Emergency Food Security Assessment in Urban Areas of Tajikistan

A Food Security, Livelihoods and Nutrition Assessment
June/July 2008
ACKNOWLEDGEMENTS

This report on the Food Security, Livelihoods and Nutrition assessment is based on the findings of a survey conducted in 7 towns of the country in June 2008.

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LIST OF ACRONYMS

CFSVA Comprehensive Food Security and Vulnerability Assessment
CFW Cash For Work
CIS Commonwealth of Independent States
DOTS Directly Observed Treatment, Short Course
DRD Direct Rule Districts
FFE Food For Education
FFW Food For Work
FG Focus Group
FSMS Food Security Monitoring System
GAM Global Acute Malnutrition
GBAO Gorno Badakhshan Autonomous Oblast
GCM Global Chronic Malnutrition
GDP Gross Domestic Product
GoT Government of Tajikistan
H/A Height for Age
HH Household
IMF International Monetary Fund
IPC Integrated Phase Classification
KI Key Informant
MICS Multi-Indicator Cluster Survey
MUAC Mid-Upper Arm Circumference
ORS Oral Re-hydration Salts
SWOT Strengths, Weaknesses, Opportunities and Threats
UNICEF United Nations Children’s Fund
W/H Weight for Height
WFP World Food Programme
WHO World Health Organisation
1 SUMMARY

Survey method and sources of information

The EFSA was conducted in June 2008 in 7 towns of Tajikistan, including the capital city Dushanbe, Khujand and Taboshar in Sughd region, Kulyab, Kurgan-Tyube and Sarband in Khatlon region, and Khorog in Gorno-Badakhshan region. The towns were selected on the basis of their varying size and geographical dispersion in the country. Their total population is estimated at 1.032 million, so around 75% of the total urban population of Tajikistan.

In each town, maps were used to delineate neighbourhood boundaries and draw a grid or clusters of approximate size. A total of 10 clusters and 10 households per cluster were randomly selected for each town. Questions were asked about living conditions, food consumption, income sources, expenditures, coping strategies and access to assistance. The weight, height and mid-upper arm circumference of all under-5 year old children living in the households were measured to assess the nutritional status, and information on child feeding practices and health was also collected. A total of 700 households and about 350 children were included.

Focus group discussions were organized with groups of men and women in each town (total 70 discussions), to enquire about livelihoods dynamics, income levels and coping strategies. Participants were selected by the local authority representative in the neighbourhood and were supposed to represent the average inhabitants of the neighbourhood. Separate interviews were conducted with the authority representatives themselves (total 70) focusing on health, education, main difficulties and priorities, and assistance programmes. Some 243 local traders and shop-keepers in the various neighbourhoods were also visited to collect information on prices, changes in food supply and demand, credit and trade-related difficulties.

While the household sample is limited, the multiplication of information sources enabled a comprehensive analysis and triangulation of findings. However, large variations were observed between towns in terms of proportions of food insecure people and malnourished children, types of

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1 Total urban population estimated at 1,369,800 as of 1st January 2007 according to the Tajikistan State Statistics Committee
2 As maps were generally not available, Google Earth internet tool was used to produce them
livelihoods, coping strategies and main problems. This renders difficult the extrapolation of results to towns that were not included in the sample.

How many are food insecure in urban areas?

In the 7 sampled towns, an average of 21% of the households were severely food insecure, 34% moderately food insecure, and 45% food secure. When extrapolated to the remaining towns, the estimated proportions for the whole urban areas\(^3\) are 15% severely food insecure, 22% moderately food insecure and 64% food secure. These figures are similar to the estimates in rural areas done in May 2008 at the peak of the lean season (12%, 22% and 66% respectively). The numbers represent an estimation of 200,756 severely food insecure people and 295,355 moderately food insecure, hence almost half a million food insecure urban people.

Who are the urban food insecure?

The socio-economic characteristics of the food insecure households are relatively comparable across towns.

The severely food insecure households typically consume a poor diet consisting of bread, pasta and/or potatoes on a daily basis, very rarely complemented with vegetables (once a week). Pulses and animal products are practically not consumed. Oil is added irregularly, and sugar is consumed 2-3 times a week. The number of meals per day of both adults and children is low (less than 2 for adults, 2 for children). The average food expenditures on a weekly basis are less than the cost of a basic food basket including only wheat, oil and sugar. Bread, potatoes, oil and sugar are the main posts of food expenditures, while health is the main non-food expenditure (9% of total expenditures).

Some 60% of the severely food insecure households have only 1 member able to earn an income. Almost 30% depend on pensions/allowances as their main income source, 21% depend on remittances, 21% rely on day time/casual work, 20% receive government salaries. The rest is combining these various sources which tend to provide low, irregular and uncertain earnings. Severely food insecure households also typically own very few assets and very few have any cash or other savings. Most of them do not have access to a home garden and for the 15% who have, the average acreage cultivated is small (0.02 ha). As a result, self-sufficiency in vegetables or fruits does not go beyond one month for most of them. Only 8% own some sheep/goats and a few poultry.

Almost half of the severely food insecure households are female-headed households, twice as much as the food secure households. The severely food insecure households are also smaller (4.4 members versus 6 in other households) and have a higher dependency ratio\(^4\).

Moderately food insecure households have a slightly better diet but still inadequate. They consume bread, pasta or potatoes, with oil and sugar daily or almost daily, but vegetables only 3-4 times a week, fruits 2 times and very seldom pulses or animal products. Combined with a low average of 2 meals a day for adults and children, this diet entails risk of minerals and vitamin deficiencies on the short or medium term. The average food expenditures are marginally above the cost of a basic minimum food basket that includes only staples.

About 64% of the moderately food insecure households have only 1 member earning an income and rely on just one source of income. Almost 40% receive government salaries, 32% depend on remittances, 10% rely on day time/casual work and the rest is engaged in petty trade, self-employment or combination of activities. The asset base remains low. Only 13% have cash or other savings. Few have access to a home garden (17%) and the acreage is small (0.022 ha). However, slightly more than half of them manage to secure 1 to 3 months of self-sufficiency in fruits, vegetables and/or potatoes (yet, they represent only 9% of the whole moderately food insecure households). About 15% of the moderately food insecure households raise animals (mostly sheep/goats and poultry). One third of the moderately food insecure are headed by a woman.

The food secure households consume a balanced diet and their food expenditures are twice the cost of the basic staple food basket. They also own more assets. The better situation reflects their higher number of income-earning members (2 for almost half of these households) and income sources. Although apparently similar in nature, the positions occupied and levels of income obtained

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\(^3\) See section V for explanations on the extrapolations made

\(^4\) Dependency ratio DR: \([\text{number of members < 15 years} + \text{number of members > 59 years}] / \text{number of members 15-59 years}\) – Low DR: ≤ 2 - High DR: > 2
are likely to explain their better economic situation. Almost 30% of the food secure households rely essentially on government salaries and 20% on remittances. **Self-employment and petty trading** are relatively frequent (18% and 20% respectively).

Almost 30% of the food secure households have access to a home garden (twice as many as the other households) and they cultivate a larger acreage (0.032 ha). More than 70% of them are self-sufficient in fruits/vegetables and/or potatoes for 1-3 months. Some 26% raise animals and they are more likely to own cattle than the food insecure. The proportion of female-headed households is lower.

**Why are they food insecure?**

Most of the food security differences between households are related to variations of income levels, which themselves reflect the type and number of income sources and number of members able to earn an income, receive pension/allowances, or migrate and send remittances. The level of income is a key determinant to urban food security given the almost total dependence on market/shop purchases for their food. Very few households can produce their own food, and even those who cultivate or raise animals do not cover their consumption requirements for more than a few months.

Focus Group discussions indicated wide ranges of monthly incomes for similar types of activities. While pensions were quite systematically valued at a low 20 to 40 somoni/month, casual labour earnings varied from 10 to 250 somoni/month, small business from 10 to 200 somoni/month, government salaries from 40 to 250 somoni/month, and remittances from 100 to 700 somoni/month. The lower ranges of these incomes would barely enable to cover the food expenses reported by the food insecure households.

All households dedicated on average two thirds of their expenses to food but the food insecure spent less than the food secure, reflecting their lower absolute income. Nutritionally-dense foods such as vegetables, fruits and animal products were the first ones left out. The large share of food expenditures also means that there is little margin to further increase food expenditures unless other essential expenditures are decreased, including health, schooling, clothing and heating fuel in winter.

The food insecure households were more likely to use cash resources for illness and health-related expenses as well as education expenses. They also faced more unemployment problems. The moderately food insecure seemed somewhat capable to incur debts (one third of them were indebted), most of which were to buy food, but they also needed to dedicate a larger share of their expenditures to debt reimbursement as a result.

Households activated several coping mechanisms to respond to their difficulties. The food insecure were more frequently engaged in strategies which entail negative effects on health and livelihoods in the short or medium term:

- almost 80% incurred new debts or credits in the previous 6 months essentially for food;
- at least 3/4th decreased the amount consumed at meals and/or reduced the number of meals eaten per day; a similar proportion borrowed food or relied on help from others;
- a staggering 40% of the severely food insecure spent entire days without eating, and 20% of the moderately food insecure (compared to 7% of the food secure);
- almost half decreased their health expenditures (compared to 1/4th of the food secure);
- some 10-12% took children out of school (versus 4% of the food secure).

Only one third of the food insecure households were able to use more positive strategies -though not necessarily successful - such as seeking alternative/additional jobs. Increased migration was feasible for about 20% of the moderately food insecure, but only 9% of the others. Also, food insecure households were more likely to receive food support from relatives in case of need and indeed about half of them had benefited from it in the past 6 months. Some increase of the level of government salaries and higher gains from petty trade were reported, but less than 20% of the food insecure households benefited from this improvement.

**Transitory and chronic food insecurity**

The characteristics of the severely food insecure urban households are mostly ‘structural’ (lack of working-able members, poor income-earning activities, no access to credit or other capital for income-earning activities, old age, disease), and thus reflect a chronic, rather than transitory, situation.
However, food prices rise has clearly worsened their situation (see below). The extremely low level of food consumption requires an emergency response in addition to longer-term interventions.

The main shocks that affected households over the past year include increased food prices, electricity/gas cuts as a result of the harsh winter, and decreased employment and/or lower salaries. Drinking water shortages and higher fuel/transportation costs were less frequently mentioned.

Amongst the moderately food insecure, some have become food insecure as a result of the rise of food prices and loss of purchasing power. The proportion of moderately food insecure who increased the number of migrants recently (about 19%) may be taken as a rough indication of those who have the best chances and capacity to recover from the current crisis by themselves, hence the ‘transitory’ food insecure. On this basis, about 80% of the moderately food insecure would be chronically so, requiring therefore more than punctual assistance. Short-term relief, however, would help to alleviate their precarious economic situation (including limit further indebtedness) and prevent further decrease in food consumption, health treatment and enrolment of children at school.

