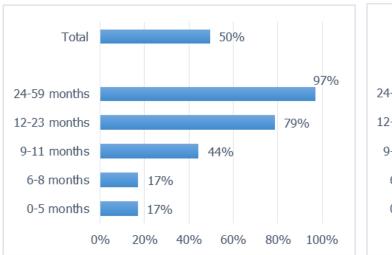


The dietary diversity of children is very low, at a similar level seen as in the previous rounds of the FSMS. Only 34% of children under five, excluding 0 -5 months, received complimentary feeding from four food groups out of the seven. Age-wise review showed that the minimum dietary diversity is low among children aged 6-8 months (11%) and is relatively higher among 24-59 months (46%).

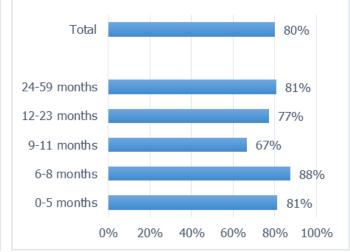
Analysis of *minimum meal frequency* was performed for both breastfed and non-breastfed children across the five age groups. Half of the breastfed children received complimentary feeding from the seven food groups two or more time, while 80% of children under five got complimentary feeding from the seven food groups four or more times.

Age-wise comparison showed that minimum meal frequency among breastfed children is very low among children 6-8 months (17%) and is highest in children 24-59 months (97%). Among non-breastfed children, the lowest meal frequency is noted among children 9-11 months.





[Figure 29] Percent of non-breastfed children receiving complimentary feeding from the 7 food groups four or more times



Generally, the nutrition status of children, both exclusive breastfeeding of children 0-5 months and complimentary feeding in terms of dietary diversity remain of a serious concern and need further programmatic interventions.

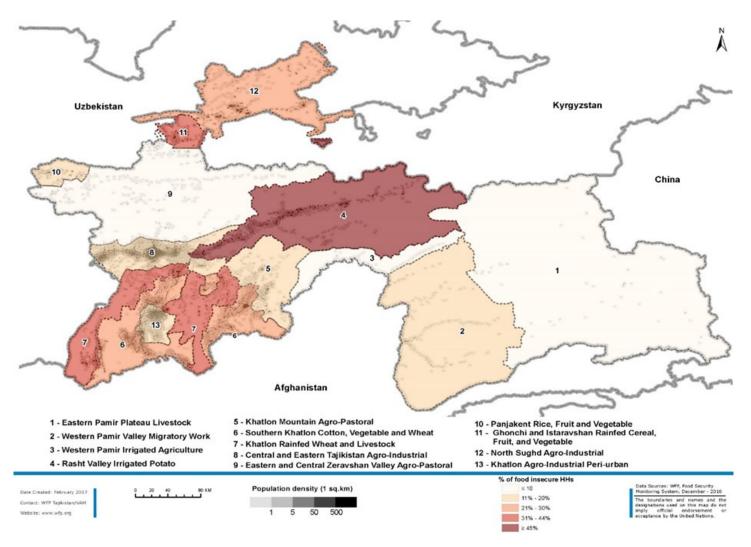
<sup>6</sup>The seven food groups include: 1) wheat, bread, rice, pasta, biscuits, potatoes or other; 2) Beans, peas, lentils, any nuts; 3): Milk or milk products; 4) Meat, chicken, fish, liver, kidney, heart or other organ meat; 5) Eggs, 6) Yellow or orange colored vegetables (pumpkin, carrots) & fruits (yellow plum, apricots); 7) Other vegetables & fruits.

Food Security Situation Overview				
Food Security Zones	Current status/action points	FS Trend compared to Dec 2015	3 months outlook	6 months outlook
Livelihood Zone 1: Eastern Pamir Plateau Livestock Zone	High percentage of households with coping strategies, lower household food expenditure share	Ŷ	¥	÷
Livelihood Zone 2: Western Pamir Valley Migratory Work Zone	High percentage of remittance receiving households, high percentage of households with coping strategies	Ŷ	¥	÷
Livelihood Zone 3: Westem Pamir Irrigated Agriculture Zone	Dramatic drop of food insecure households prevalence since May 2016	Ŷ	→	÷
Livelihood Zone 4: Rasht Valley Irrigated Potato Zone	Poor food consumption, high percentage of households with coping strategies	¢	¥	Ŷ
Livelihood Zone 5: Khatlon Mountain Agro-Pastoral Zone	Seasonal fluctuation in food security	÷	→	↑
Livelihood Zone 6: Southem Khatlon Cotton, Vegetable and Wheat Zone	High percentage of households with coping strategies, high percentage of remittance receiving households	÷	¥	÷
Livelihood Zone 7: Khatlon Rain fed Wheat and Livestock Zone	Poor food consumption	Ŷ	¥	÷
Zone	Food insecurity prevalence remains	÷	→	¥
Livelihood Zone 9: Eastern and Central Zeravshan Valley Agro- pastoral Zone	Dramatic drop of food insecure households prevalence since May 2016	Ŷ	÷	÷
Livelihood Zone 10: Panjakent Rice, Fruit, and Vegetable Zone	Dramatic drop of food insecure households prevalence since May 2016	÷	¥	÷
Livelihood Zone 11: Ghonchi and Istaravshan Rainfed Cereal, Fruit, and Vegetable Zone	Poor food consumption. High percentage of remittance	¥	→	<b>1</b>
Livelihood Zone 12: North Sughd Agro-Industrial Zone	Poor food consumption, lower household food expenditure share, high percentage of remittance receiving households	¥	Ŷ	<b>1</b>
Livelihood Zone 13: Khatlon Agro- industrial Peri-urban Zone	High percentage of remittance receiving households	Ŷ	Ŷ	÷
Trend	Current food security status			
→ - No changes	Food secure			
1 - Improvement	Marginally food secure			
↓ - Deterioration	Moderately food insecure			

# Outlook

- Overall food security is expected to deteriorate slightly during the next six months (February— July 2017), following the seasonal trend before harvest.
- More vegetables and fruits will be available in the coming seasons—spring and summer. Also, the recent increased food stock may also assist households for better food consumption.
- According to the Asia Development Bank, Tajikistan's economy is forecast to grow by 4 % in 2017. The food security situation is expected to improve in 2017.

# Food Insecurity Prevalence Map (December 2016)





#### For further information please contact:

Heejin Kim, WFP Tajikistan: heejin.kim@wfp.org

Erkin Huseinov, WFP Tajikistan: erkin.huseinov@wfp.org

Analysis on child nutrition status and infant and young child feeding practices provided by Shodmon Hojibekov, UNICEF Tajikistan: shojibekov@unicef.org