**Nutritional situation**

Acute and chronic malnutrition rates\(^5\) amongst under-5 children were indicative of a ‘poor’ situation according to international standards: 7.8% were wasted and 20.5% stunted. The acute malnutrition figure is higher than in rural areas (4.7%) while chronic malnutrition is lower (27.5%) but differences are not significant. Because of the small sample, differences are also not significant when compared to the figures obtained in the nation-wide survey of 2005.

The combination of household food insecurity, inadequate complementary feeding practices and children’s frequent sicknesses is a likely explanation for the high proportions of malnourished children.

**Where are the urban food insecure?**

Only 7 towns were included in the assessment and no firm conclusion can be established on the non-sampled ones. The highest proportions of severely food insecure households were found in Khujand (45%) and Taboshar (46%) which are both in Sughd region. The highest proportions of moderately food insecure households were in Sarband (59%), Taboshar (43%), Kurgan-Tuybe (42%) and Khujand (37%). As a result, the highest proportions of total food insecure households were in Taboshar (89%), Khujand (82%), Sarband (71%) and Kurgan-Tuybe (58%).

No clear pattern emerges to explain the high food insecurity in these towns except for the fact that high proportions of households were living in multi-storey buildings and generally few had access to a home garden or were raising animals. This heterogeneity makes it difficult to extrapolate the results of the assessments to the other towns that were not sampled and which represent 25% of the total urban population. It was therefore decided to use the average proportion of severely and moderately food insecure estimated for the 7 sampled towns to estimate the total numbers of food insecure in the non-sampled towns. A rapid household survey focusing on the key characteristics of the food insecure households in the non-sampled towns is recommended to refine the estimates and for programming purposes.

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\(^5\) Global acute malnutrition (GAM): weight-for-height below -2 Z-scores. Global chronic malnutrition (stunting): height-for-age below -2 Z scores. EFSA results: 4.7% GAM [2.8-6.5% confidence interval], 27.5% [23.5-31.5 confidence interval]
What assistance is required?

The most food insecure people include **female-headed households, pensioners, and households hosting sick members**. The **youngest and school-age children** living in these households are particularly at risk from a nutritional and educational point of view.

The situation of the **chronically food insecure households** (33%, some 437,050 people) is not expected to improve in the short or longer term unless prices decrease dramatically and/or pensions and casual labour wages are increased to reflect inflation and food price rises. Considering that these measures may not be taken rapidly or at all, **short-term interventions** are necessary to:

- improve the very poor diet of the severely food insecure, and prevent a further degradation of the diet of the moderately food insecure;
- restore the nutritional status of malnourished individuals and prevent further malnutrition;
- stop the drop in the use of health care services and treatment and restore access;
- prevent decrease of children’s enrolment at school, particularly for the start of the school year;
- limit further indebtedness.

These may take the form of time-bound food/cash/voucher (or combinations) transfers, targeted supplementary feeding linked with communication/sensitization activities, school feeding, and exemption of fees or cash/vouchers for health care and school expenses targeted to the poorest households.

At the same time, parallel and longer-term interventions should take place to:

- set up **safety nets** for the chronically food insecure with only one income-earner, using cash/vouchers transfers;

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6 15% of total urban households are severely and chronically food insecure. Of the total urban households, 23% are moderately food insecure, out of which 80% are estimated to be chronically so (representing 19% of total) and 20% transitorily (representing 4% of total households)
advocate for an adjustment of pensions, allowances and of casual labour wages (minimal wage?);  

- support or launch public works/employment programmes (essentially for the food insecure households who include members actively looking for work);  

- provide start-up grants/credit and technical assistance for small businesses.

For the estimated moderately transitory food insecure (4%, about 59,070 people) no interventions may be needed in the short term. However, as the main reason for expecting a spontaneous improvement in their situation is the receipt of fresh remittances from the new migrants, identifying and eliminating these households from the above-mentioned interventions is likely to be difficult. Options include:

- **self-targeting** – This may be the most cost-effective, and could involve the provision of food vouchers for less preferred commodities e.g. low-grade wheat (but such limitations would have the serious disadvantage of preventing the inclusion of nutritious food lacking in the diet), or setting the wages of public works at a low level (but this may then bring too little benefits to targeted households).

- **conditional transfers** – Cash or vouchers against attendance to health centres or schools may deter some households who would not have real needs for them (to be checked).
2 BACKGROUND AND OBJECTIVES OF THE ASSESSMENT

2.1 Background

Tajikistan is the poorest country in Central Asia, with 64% of the population living below the poverty line of US$2/person/day. It is a country of diverse geographic and ecological systems and accompanying production systems. This landlocked country ranks 122nd of 177 on the UN Human Development Index. The unofficial unemployment rate is estimated at 33%, and remittances from labour migration are a major source of household income. Tajikistan has also, compared to other central Asian countries, the highest numbers of female-headed households due to this migration. This factor exacerbates already existing gender inequalities and puts additional burdens on women who are also disproportionately affected by poverty and discrimination.

Aside from labour, the country has relatively few exports (the most significant being cotton and aluminium), limited domestic industry and is a net food importer. The country was wrecked by a civil war which began shortly after independence in 1991 and ended in 1997. Relief programmes that had become a semi-permanent part of assistance to Tajikistan post-independence began to phase out in 2006-2007, and assistance efforts have increasingly shifted to long-term development. At the same time, natural disasters such as earthquakes, landslides, mudflows, avalanches, floods and other disasters happen annually in Tajikistan.

In early January 2007, heavy snowfall and avalanches blocked several areas of the country, limiting access and causing several casualties, while the cold spell throughout the country during most of January, reached temperatures of -15°C during daytime and -25°C at night, including in the capital city Dushanbe. An energy crisis started in December 2007 and has been progressively worsening since, whereby most rural areas have been cut off from electricity supplies. As of June 2008, the Nurek hydroelectric dam had not regained the capacity necessary to cover electricity needs for a large part of the country and most rural areas were still left without power for lighting and water supply systems. Energy supplies from neighbouring Kyrgyzstan and Uzbekistan have been suppressed, resulting in further shortages of gas and electricity, with a knock-on effect on food supplies and prices.

Tajikistan is a net importer of food and fuel. Since the end of 2007 and the beginning of 2008, the prices of oil, bread and wheat-based products doubled, mainly as a result of pass-through effects from the high prices of wheat and other commodities in the international markets. Prices remain high despite several government efforts to stabilize them. The UN launched a Flash Appeal for Tajikistan in February 2008 in response to the crisis. The Appeal recommended an increase in food supplies through direct assistance and a support to economic means to acquire food as well as to crop and animal production.

To ascertain the effects of the winter as well as of the rise in food and fuel prices rise on the population, a Joint Government of Tajikistan/FAO/UNICEF and WFP Food Security, Livelihoods, Agriculture and Nutrition Assessment was conducted in rural areas in April/May 2008. A subsequent assessment was undertaken in selected cities in June/July 2008.

Findings of both surveys were expected to guide short- and medium-term interventions to alleviate the impact of low temperatures, agricultural damage and unaffordable prices of food and fuel.

2.2 Objectives of the assessment in urban areas

The main objective was to update the knowledge base on the food security, livelihoods and nutrition situation in urban Tajikistan at household level in order to better inform priorities and programming decisions on food and non-food assistance, taking into account the recent natural and economic shocks experienced by the population.

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7 In July 2008 the World Bank presented the updated poverty data following the Tajikistan Living Standard Survey in November 2007. The preliminary results indicate that 53% of the population lives below the poverty line of US$ 1.33 per day whilst food poverty at US$ 0.85 per day is affecting 17% of the population
8 To be found at http://www.un.tj/files/React/UN_Appeal_TJ_FINAL_ENG.pdf
Specific objectives included:

- Describe the profile of households and individuals affected by food insecurity and/or malnutrition, including their location and socio-economic characteristics;
- Elucidate the causes of food insecurity and malnutrition, including a distinction between chronic and transitory food insecurity;
- Identify towns presenting higher prevalence of food insecurity and/or malnutrition and their main characteristics;
- Forecast the evolution of the food security and nutrition situation in the next 12-24 months, and describe the groups most likely to be food insecure and/or malnourished in that period who would need assistance;
- Review current and planned food and other interventions and unmet needs;
- Recommend food and non-food interventions for the next 12-24 months to meet unmet needs, including indications of the type of interventions, amounts/contents (as much as possible), and targeting criteria;
- Suggest indicators that should be monitored at urban neighbourhood, household and market levels to follow-up the evolution of the food security and nutrition situation.
3 ASSESSMENT METHODOLOGY

3.1 Guiding principles
The urban food security, livelihoods and nutrition assessment was designed in such a way as to:

- cover the main towns of the country;
- focus the analysis on households, neighbourhoods and local shops and markets (rather than macro-economic issues);
- follow a purposive sampling approach based on well-defined criteria that enable valid extrapolation of results at town levels relevant for decision-making and programming; the approach privileged the estimation of varying levels of severity for comparison and targeting purposes, and the understanding of processes contributing to food insecurity, over obtaining statistically representative data;
- pay particular attention to the relationship between household food insecurity and (i) child malnutrition (chronic and acute), and (ii) access and performance of local markets.

A combination of purposive and random sampling was applied. Secondary data and maps enabled the identification of neighbourhoods within the selected towns. Primary data collection was done in randomly selected ‘sub-neighbourhoods’ from the larger neighbourhoods. Within each sub-neighbourhood, multiple sources of information, data collection techniques (interviews, discussions) and tools (questionnaires, checklists) were used to make sure that the data collected was reliable and reflected the true situation on the ground.

3.2 Neighbourhoods, Key Informants, Households and Traders’ sample

3.2.1 Selection of towns for the assessment
Due to time and resources limitations, the assessment did not aim to cover all the urban areas of the country. Instead, the main towns were selected based on their:

- size: the combined population of the towns included in the assessment represented approximately 3/4th of the total urban population of Tajikistan; at the same time, both large and smaller towns were included to reflect the diversity of urban settlements;
- geographical location: at least one town in each of the region of the country was included in the sample.

On this basis, the following towns were selected:

<table>
<thead>
<tr>
<th>Region</th>
<th>Town(s) selected</th>
<th>Population estimation*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Rules District (DRD)</td>
<td>Dushanbe</td>
<td>660,900</td>
</tr>
<tr>
<td>Sughd</td>
<td>Khujand</td>
<td>154,700</td>
</tr>
<tr>
<td></td>
<td>Taboshar</td>
<td>12,500</td>
</tr>
<tr>
<td></td>
<td>Kulyab</td>
<td>69,900</td>
</tr>
<tr>
<td>Khatlon</td>
<td>Kurgan-Tyube</td>
<td>91,900</td>
</tr>
<tr>
<td></td>
<td>Sarband</td>
<td>12,600</td>
</tr>
<tr>
<td></td>
<td>Khorog</td>
<td>28,900</td>
</tr>
<tr>
<td>GBAO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total sample</td>
<td></td>
<td>1,031,400</td>
</tr>
<tr>
<td>Total urban</td>
<td></td>
<td>1,369,800</td>
</tr>
</tbody>
</table>

*Tajikistan National Statistics Committee, 2007-2008
3.2.2 Delineation of neighbourhoods and selection of ‘clusters’

For each town, neighbourhoods known by local staff and other Key Informants were delineated on maps\(^{10}\) and a grid with squares of approximately the same size (in terms of expected number of households) was overlaid on them. Squares were numbered and 10 were randomly selected (‘clusters’). The square was further drawn or described to the teams using the main streets or other observable boundary on the map or on the ground.

3.2.3 Random selection of households within the selected clusters

Taking time, staff and resources into consideration, as well as the priority given to quality data over quantity of interviews, the number of households to interview was set at 10 per cluster, and thus 100 households per town. A standard process was followed to randomly select the households. In brief:

Teams first checked the boundaries of the ‘cluster’ using recognizable landmarks (streets, parks, rivers etc.); the map of the clusters was refined or drawn on that basis;

The centre of the cluster was identified and two directions were determined using the “spin the pen” method; two teams walked in each direction up to the limit of the cluster;

Once at the limit, one side of the street was randomly selected and random numbers between 1 and 20 (or more if the street was very long) were used to select the households to interview (5 per team, hence 10 at total) while walking back towards the centre of the cluster; when multi-storey buildings were selected, only one household was randomly interviewed\(^{11}\) after random selection of the floor and of a flat for that floor.

Absent households were replaced only if neighbours or other informants confirmed that they had moved definitively or were in long holidays. Otherwise the team returned later in the day or arranged for an appointment.

3.3 Data collection

Supervisors from WFP Country Office and sub-Offices were trained in English by WFP international consultants for 2 days, after which supervisors trained the enumerators from the State Statistical Committee and other WFP staff in Tajik with the support of the international consultants. The preparation included specific guidance to take anthropometric measurements on children under 5 years of age. One field pilot took place with the Supervisors and another one with the enumerators in neighbourhoods of Dushanbe.

7 teams of 6 enumerators were formed to cover the 4 Regions of DRD, GBAO, Khatlon and Sughd. In each team, two pairs of enumerators administered the household interviews, one pair of enumerators interviewed the local leader of the neighbourhood and led Focus Group discussions, and visited shops and the nearest local market.

The household survey, local neighbourhood Key Informants’ survey, Focus Group discussions, and traders/shop-keepers’ interviews (see below) aimed at complementing each other and to enable triangulation (cross-checks), in order to control as much as possible potential bias and lack of statistical representativity inherent in the sampling approach that had been adopted (delineation of neighbourhoods and ‘clusters’ defined on a mix of quantitative and qualitative data, limited number of households interviewed).

3.3.1 Household survey

A standard questionnaire covering demographic information, home garden and animal productions, income and food sources, food consumption and expenditures, coping strategies and assistance received was developed (in English, translated in Tajik – see Annexes 2a and 2e). The nutritional status of all under-5 children living in the selected households was also measured by taking height, weight and mid-upper arm circumference measurements. Specific questions on the child’s health and

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\(^{10}\) Maps of the towns generally did not exist beforehand and were downloaded from Google-earth Internet tool

\(^{11}\) In retrospect, it would have been preferable to count the number of households in the multi-storey structure and interview as many households as the random numbers generated would have required. This was not done to avoid the risk of increasing homogeneity if households were from the same building. However, observations during the survey did not support the hypothesis that households within a same building were similar in terms of food security and livelihoods.
food consumption were also asked to the mother or child care-taker. A total of 700 household questionnaires (including 100 in each town) were obtained, including valid anthropometric data on 347 under-5 children.

### 3.3.2 Neighbourhood-level Key Informants interviews

In each selected neighbourhood cluster, a short questionnaire was administered to the local leader to enquire about main sources of income and food of the inhabitants, access to, and changes of use of primary school and health services, main difficulties and ongoing assistance programmes (see Annexes 2b and 2f). A total of 70 “Key Informant/neighbourhood-forms” were filled in.

### 3.3.3 Neighbourhood Focus Group discussions (FGDs)

Discussions took place with groups of 6-12 men and women in each selected neighbourhood cluster. Participants were selected through the local leader and were expected to “represent” the average households in this area. A checklist of topics on sources of food and income, labour opportunities, main difficulties and coping strategies, social assistance and networks, health and education was used to guide the discussions (see Annexes 2d and 2h). A total of 70 FGDs were transcribed.

### 3.3.4 Traders and shop-keepers interviews

To add information on food supplies, prices and households’ demand and constraints to trade, a dedicated enumerator in each team visited several shops in the neighbourhood cluster as well as the nearest local market and collecting information using a structured questionnaire (see Annexes 2e and 2g). A total of 243 shop-keepers/traders were interviewed, including 40 in Dushanbe, Kurgan-Tuybe, Sarband and Khorog, 36 in Khujand, 24 in Taboshar and 23 in Kulyab.

### 3.4 Limitations

- Although the selection of the neighbourhoods ‘clusters’ and households was random, the number of clusters was possibly too small to ensure sufficient heterogeneity within each town, and the total number of households for the whole town (100) was also on the low side. However, the relatively small household sample size was compensated by the use of information obtained from the different sources (households, Key Informants, Focus Group discussions, traders).

- Some 44 households were absent and could not be found despite repeated visits, only young children (below 16 years of age) were present in 9 households and could not answer, and 23 households refused the interview. This may create a bias as the characteristics of the absentees or refusals can differ from those of the households interviewed. However, out of a final sample of 700 households, these figures are reasonably low and do not give cause for much concern.

- Although intensive training and field pilots took place, the discussions in the Focus Groups were not always conducted as openly as they should have been and could have provided richer information.
4 MARKETS

While physical access to local shops and markets was not an issue in urban areas, food supplies (offer), prices and demand must be analysed given the high dependency of the population on markets transactions for their food consumption. However, it must be noted that the assessment conducted in April/May in rural areas also found out a high dependency of rural population on markets.

4.1 Neighbourhood local shops/markets food availability and supplies

Overall, the results do not indicate significant problems of food availability and offer in local shops and markets in urban areas, with the exception of animal products as a result of stock-building by traders.

4.1.1 Availability and source of food in local shops and markets

Between 75-80% of traders/shop-keepers interviewed were engaged in the sale of sugar, oil, and processed items such as pasta, biscuit, and fried potatoes, 2/3rds were selling bread and eggs, and half were selling poultry (meat or alive). Between half and 1/3rd of the traders/shop-keepers were involved in the sale of pulses (beans, lentils, peas), imported wheat, vegetables and fruits, and potatoes. Only 1/4th sold dairy products, and less than 1/5th sold local wheat. The proportion of traders/shop-keepers selling local wheat was much higher in Khujand (72% of the traders) while traders in the sample in Khorog only sold imported wheat.

At least 2/3rd of the traders/shop-keepers obtained their oil, sugar, wheat, potatoes, fruits, vegetables and eggs from larger traders. About 1/3rd of the traders sourced potatoes, fruits and vegetables from farmers directly. Between 10% and 40% of the traders obtained imported wheat, oil, sugar, bread, meat, dairy products and eggs from importers and private companies.

The majority of traders/shop-keepers indicated that local and imported wheat, bread, meat, dairy products, eggs, oil and sugar were available in sufficient quantities to meet households’ demand both in winter and summer. However, seasonal variations were reported on the availability of potatoes, fruits and vegetables which were irregularly available or in amounts less than sufficient to meet demand in winter times according to more than half of the traders, while their availability was not an issue in summer. Lower availability of seasonal products in winter was particularly reported in the cities sampled in Khatlon region (Kulyab, Kurgan-Tyube and Sarband) as well as in Khorog (GBAO region).
4.1.2 Stocks and changes in supplies

About 1/3rd of the traders/shop-keepers reported lower supplies of potatoes and vegetables, almost half indicated less supplies of meat, and 60% lower supplies of wheat this year compared to last year.

**Decreased supplies of meat and wheat were mainly attributed to stock-building by traders.**

However, **less than 1 out of 3 traders held stocks**. For the few who did, the average duration of the stocks was 3.5 weeks. On the other hand, traders reporting larger supplies of vegetables and meat related them to the better prices obtained when selling.

The proportion of traders holding stocks was very low in Khujand and Taboshar (3% and 8% respectively), but very high in Khorog (64%), reflecting in part differences in physical access by trucks and other means. None of the traders interviewed in Khujand reported changes in the supplies of their commodities.

4.2 Levels and trends of market food prices

4.2.1 Rising food prices on international markets and linkages with domestic prices

Tajikistan is a net importer of wheat (the local staple) and of other key food commodities including animal products, sugar, oil and other processed foods. Not only is local production insufficient to cover the food consumption requirements of the population, but flows from rural to urban areas are also small, reflecting a poor market integration (mostly a consequence of weak transport infrastructure).

As a result, the country is highly susceptible to price variations on the international markets. Much of the inflation since 2007 has been caused by regional and global food price developments. In addition, high global energy prices and a rise in the price of gas from Uzbekistan pushed import costs upwards.

At present, Tajikistan has the highest rate of inflation amongst the countries of the Commonwealth of Independent States (CIS), rising to 28% in January, February 2008 up from 12% in September 2007 and 23% in December 2007.

In response to the pass-through of international prices to the domestic market, the Government formed a special Commission to address the price crisis and price controls have been imposed on flour and other major staples. Decisions apparently taken include exemption of grain and flour imports from the 20% value-added tax, and increased funding for flour and grain purchases with the view to replenish State supplies of basic food and other products. It was mentioned that the budget for the agricultural sector was also increased by 220% for 2008, tentatively for small and medium-sized loans to farmers. Considering that the share of agriculture out of total Gross Domestic Product (GDP) is estimated at 23.6%, out of a total GDP of to US$ 1,187 million, the planned budget increase would bring substantial amounts of funding to the sector if it materializes. While the above decisions have the potential to mitigate price increases, it is not clear whether they are indeed being implemented. Furthermore, the impact of these macro-policy decisions on impoverished households is also not fully clear.

4.2.2 Prices on central markets

WFP has monitored food prices on 5 main markets throughout the country since 2002. The graphs below illustrate the sharp increase in market nominal prices since the end of 2006. Consumer prices increased by 11.9% in 2006, and inflation rose sharply since September 2007 (6.3% that month, 10.2% for food items), representing an increase of 18% compared to September 2006. However, price increases have taken place earlier for some commodities and seasonal variations also occur (not visible on the graphs):

- wheat flour (1st grade) prices increased first in 2003, then sharply at the end of 2006 until now; between 2006 and 2008, bread real prices increased by 39% and wheat flour by 37%;
- potato nominal prices increased since 2004, with a peak in 2006 explained by the poor harvest that year; changes in potato real prices are difficult to interpret as they are very much

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12 Economic Intelligence Unit ViewsWire, December 2007
13 Whether this decision is being implemented in practice needs to be checked
14 The extent to which this is happening also needs to be checked
16 This section is similar to the corresponding one in the rural EFSA report, April/May 2008
17 IMF, International Financial Statistics - Economic Intelligence Unit Tajikistan Country Profile, 2007
related to seasonal variations in the volumes supplied to the markets (i.e. harvest times), which blur the effect of other possible factors on potato prices;

- meat prices increased beginning the end of 2006 by 26-28% in real terms (both chicken and beef);
- oil real prices rose by 51% between 2006 and 2008;
- the only exception to the trends was sugar, with a decrease in real prices of 22% between 2006 and 2008; international prices for sugar also tended to decrease in 2007-08 compared to other commodities.

Prices are typically higher in Khorog due to higher transportation costs. A Market Profile18 conducted by WFP in 2005 indicated that, if anything, prices on local markets would be expected to be higher given the additional transportation costs from urban markets to rural, often isolated, areas.

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18 Tajikistan: Market Profile for Emergency Food Security Assessments. WFP (ODAN), December 2005
Figure 4 – Beef meat real prices 2002-2008 in 5 main markets

- Average of annual prices except for 2008: average of monthly prices January to June

Figure 5 – Vegetable oil real prices 2002-2008 in 5 main markets

- Average of annual prices except for 2008: average of monthly prices January to June
4.2.3 Prices of commodities at local shops and market level

All traders/shop-keepers interviewed mentioned that prices had increased compared to the past year and the vast majority attributed the higher prices to: (i) increased price of commodities at the source, and (ii) increased cost of transportation. A high proportion (84%) also blamed taxes while few, essentially in Taboshar and Khorog, referred to high credit interest rates.

The largest price increases were reported for imported wheat flour: almost half of the traders mentioned an increase by 50% or more. About 1/3rd of the traders also indicated large increases of the price of oil and sheep/goat meat. The smallest price increases (by 25% or less) were mentioned for local wheat, potatoes, pulses, poultry meat and sugar.

The extent of price increase differed between towns, reflecting the added cost of transportation as well as, possibly, the effective demand of the population (see paragraph 4.2.4). Reported price increases in Dushanbe were important, particularly bread (a large number of traders/shop-keepers indicated a doubling of its price). Increases were apparently more limited in Khujand and Taboshar (located close to Istravashar, a major entry point for imported food commodities) than in other cities such as Kulyab and Kurgan-Tuybe.

4.2.4 Volume of sales and households’ effective demand

The volumes of sales reflect the interaction of higher prices with households’ effective demand.

The majority of traders reported that households were now buying cheaper foods and in small quantities. The variations in demand were different according to the type of commodities, as a result of households’ preferences and inelasticity of the demand. While decreased demand was generally attributed to the higher prices, increased demand was attributed to stock-building by consumers. An increase in demand for some commodities may also reflect a switch of households’ expenditures toward these items rather than more expensive ones (see also Section 5):

- about 1/3rd of the traders/shop-keepers indicated a decreased demand of wheat (essentially in Dushanbe and Taboshar), but half of the traders in Khorog reported an increase in demand;
- about 1/3rd of the traders/shop-keepers indicated a decreased demand of potatoes (most towns except Khorog), and 1/4th an increase (essentially in Kulyab and Khorog);
- about the same proportions of traders/shop-keepers mentioned either decreased or increased demand of vegetables;
- almost half of the traders reported decreased meat and milk demand (in most towns except Khujand), while less than 20% indicated an increase (mostly in Kulyab).
Reflecting the general depressed demand for food commodities, the amounts sold on a weekly basis were also lower than the usual amounts sold at this period of the year for a number of traders:

28% of the traders reported a decreased in the volume of local wheat sold but the decrease was small (by 4% on average); conversely, 3% reported a decreased in the amount of imported wheat sold, down by 11% on average;

- almost half of the traders indicated less potatoes and pulses sold compared to usually (down by 16% and 19% respectively), as well as sugar (down by 14%);
- more than half mentioned a decreased in the volume of oil sold, down by 21%;
- while 41% reported less poultry meat sold (by 11%), 63% indicated a decrease in the amount of beef meat sold, down by 21%.

The above results indicate that, on average, households have reduced their purchases (and thus consumption) of nutritionally-dense food but expensive food such as oil and animal products, as well as, to a slightly lesser extent, pulses and even sometimes bread. Again variations were noted between towns, linked to: (i) the initial purchasing power and consumption levels of the population and thus the margin of decrease feasible to cope with higher prices, and (ii) the extent to which prices had increased. The situation differed somewhat between towns as summarised in Box 1.

### Box 1 – Households’ demand and changes in volumes of sales, according to towns

Figures must be taken with caution given the small number of traders/shop-keepers interviewed in each town. Taking this caveat into account, the following pattern was observed:

A large decrease in the sales of imported wheat were reported by most traders/shop-keepers interviewed in Dushanbe, representing 45% less in volume; a similarly high number of sellers reported decreased sales of beef meat (down by 31%) and oil (down by 21%);

Smaller sales of oil, but much less of the other commodities, were mentioned by most traders/shop-keepers in Khujand and Kulyab (sugar as well for the latter); the limited decrease of other food sales in Khujand may be related to the fact that traders were the least likely to report price increases in this town; this was not the case in Kulyab but may also reflect different economic levels of the population in both towns, and thus different capacity to adjust their consumption to higher prices (see Section 5 on Household Food Security);

High numbers of traders/shop-keepers in Taboshar indicated lower sales of wheat, pulses and sugar;

Most traders reported decreased sales of almost all commodities in Kurgan-Tuybe, Sarband and Khorog.

With the exception of Khujand and Taboshar (both in Sughd region), some 80-90% of the traders/shop-keepers in towns were extending credit to their customers for food purchases. The majority of them (82%) reported an increase the number of households asking for credit compared to last year.

### 4.3 Main constraints and capacities of local shop-keepers/traders

#### 4.3.1 Access to credit for local traders/shop-keepers

Only 38% of the traders/shop-keepers had access to credit to purchase their commodities for resale. On average, half of the credit providers were the traders (wholesalers) selling them the goods, 28% were banks or other formal institutions, 10% received support from NGO-run programmes, 8% from money lenders and 4% from relatives.

They were large differences between towns, with:

- most traders having access to credit in Dushanbe (mostly provided by other traders);
- a large number accessing credit in Kulyab and Khorog (the latter mostly from formal financial institutions);
low numbers benefiting from credit in Taboshar (mainly obtained from relatives and some from formal financial institutions) Kurgan-Tuybe and Sarband; and

- none (in the sample) having access to credit in Khujand.

Less than 10% of traders mentioned increased use of credit this year, and 8% mentioned higher credit interest rates. The average monthly interest rate was estimated at almost 2% but half of the traders/shop-keepers were accessing credit at 1%. The highest monthly interest rates were quoted in Khatlon region (2.4% in Sarband and 5.4% in Kulyab).

### 4.3.2 Main trade-related difficulties

The main trade-related difficulties identified by almost all local traders were the higher cost of commodities at the source (mostly imported food, hence confirming the pass-through effects of increased prices on international markets), decreased consumers’ demand, higher cost of fuel and transportation, and taxes. Almost half of the traders lamented the lack of access to credit and around 40% the lack of transportation and poor roads. Insufficient storage facilities were mentioned by 28% of the traders. Again difficulties differed across towns, mainly according to their location and to the need for transportation and associated cost:

- a very low number of traders in Dushanbe, Kurgan-Tyube and Sarband reported difficulties with transportation and roads, while they were many to do so in Khujand, Taboshar and Khorog;
- lack of access to credit was frequently mentioned by traders in Taboshar, Kulyab and Khorog;
- insufficient storage facilities were a more prominent problem for traders in Taboshar and Khorog, possibly related to transportation difficulties and higher risk of supply cuts for this reason.

### 4.3.3 Response capacity in the event of increased households’ demand

More than 80% of the local traders/shop-keepers were confident that they would be able to increase their supplies of local wheat, bread, beef/sheep/goat meat, milk and eggs in less than 2 weeks should households’ demand increase, for instance through cash or voucher transfers or other means. They were slightly less (around 70%) to mention this capacity for imported wheat, potatoes, fruits, vegetables, poultry meat, oil and sugar: a higher proportion would need 2-4 weeks to respond. Very few traders indicated the need for longer time to mobilise commodities or informed that they would not be able to increase their offer.

Capacities to increase supplies seem particularly high for local traders/shop-keepers in the larger towns of Dushanbe and Khujand, possibly linked to their larger market share and connections with other traders and importers compared to the medium-sized towns of Kulyab and Kurgan-Tyube, and even more so compared to the smaller towns of Taboshar and Sarband. Lower response capacities of traders in Khorog may be explained by the difficulties to reach the town and hence to ensure swift adjustments of the offer to changes in demand.

While these results generally augur well for cash-based transfer interventions to address food insecurity, they must be taken with caution as this kind of programme has not taken place in the past in any significant scale in urban centres of Tajikistan.
5 HOUSEHOLD FOOD SECURITY SITUATION

Similarly as for the joint assessment in rural areas, the food security, livelihoods and nutrition assessment in urban areas took place in the context of a long and particularly cold winter, compounded by high food and fuel prices. Overall, the effects of the cold winter seemed to have subsided by the time of the assessment (June) and rather highlighted structural deficiencies of the heating, electricity and water systems. However, higher health expenditures were incurred by some groups as a result of increased diseases during the winter, further reducing households’ food purchasing capacity. Like in rural areas, high food and fuel prices superimposed on a background of chronic poverty and explain the widespread and, for some groups, severe, food insecurity.

5.1 Analysis of household food security

The same methodology as for the rural EFSA was used to estimate the proportion of food insecure households, describe their profile and determine the role played by cold- and price-related factors during the past 6 months as well as other longer-term factors. The main steps are described below:

1. Food insecurity was determined by the combination of households’ current (past 7 day) food consumption and their main sources of income. Food consumption patterns gave an idea of the adequacy of the diet at household level, while income sources informed on food access capacity. Because almost 1/3rd of the households had more than 1 source of income, both the 1st source (when providing at least 80% of the total income) and combinations of 1st and 2nd income sources were used as food access indicator.

2. The human, social, financial, physical and natural assets of the households food security groups were described in order to characterise their livelihoods and identify the main factors associated with food insecurity, including a distinction between ‘transitory’ (recent) and ‘chronic’ factors.

5.1.1 Food consumption patterns

Food frequency and dietary diversity

Food consumption patterns were assessed by examining the frequency and diversity of consumption of 12 different food groups in the household during the 7 days prior to the survey. A score was obtained and compared to two thresholds\(^\text{19}\) indicative of ‘poor’, ‘borderline’ or ‘acceptable’ food consumption. Overall, 21% of households had poor food consumption, 34% borderline and 45% acceptable. These proportions reflect a larger share of the urban population presenting inadequate food consumption than the rural population (14%, 23% and 63% respectively). This may be explained by a combination of: (i) methodological reasons: urban areas enumerators paid more attention to small quantities of food reported to be consumed and eliminated these from the records, possibly under-estimating the true consumption, and (ii) less access (due to high prices) to fresh items which are more readily produced in rural areas such as fruits, vegetables and animal products, and which increase dietary diversity and quality.

A poor diet (21% of households) consists of bread, pasta and/or potatoes on a daily basis, very rarely complemented with vegetables (once a week). Pulses, animal products (dairy, meat, fish, eggs) are practically not consumed. Oil is added irregularly, and sugar is consumed 2-3 times in a week. This diet may not cover the energy requirements of individuals with specific needs such as growing children, pregnant and lactating women, and does not provide the necessary minerals and vitamins for a healthy life for anyone, especially if consumed over several weeks.

The borderline diet (34% of households) is slightly better even though still unsatisfactory from a nutritional point of view if consumed for more than a few weeks or months. Households consume bread, pasta or potatoes, with oil, and sugar daily or almost daily, but vegetables only 3-4 times a week, fruits 2 times and very seldom pulses or animal products.

\(^{19}\) The calculation of the Food Consumption Score followed the standard WFP guidance as of April 2008 (see Comprehensive Food Security and Vulnerability Assessment (CFSVA) Guidelines, draft June 2008). The thresholds retained to define the 3 food consumption groups took into account the suspicion of under-estimation of the dietary diversity due to the elimination of food consumed in small amounts not always on a very objective basis.
The acceptable diet (45% of households) is of better quality, including daily consumption of staple cereals/potatoes, oil and sugar almost daily, vegetables 5-6 times, fruits 3-4 times, animal products (dairy, meat) 2-3 times, and pulses once in the week.

Overall, Dushanbe inhabitants had the best dietary profile (only 4% with poor food consumption and 8% borderline) while Khujand and Taboshar had the worst (45-46% with poor food consumption and 37-43% borderline). Interestingly these two towns were those where traders/shop-keepers did not seem to readily extend credit to their customers, but at the same time they also tended to report lower price increases than in other towns.

Number of meals
On average adults were eating 2 meals a day and children 2.7 meals. These numbers were lower in food insecure households:

- adults were eating less than 2 meals a day in severely food insecure households and 2 meals in moderately food insecure (compared to 2.4 in the food secure); almost half of the adults in the severely food insecure households and 1/5th in the moderately food insecure had eaten only once;
- children were consuming 2.4 meals a day in food insecure households compared to 3 in the food secure; up to 22% of the children in severely food insecure households had eaten only once.

Compared to ‘usually’, almost 4 out of 10 households indicated that the number of meals of adults had decreased. This was particularly the case for the food insecure, half of which mentioned a decrease. Similarly, 3 out of 10 households mentioned that the number of meals of children had decreased, and 4 out of 10 amongst the food insecure.

Food access
Several food access indicators were examined in the context of urban areas in Tajikistan. After studying each of them individually and in relation to each other, sources of income were considered
the best proxy indicator of sources of food and access to cash and assets. Access groups were defined as ‘poor’, ‘average’ and ‘good’ on the basis of the level of income obtained (using secondary data, Key Informants and Focus Group discussions), reliability/regularity, independence/sustainability, and acceptability of the various sources of income, as well as the associations of the various sources of income with per capita food expenditures and ownership of assets:

- ‘Poor’ income sources: sale of wheat/potatoes - pensions/allowances, day-time/casual labour - those reporting no income sources
- ‘Average’ income sources: sale of vegetables/fruits - non-agricultural wage labour - self-employed - government employee/salaried - sale of handicraft - sale of animal products - sale of home-made food, remittances - mix government salary (as 1st source of income) and pensions/allowances (as 2nd income source) - mix remittances (as 1st source of income) and government salary (as 2nd source of income) - mix remittances (as 1st source of income) and pensions/allowances (as 2nd income source) - mix of various combination of income sources

On this basis, 15% households had a poor source of income, 68% average and 17% good. This reflects a higher proportion of urban households with poor food access than rural households (respectively 4%, 70% and 26%). Differences were noted between towns, with:

- Dushanbe having the lowest proportion of households with poor sources of income (7%);
- Khujand having the highest proportion of households with poor sources of income (25%);
- a higher proportion of households with average sources of income (around 80%) in the small towns of Taboshar and Sarband.

The variations between towns in terms of proportions of households engaged in different income-earning activities reflect the overall demographic and social profile of the population (more diverse in larger towns) as well as the economic opportunities within the town or in its immediate surroundings. However, while hypotheses can be made (such as government institutions and thus government employment more widespread in the capital city and larger towns, larger opportunities for self-employment and petty trade in bigger towns, facilities or incentives to migrate greater in towns close to bordering countries), they were not consistently verified when looking at the profile of the various towns and their size and location. The variety of socio-demographic and economic conditions combinations makes it difficult to identify typical ‘patterns’ for urban centres.

Results showed almost 40% of the households had more than 1 source of income and the first source of income provided at least 80% of total revenues. The first source of income (when providing at least 80% of total income) and combinations of 1st and 2nd sources of income in the other cases, were used as food access indicator.
5.1.2 Food security groups in the sampled towns and extrapolated to urban areas

In the sampled towns
Household food security groups in the sample were determined by crossing food consumption groups with food access groups, as follows:

<table>
<thead>
<tr>
<th>Sources</th>
<th>Food Consumption Groups (thresholds FCS 28, 42)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poor</td>
<td>Borderline</td>
</tr>
<tr>
<td>Poor</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Average</td>
<td>10%</td>
<td>29%</td>
</tr>
<tr>
<td>Good</td>
<td>1%</td>
<td>7%</td>
</tr>
<tr>
<td>Total</td>
<td>15%</td>
<td>42%</td>
</tr>
</tbody>
</table>

The results indicate that about more than half of the population in the sampled towns is food insecure, and almost four out of ten food insecure households is severely food insecure.

Large differences were noted between towns due to the varying combinations of food consumption patterns and income sources:

- the highest proportion of severely food insecure households (45-46%) is found in Khujand and Taboshar, both in Sughd region;
- the highest proportion of total food insecure households (more than half of the population severely or moderately food insecure) is found in Khujand, Taboshar, and in Sarband and Kurgan-Tyube (both in Khatlon region).

Extrapolated to the whole urban areas of Tajikistan
As noted, the towns in the sampled differed in terms of proportions of households with ‘poor’, ‘borderline’ and ‘acceptable’ food consumption, and with ‘poor’, ‘average’ and ‘good’ income sources. The diversity reflects the various socio-demographic profiles of the population combined with different economic opportunities in or around the towns. It is therefore difficult to extrapolate results of individual towns to non-sampled towns, even though they may be located close to each other or may have a similar population size.

In the absence of objective criteria upon which to base the extrapolations, it was decided to use the average proportions of food insecure households derived from the sampled towns (21%, 34% and 45%) for each of the non-sampled towns, and to estimate the overall proportions of food insecure households for the whole urban areas based on the relative population size of each town.

The estimations indicate that 15% of the total urban population is severely food insecure, 22% moderately food insecure and 63% food secure. These results compare with 12%, 22% and 66% respectively in rural areas, reflecting a slightly higher proportion of severely food insecure households in urban areas.

<table>
<thead>
<tr>
<th>Food Security Groups</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severely Food Insecure</td>
<td>15%</td>
</tr>
<tr>
<td>Moderately Food Insecure</td>
<td>22%</td>
</tr>
<tr>
<td>Food Secure</td>
<td>63%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>
Table 2 - Extrapolated food security results to whole urban population in Tajikistan

<table>
<thead>
<tr>
<th>Town</th>
<th>Population</th>
<th>% severely food insecure</th>
<th>% moderately food insecure</th>
<th>% food secure</th>
<th># severely food insecure</th>
<th># moderately food insecure</th>
<th># food secure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dushanbe</td>
<td>660,900</td>
<td>4</td>
<td>8</td>
<td>88</td>
<td>26,436</td>
<td>52,872</td>
<td>581,592</td>
</tr>
<tr>
<td>Vahdat (*)</td>
<td>48,400</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>10,164</td>
<td>16,456</td>
<td>21,780</td>
</tr>
<tr>
<td>Tursunzoda (*)</td>
<td>42,500</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>8,925</td>
<td>14,450</td>
<td>19,125</td>
</tr>
<tr>
<td>Roghun (*)</td>
<td>9,400</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>1,974</td>
<td>3,196</td>
<td>4,230</td>
</tr>
<tr>
<td>Khorog</td>
<td>28,900</td>
<td>12</td>
<td>27</td>
<td>61</td>
<td>3,468</td>
<td>7,803</td>
<td>17,629</td>
</tr>
<tr>
<td>Khujand</td>
<td>154,700</td>
<td>45</td>
<td>37</td>
<td>18</td>
<td>69,615</td>
<td>57,239</td>
<td>27,846</td>
</tr>
<tr>
<td>Isafara (*)</td>
<td>40,000</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>8,400</td>
<td>13,600</td>
<td>18,000</td>
</tr>
<tr>
<td>Kairokum (*)</td>
<td>12,400</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>2,604</td>
<td>4,216</td>
<td>5,580</td>
</tr>
<tr>
<td>Konibodom (*)</td>
<td>47,000</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>9,870</td>
<td>15,980</td>
<td>21,150</td>
</tr>
<tr>
<td>Panjakent (*)</td>
<td>35,500</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>7,455</td>
<td>12,070</td>
<td>15,975</td>
</tr>
<tr>
<td>Istaravshan (*)</td>
<td>59,200</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>12,432</td>
<td>20,128</td>
<td>26,640</td>
</tr>
<tr>
<td>Taboshar</td>
<td>12,500</td>
<td>46</td>
<td>43</td>
<td>11</td>
<td>5,750</td>
<td>5,375</td>
<td>1,375</td>
</tr>
<tr>
<td>Chkalov (*)</td>
<td>21,800</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>4,578</td>
<td>7,412</td>
<td>9,810</td>
</tr>
<tr>
<td>Kurgan-Tuybe</td>
<td>69,900</td>
<td>17</td>
<td>42</td>
<td>42</td>
<td>11,883</td>
<td>29,358</td>
<td>29,358</td>
</tr>
<tr>
<td>Kulyab</td>
<td>91,900</td>
<td>12</td>
<td>22</td>
<td>66</td>
<td>11,028</td>
<td>20,218</td>
<td>60,654</td>
</tr>
<tr>
<td>Norak (*)</td>
<td>22,200</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>4,662</td>
<td>7,548</td>
<td>9,990</td>
</tr>
<tr>
<td>Sarband</td>
<td>12,600</td>
<td>12</td>
<td>59</td>
<td>29</td>
<td>1,512</td>
<td>7,434</td>
<td>3,654</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1,369,800</td>
<td>15%</td>
<td>22%</td>
<td>64%</td>
<td>200,756</td>
<td>295,355</td>
<td>874,388</td>
</tr>
</tbody>
</table>

(*) Proportions of food insecure households estimated to be similar to the average of the 7 towns included in the assessment: 21% severely, 34% moderately, 45% food secure

5.2 Livelihood characteristics of the food insecure households

5.2.1 Human assets

Gender of the head of household

On average 31% of the households in the sampled towns were headed by a woman. Gender was clearly associated with food security. **Women-headed households were markedly more likely to be food insecure than male-headed households.** Almost half of the severely food insecure households were headed by a woman and one third of the moderately food insecure, compared to one fifth of the food secure households. This was confirmed by Focus Group discussions which regularly identified women-headed households amongst the most food and economically insecure.

Size of households

The size of the households was associated with food insecurity, with **smaller families** (4.4 members) **more likely to be severely food insecure than large families** (5.8 members in moderately food insecure and 6.2 members in food secure). This result differs from previous surveys as well as from 1/5th to 1/3rd of the Focus Group discussions which mentioned ‘big families’ amongst the most vulnerable groups. The same pattern was noted in rural areas, and the discrepancy between the EFSA and other sources of information may be explained by the fact that it is the absence of working-able and income-earning members which is the main determinant of food insecurity, rather than just the size of the households. As such, large families including 1 or 2 income-earning members and/or receiving remittances regularly and in large amounts may be better-off than small families with an under-employed adult member. Indeed, the average dependency ratio\(^{22}\) was higher amongst food insecure households.

\[^{22}\text{Dependency ratio DR} = \frac{\text{number of members} < 15 \text{ years} + \text{number of members} > 59 \text{ years}}{\text{number of members} 15-59 \text{ years}} - \text{Low DR:} \leq 2 - \text{High DR:} > 2\]
One out of three or four Focus Groups identified the following groups as the ones facing the most difficulties, including not only food but also health:

- large families/ families with many young children: this reflects a perception (not backed by the household data collected) of heightened vulnerability of these households as income is insufficient to cover multiple expenditures including food, clothing and schooling;
- families hosting a disabled member and/or pensioners: increased dependency ratio, low pensions or allowances.

**Attendance at school**

More than half of the households sampled (57%) hosted at least one primary school-age child and about the same proportion hosted at least one secondary school-age child. Severely food insecure households were less likely to host a secondary school-age boy (23%) than the other households (41%), possibly reflecting out-migration of boys in that age group (reason not investigated).

Overall, almost 3 out of 10 households indicated that primary school-age children had NOT been attending regularly school during the previous 6 months, and a similar number applied for secondary school-age children. **Food insecure households were more likely to report irregular primary or secondary school attendance** (more than 4 out of 10).

There was no gender difference between boys or girls in terms of irregular/non-attendance to primary school. The main reason evoked was child sickness or handicap (about 40%) followed by education costs (about 30%), and poor school facilities (about 30%). **A higher proportion of food insecure households mentioned cost as the main reason for irregular/non-attendance**, compared to food secure households who were more likely to complain of poor school facilities. The majority of neighbourhood Key Informants attributed low attendance to economic difficulties of the households, but about half of them also mentioned poor school facilities and the need for children to assist with household chores.

**Cost** was also the reason mentioned by almost half of all households reporting that children were not attending secondary school. However, in severely food insecure households, girls tended to be less likely to attend than boys, perhaps reflecting more difficult choices that households had to make in terms of allocation of expenditures for education of their children.

![Figure 9 – Main reasons for not attending school by town surveyed](image)

There were differences in the reported attendance levels and main reasons between towns, probably reflecting the average economic situation of households as well as the quality of teaching facilities especially with regards to the cold temperatures in the winter:

- the vast majority of households and Key Informants in Dushanbe, Kulyab and Khorog did not report drops in school attendance during the previous 6 months (Key Informants in Kulyab had a different perception and attributed decreased attendance essentially to school costs);
about 40% of households in Khujand indicated decreased school attendance, mostly linked to cost and poor facilities; Focus Group participants blamed the cold winter, lack of heating and warm clothes;

almost half of the households in Taboshar, Kurgan-Tyube and Sarband indicated decreased school attendance, with child sickness as the main reported reason, as well as cost and sometimes poor school facilities; Focus Group participants mentioned the cold winter and lack of heating in classrooms (and lack of warm clothing) as factors having contributed to the lower attendance; economic issues were also evoked.

Health status, access to and use of health services

Most Key Informants and Focus Group participants felt that diseases had increased in the past 6 months compared to ‘usually’ at this period of the year. In Dushanbe and Khorg they related increased diarrhoea to the consumption of contaminated water, and anaemia to poor diet and malnutrition.

About two thirds of Key Informants felt that the use of health services had decreased due to the inability to pay for treatment as a result of income being prioritized for food. The lack of qualified doctors, with many reportedly migrating to Russia, was also mentioned.

5.2.2 Natural assets

Cultivation of a home garden and ownership of animals were associated with better food security. A cause-to-effect relationship is not clear however. It may be that the better economic conditions of food secure households enable them to engage into these activities, which further contribute to their better diet. Conversely, it may be that food consumption is positively influenced by gardening and animal raising which then become strong determinants of the food security status.

Home gardening

Overall, 22% of households cultivated a home garden, with an average acreage of 0.027 ha. Food insecure households were less likely to cultivate a home garden: 15-17% versus 29% of the food secure. The acreage cultivated was also lower (0.02 versus 0.03 for the food secure). Virtually no household had access to larger fields.

The majority of households with access to a home garden were cultivating fruits and vegetables (83%). Only 30% were producing potatoes and almost none was cultivating wheat. The few severely food insecure households with a home garden were less likely to produce potatoes (20% versus 29-34% of the others).

Home garden production was exclusively for the households’ own consumption (only a handful of households were selling up to 1/4th of their fruits and vegetables). The potato harvest covered on average 2.5 to 2.9 months of consumption while the fruits/vegetables harvest provided for 1-1.3 months only. Given the low proportion of households cultivating, these results translate into less than 10% of the severely or moderately food insecure households who can reach 1-3 months of self-sufficiency with a home garden, versus 20% of the food secure.

The cold temperatures during the winter did not cause significant damage to the potato and fruits/vegetables crops in the towns visited.

Animal raising

About 18% of households in the sample raised animals. The average number of animals owned by these households was 1 cattle, 2 sheep/goats and 2 poultry (obviously much less than in rural areas which owned on average 2 cattle, 7 sheep/goats and 5 poultry). Food insecure households were less likely to own animals: 8% of the severely food insecure and 15% of the moderately, versus 26% of the food secure. The few food insecure households who raised animals tended to favour sheep/goats rather than cattle.

A low proportion of animal owners sold animals in the previous 6 months, with no differences across food security groups. The main reason for selling cattle or sheep/goats was the need for money. Lack
of fodder/feed was mentioned by 1/5th of the households owning cattle and half of the households owning poultry.

The vast majority of households kept the animal production for their own consumption. The few households who sell were food secure in general.

**Differences between towns in home gardening and animal raising**

The highest proportions of households having access to a home garden and raising animals were found in Dushanbe and Khorog, while the lowest ones were in Khujand, Kurgan-Tyube and Sarband (see Figure 10).

**5.2.3 Physical assets**

**Domestic assets**

Six domestic assets were investigated in the EFSA, including fridge, oven, television, satellite dish, radio and cell phone. Approximately 1/5th of the households owned two domestic assets, and 3/5th owned more than two domestic assets.

A higher proportion of food insecure households owned only one or two domestic assets, compared to the food secure. While 43% of the severely food secure and 54% of the moderately food insecure owned more than 2 assets, 79% of the food secure households did so. The main differences according to the food security level concerned the ownership of fridge, oven, satellite dish and cell phone (no differences with regard to television or radio).

**Productive assets**

Five types of productive assets were investigated, including sewing machine, farm machinery, bicycle, motorbike and vehicle (car/taxi/truck). On average, almost half of the households did not own any of these assets, and 39% owned one. Sewing machine was the most frequent asset owned (by 46%), only 11% had a bicycle, 2% a motorbike and 17% a vehicle.

Food insecure households were much less likely to own productive assets: 64% of the severely food insecure and 49% of the moderately food insecure did not have any, compared to only 32% of the food secure.

**Differences between towns in the ownership of assets**

The differences between towns were not systematically reflecting the various proportions of food insecure households in each one, or the proportion of migrants and households receiving remittances (which could facilitate access to assets). They are thus difficult to interpret. Essentially:
- the highest proportions of households owning domestic assets were found in Dushanbe (83% with more than 2 domestic assets and 70% with at least one productive asset) and Kurgan-Tuybe (74% with more than 2 domestic assets); the proportion of migrants was high only in the latter;
- the lowest proportion of asset owners was in Kulyab and Sarband (only about half owned more than 2 domestic assets and more than half did not own any productive asset).

**Figure 11 – Households’ assets ownership**

5.2.4 **Economic assets: income sources (including remittances), savings, expenditures and debts**

**Income sources**

Some 61% of urban households in the sample reported to have only one source of income and 32% two sources (corresponding proportions in rural areas were 43% and 50%). For those having more than one source of income, the first source still provided the bulk of total income (73%).

Some 6% of the severely food insecure households had apparently no income source as such. **Food insecure households were more likely to have only one income source** (65-67%) compared to food secure households (56%).

While remittances were the dominant income source in rural areas, **government employment** was the first income source for about 30% of the urban households, while remittances came in second position with 25% of the households relying on them. Petty trade, self-employment, day-time/casual work and pensions/allowances came next with 8-10% of households depending on either one of them as their first source of income.

Second sources of income were essentially **pensions/allowances** (for 41% of the households with two income sources) and **government employment** (25%). No more than 5-6% of households relied on either remittances or non-agricultural wage labour, day-time/casual labour or self-employment.

By analytical construction, income sources differ according to the food security status. Essentially:

- **severely** food insecure households relied more on pensions/allowances (27% of them versus 1-5% of the other households);
- **food insecure** households relied more on day-time/casual work (21% of the severely food insecure and 10% of the moderately, versus 1% of the food secure), and less on self-employment (1-2% compared to 18% of the food secure) and petty trade (0-2% compared to 20% of the food secure).
For their second source of income (for those with more than one), severely food insecure households relied less on government employment (18% versus 26% of other households) and more on daytime/casual labour (15% versus 4% of other households).

These results indicate a different income-earning profile of urban households and relationship with food security, compared to rural households. In rural areas, severely food insecure households relied more on self-employment (30%) and slightly less on remittances (30%) for their income. They also depended more on agricultural wage labour (20%) and pensions/allowances (15%) than the other households.

Income levels and purchasing power
The amount of income brought by the various sources differed markedly according to the various Focus Groups held in the 7 towns. While the small number of participants may have contributed to the wide margins, they also reflect variations linked to different levels of qualification for a same type of activity (for example government employees) and therefore different levels of salary, as well as variations in the amount and frequency of remittances received. Petty trade gains are also likely to vary a lot depending on the season as well as on prevailing prices.

Over the various groups, pensions were quite systematically valued at a low 20 to 40 somoni/month but casual labour earnings varied from 10 to 250 somoni/month, small business from 10 to 200 somoni/month, government salaries from 40 to 250 somoni/month, and remittances from 100 to 700 somoni/month.

A very rough estimation of the market cost of the WFP basic food ration (wheat, oil, sugar, salt) in Dushanbe amounts to 40 somoni/capita/month, i.e. 200 somoni/month for an average 5-member household. The minimum poverty line of the World Bank for Tajikistan is 80 somoni/capita/month, i.e. 400 somoni/month for a 5-member household. On that basis, it seems that households who rely only on pensions but have other dependents, households employed in low-paid jobs or at the lower scale of the salary ladder, and households receiving limited remittances, cannot cover the cost of a minimum food basket, not to mention additional non-food expenditures.

Changes in income during the past 12 months
Some 40% of sampled urban households indicated that their income had decreased over the past 12 months, 35% said it had not changed and 25% that it had increased. Food insecure households were more likely to mention a decrease of income (45-46%) than the food secure households (33%). Only 17% of the severely food insecure households experienced a higher income, compared to 26-27% of the other households.

The magnitude of income change was significant: minus 47% for those reporting a decrease, and + 31% for those reporting an increase. In the Focus Group discussions, some of the reasons mentioned for income level changes were:
- Decrease of income:
  - higher prices;
  - higher demand for unskilled work, and related unemployment;
  - decreased remittances (harder for migrants to find jobs, increased cost of ticket and related indebtedness)

- Increase of income:
  - increased migration (as a result of unemployment) and corresponding remittances;
  - increased salary, mostly for government employees
  - increased earnings, mostly for those engaged in petty trade (as a result of higher prices).

These findings indicate that:

- the main losers of price increases are the casual labourers and pensioners (pensions apparently have not been adjusted upwards);
- the main winners are amongst those engaged in petty trade; however not all of them are gaining: a number are negatively affected by lower demand (due to higher prices) and taxes;
- the self-employed generally seem more capable to increase the intensity of their activities or to obtain higher remunerations, and thus fare better in a context of higher prices;
- households depending on government salaries and those able to increase the number of migrants can partially mitigate the impact of higher prices owing to the augmentation of their salary (but reportedly insufficient to compensate for the price increase) or remittances.

Overall, 39% of the households had at least one member actively looking for work (proxy for under/unemployment) at the time of the survey. This is comparable to what was found in rural areas. Moderately food insecure households were more frequently mentioning the search for work, reflecting their better capacity to mobilize some workforce than the severely food insecure.

**Migration and remittances**

As in rural areas, increased migration has been a common response of households to their economic difficulties. This was confirmed in the Focus Group discussions. Half of the Key Informants also indicated out-migration from their neighbourhood inhabitants, but many evoked the degradation of urban services (water, electricity) as the push factor, rather than just the search for labour and income.

Overall, slightly more than 1/3rd of the households had at least one migrant. Moderately food insecure households were more likely to report migrants (41%) than other households (30-31%). More than half of the households with migrants indicated that they had left less than 6 months ago, while 29% reported longer-term migration of more than 1 year ago. Recent departures were more frequent amongst the food insecure households: between 62-68% indicated a migration in the previous 6 months, compared to 45% of the food secure.

As noted previously, the level of remittances received varies tremendously between households, which explains why these transfers do not play an equal role in determining the food and economic situation of recipients. Furthermore, recent migration is associated with indebtedness due to the higher cost of tickets, and increased difficulties to find jobs abroad were frequently mentioned.

**Differences between towns in income sources**

There is no clear pattern that can explain differences in the proportions of income sources between the towns in the sample. For instance, while the concentration of government institutions in the capital city Dushanbe could have contributed to a high proportion of households depending on government employment, this was not much different in a small town such as Sarband. The importance of remittances was not clearly related to the proportion of migrants, possibly because migration was recent and/or seasonal (seasonality was not enquired).
Broadly speaking:

- **under/unemployment** seemed more widespread in **Taboshar** (Sughd region) **Sarband** (Khatlon region) and **Khorog** (GBAO region); all three are rather small towns;

- **decrease of income in the past 12 months** was more apparent in **Khujand** (Sughd region) and **Kurgan-Tyube** (Khatlon region); both are medium-size towns; the linkages with price increases are unclear, as traders/shop-keepers tended to report rather lower increases in Khujand and higher ones in Kurgan-Tyube compared to other towns.

![Figure 13 – Main sources of income by city and food security status](image)

The main characteristics of the towns as compared to the average sample are summarised in the box below.

**Box 2 – Main income sources, under/unemployment and migration characteristics of the sampled towns**

**Dushanbe**: compared to other towns, a low proportion of households relied on remittances (16%) or day-time/casual labour (1%) while a high proportion was self-employed (21%); a relatively low proportion of households had member(s) actively looking for work (26%); the proportion of migrants was also low (23%) and rather long-term (half of the migrants had left more than one year ago).

**Khujand**: a comparatively low proportion of households relied on remittances (15%) while a high proportion depended on day-time/casual labour (18%); more than half of the households reported a decrease of income in the past 12 months; as in Dushanbe, the proportion of migrants was low (21%) and rather long-term (more than half of the migrants had left more than one year ago)

**Taboshar**: a relatively low proportion of households depended on government employment for their income (16%), but most relied on remittances (60%); few households had member(s) actively looking for work (16%); a high proportion of households had migrants (69%), most of whom seemed to have left rather recently (80% less than 6 months ago).

**Kulyab**: government employment was limited (17%) while self-employment was high (19%) compared to other towns; only 1/4th of the households reported a decrease of income in the past 12 months, while 37% indicated an increase; the proportion of migrants was comparable to the average sample.

**Kurgan-Tyube**: a low proportion of households relied on remittances as their first source of income (11%) and a relatively high proportion depended on non-agricultural wage labour (12%); 2/3rds of the households reported a decrease of their income in the past 12 months; the proportion of migrants was low (20%) and rather recent (70% had left less than 6 months ago).

**Sarband**: the income sources were in line with the average for the 7 sampled towns; almost half of the households indicated that their income had actually increased in the past 12 months but the magnitude was low (+17%); in addition, more than 2/3rds of the households had member(s)
Box 2 – Main income sources, under/unemployment and migration characteristics of the sampled towns

actively looking for work, probably reflecting the fact that the income increase was not sufficient; the proportion of migrants was comparable to the average sample.

Khorog: a low proportion of households relied on remittances compared to other towns (13%), but a high proportion had a mix of income sources of various kinds; only about 1/5th of the households reported a decrease of income in the past 12 months, but a high proportion (60%) had member(s) actively looking for work; the proportion of migrants was comparable to the average sample, but migration seemed rather long term (2/3rds had left more than 1 year ago).

Cash and other savings

On average only 14% of the urban households sampled had cash or other savings. As expected, a lower proportion of severely food insecure households had cash or savings (8%) compared to the others (13% of the moderately food insecure and 17% of the food secure. The exception was in Kulyab, where almost half of the households mentioned having cash and other savings, with no differences across food security groups. The reason for this “anomaly” is unclear.

Practically no household sampled had a bank account, except a handful in Khujand, Taboshar and Kulyab (all food secure).

5.2.5 Sources of food and dependence on markets

As expected, the majority of food consumed by the urban households was purchased on the market and local shops. There were no significant differences between the food sources used in the 7 days prior to the survey and ‘usually’.

A large share of the food (71%) was obtained at central markets and 18% at local markets and shops. Local markets and shops were more frequently used for eggs and milk, perhaps because they are bought in smaller quantities. However, a significant proportion of households (11%) also indicated that they had borrowed or incurred debts for their food, or received it as gift. Gifts were more frequently mentioned for vegetables, fruits, milk and fish, all items that offering households may have been able to produce themselves from their home garden, animals or fishing activities. Given their nutritional value, the ability to benefit from these gifts is important for households with a poor diet. However, only 5% of the severely food insecure and 3% of the moderately food insecure reported food gifts.

Food expenditures

Food expenditures represented 62% of total expenditures for all households. Some 35% of the households dedicated more than 3/4th of their expenditures to food, while only 27% dedicated less than half of their expenditures to food.

While the importance of food in total expenditures did not differ across food security groups, the food insecure spent less on food than the food secure households: 9 somoni per capita per week for the severely food insecure, 13 somoni/capita/week for the moderately food insecure, and 20 somoni/capita/week for the food secure. These values are low compared to the rough cost of a basic WFP ration (about 10 somoni/capita/week at Dushanbe local shop prices) which does not include any fresh item (fruits, vegetables, animal products) nor pulses. They are below the World Bank poverty line for Tajikistan (about 20 somoni/capita/week) for the food insecure and just at that level for the food secure. In other words, the reported food expenditures were clearly insufficient to provide for a balanced food basket for the food insecure households.

Bread represented the larger share of food expenditures (29%) followed by oil and potatoes (14% each), fruits/vegetables (12%), animal products and sugar (7% each), rice 6% and dairy products 4%. Meals or snacks eaten outside the home represented only 2% of food expenditures.

23 The rural EFSA found that food expenditures represented 81% of all basic expenditures for the majority of rural households. However, direct comparison with urban areas is not possible because other expenditures were taken into account in addition to “basic” ones.
Food insecure households dedicated a larger share of their food expenditures to potatoes (19% for the severely food insecure and 15% for the moderately, versus 12% for the food secure), and also tended to spend more in \textit{relative terms} for oil and sugar and less for animal products. These expenditure profiles are consistent with the food consumption patterns observed in the food security groups. They reflect efforts by the food insecure to protect the calorie intake to the detriment of dietary diversity and quality.

\textbf{Difference between towns in food expenditures}

The different amounts of food expenditures across towns reflect both the variations of market food prices and income levels/effective demand of households (see Error! Reference source not found.). As for income sources, it is not possible to determine a consistent pattern that would enable to characterize the towns according to their size, location, or other such parameter.

\begin{center}
Box 3 – Food expenditures across towns
\end{center}

Households in \textbf{Dushanbe} tended to spend more on food per capita than in other towns (21 somoni/capita/week, ranging from 15 for the severely food insecure to 22 for the food secure).

Households in \textbf{Khujand} spent less (9 somoni/capita/week on average, ranging from 7 for the severely food insecure to 16 for the food secure); the proportion of food expenditures was particularly high (75%), with bread representing up to 41% of total food expenditures for the severely food insecure while animal products represented 2-6%.

Food expenditures in \textbf{Taboshar} were also low (11 somoni/capita/week, ranging from 7 for the severely food insecure to 14 for the food secure), but the share of food expenditures was lower than in other towns (54%), for unclear reasons (nothing exceptional regarding non-food expenditures).

Per capita weekly food expenditures in \textbf{Kulyab} were similar to the average for the sampled towns but rather on the low side (16, ranging from 11 for the severely food insecure to 16 for the food secure).

Households in \textbf{Kurgan-Tuybe} spent as per the average sample, but slightly more than in Kulyab (18, ranging from 14 for the severely food insecure to 17 for the food secure); the share of food expenditures tended to be lower (56%); bread represented up to 44% of food expenditures for the food insecure.

Food expenditures in \textbf{Sarband} were average (13 somoni/capita/week, ranging from 11 for the severely food insecure to 18 for the food secure);

\textbf{Households in Khorog} tended to spend more on average (22 somoni/capita/week), but per capita amounts were low for the food insecure (7 for the severely and 11 for the moderately food insecure, versus 29 for the food secure).

\textbf{Non-food expenditures}

Non-food expenditures represented on average 38% of total expenditures. They were distributed at 22% for health, 16% energy (including heating, cooking and lighting), 13% education, 12% transportation, 11% clothing/shoes, 6% debt reimbursement, 5% ceremonies, 5% water and 3% housing.

The low housing expenditures are explained by the fact that the majority of households are owners of their flat or house. However, for those who do pay a rent, the average value was quite high at 114 somoni/month.

About $\frac{3}{4}$th of the households used electricity for cooking, while 37% used it for heating. Other sources of energy for cooking were gas (19% of households) and wood (6%). For heating, wood (32% of households), animal dung (15%) and coal (13%) were used. Compared to food secure households, the food insecure tended to use more gas and less electricity for cooking, while for heating they used more often coal and animal dung and less often wood.

\textbf{Severely food insecure households dedicated a slightly larger share of their non-food expenditures to water} (9% versus 3-4% for the other households) and education (14% versus 11% for the food secure), and a lower share to clothing/shoes (6% versus 14% for the food secure).
There were some variations between towns, likely linked to the state of existing urban services:

- transportation expenditures tended to represent a higher share of non-food expenditures in Dushanbe (22%) than in other towns;
- the share of water expenditures was relatively higher in Khujand (17%);
- health expenditures represented a larger share in Sarband (32%).

**Changes in expenditures compared to 12 months ago**

The vast majority (more than 94%) of households reported an increase of their food and energy expenditures compared to one year ago. A high proportion (more than 70%) also reported increased health, transportation and housing-related expenditures. Changes in education-related expenditures were less frequently mentioned (51% of the households). Generally speaking, higher health expenditures were more an issue for food insecure households, while higher transportation expenditures were more an issue for food secure households.

Again some differences appeared between towns, with no clear pattern of geographical or structural characteristics (see Box 4).

**Box 4 – Differences in increase of non-food expenditures between towns**

- Increased transportation expenditures were frequently mentioned in Dushanbe (95% of households) but increases of health and education expenditures were less frequently mentioned than in the other towns;
- Higher housing and transportation expenditures were frequently reported in Khujand and Taboshar compared to other towns;
- Increased education and housing expenditures were often reported in Kulyab and Khorog but increased transportation expenditures less frequently than in other towns;
- Increased health and education expenditures were frequently mentioned in Sarband but higher housing expenditures less often than elsewhere.

**Debts**

About 28% of households were indebted at the time of the survey, a proportion similar to the one observed in rural areas. Moderately food insecure households were more likely to be indebted...
than the others, may be in relation to the larger number of migrants that were issued from this group and the need for credit to purchase their ticket.

Some 3/4th of the households had contracted new debts or credit in the previous 6 months. For 38% of households, the main reason for new debts/credit was to buy food. The next reasons mentioned were coverage of health expenditures (16%), investment/supplies for trade/business (12%), ticket for migrants (10%), maintenance of the house (6%) and ceremonies (6%). **Food insecure households were much more likely to have incurred debts in order to buy food** (63% of the severely food insecure and 51% of the moderately, versus 20% of the food secure).

Debt as a response to the current food and economic difficulties was regularly mentioned in Focus Group discussions, although they tended to associate it to large families and to those sending migrants abroad.

The main sources of credit were relatives (34% of borrowing households) and banks/formal finance institutions (34%), followed by traders/shop-keepers (14%), money-lenders (12%) and friends (5%). A higher proportion of severely food insecure households were indebted to traders/shop-keepers (38%), highlighting the **importance of the latter to assist the most insecure to obtain their food**. Moderately food insecure households were more frequently indebted to relatives (42%), possibly indicating a more reliable network of support compared to the severely food insecure.

About 1/4th of the indebted households felt able to reimburse in the next 3 months, and another 1/4th was able to reimburse in 4-6 months.

The proportion of households indebted differed between towns, reflecting the various proportions of food insecure people in each one as well as other characteristics such as the opportunities for, and engagement in petty trade/business activities. For example, the profile of indebtedness was similar in Kurgan-Tyube and Khorog and much linked to these activities (see Box 5).

**Box 5 – Differences of households’ indebtedness between towns**

**Dushanbe:** Low proportion of households indebted (16%) compared to other towns. The main reason for new debts/credit was to cover health expenditures (38%), followed by maintenance of the house (23%) and ceremonies (15%). Only 8% were indebted to buy food. More than half of the credit providers were relatives (54%). A relatively low proportion of households felt able to reimburse in the next 6 months (37%).

**Khujand:** Surprisingly, the food secure households tended to be more indebted than the food insecure, even though the main reason for debts/credit was to buy food (37% of households).
Box 5 – Differences of households’ indebtedness between towns

Taboshar: Compared to other towns, a relatively high proportion of households were indebted to pay for the ticket of migrants (20%). More than half of the credit providers were relatives (53%), and a rather high proportion also obtained credit from traders/shop-keepers. The majority felt able to reimburse in the next 3 months, possibly reflecting a rather low level of debt.

Kulyab: A high proportion of households contracted new debts in the previous 6 months (91%). The most frequent reason was to purchase food (30%), followed by trade/business (20%) and ticket for migrants (15%).

Kurgan-Tyube: A low proportion of households contracted new debts in the previous 6 months (39%). Investment/supplies for trade/business was a frequent reason (27%). Most borrowers obtained credit from banks or formal institutions. Less than 1/3\textsuperscript{rd} felt able to reimburse in the next 6 months.

Sarband: More than half of the households were indebted (59%), particularly the food insecure (67%), and most took debts in the previous 6 months (88%). About 2/3rds were indebted to buy food. A high proportion (1/4\textsuperscript{th}) obtained credit from money lenders, compared to other towns.

Khorog: The food secure tended to be more indebted than the food insecure. Few were indebted to buy food while half were indebted for trade/business-related reasons. The majority obtained credit from banks or formal institutions. Only 36% felt able to reimburse in the next 6 months.

5.2.6 Social assets: support structures, assistance programmes

Urban households support networks

Almost half of the households indicated that they could receive food from relatives in case of need. A positive finding was that a higher proportion of food insecure households (between 57% and 59%) could benefit from this assistance compared to the food secure (31%), and indeed around half had actually received the assistance in the past 6 months (compared to 1/4\textsuperscript{th} of the food secure).

Food support was also provided by some 20% of the households themselves to their relatives, even though they were themselves food insecure. This tends to reflect quite well developed solidarity mechanisms while it is often expected that they are weak in urban areas. Focus Group discussions also confirmed that people in need were asking support from relatives in order to respond to their difficulties.

The differences between towns reflected in part the various proportions of food insecure households rather than any specific characteristic. As such, lower proportions of households tended to benefit from food assistance from relatives in the cities where there was less food insecure households. Nonetheless, it is worth noting that:

Two thirds of the severely food insecure households in Khujand received food support from their relatives in the previous 6 months (compared to 1/3\textsuperscript{rd} of the other households); the situation was somewhat similar in Sarband;

In Taboshar, 2/3rds of all households, whatever their food security status, had received food support from their relatives;

Solidarity between relatives was apparently low in Kulyab, with only 8% of the severely food insecure able to benefit from it.

Neighbourhood structures

The information obtained from Focus Group discussions was limited and did not enable to ascertain the extent to which formal or informal structures exist at neighborhood level to assist the most vulnerable people. Generally speaking, it seems that such structures do not exist. Rather, some government or NGO programmes were mentioned (see below).
Food and non-food interventions

Focus Group participants reported a few programmes undertaken by the government to rehabilitate water pipes, distribute clothes or provide health support (essentially immunization at health centres). Supply problems and poor targeting were often mentioned. Food aid interventions by NGOs and the Red Cross were reported by some groups.

Key Informants (KIs) in the neighbourhoods were more specific. More than half mentioned projects/activities run by the government or other agencies. The most frequently quoted intervention (by 37% of the KIs) was Food-for-Education (FFE)/school feeding (particularly in Taboshar and Khorog), and free health care/drugs (29%). Very few reported food assistance to vulnerable groups (3%), Cash-for-Work (5%) and micro credit (3%).

The above was broadly in line with the information provided by households themselves. Some 14% of households benefited from government social programmes and 10% from FFE, while virtually none participated to any other kind of programme. Even though the sample of households was limited in each town and not designed to capture programme coverage, it does seem that targeting could be improved. FFE targeting appeared to be slightly better in Taboshar with a tendency for severely food insecure households to benefit more frequently than other households; free food ration distributions in Khorog benefited only severely food insecure households (1/4th of these households).

Government social programmes also tended to reach more frequently the food insecure than the food secure, possibly because they included many pensioners, but this varied between towns. Such programmes were more often mentioned in Khujand (22% of the households, with poor targeting) and Taboshar (half of the households, with poor targeting).

5.3 Coping mechanisms

More than 8 out of 10 households mentioned a lack of money to buy food or cover other essential expenses during the month prior to the survey. Food insecure households were more likely to be in that situation (91%) than food secure households (72%).

As in rural areas, households activated a series of mechanisms to confront their difficulties. The proportions of households who engaged in them were very similar in the urban sample and the rural areas.

During the previous month, the following food-related strategies were used by urban households:

- 81% consumed less preferred but less expensive food;
- 74% limited the portion size at meals, and 68% reduced the number of meals eaten in a day;
- 56% restricted the consumption of adults in order for small children to eat;
- 59% borrowed food in kind and 44% purchased it on credit and incurred debt for it;
- 19% spent entire days without eating.

In addition, savings on other expenditures were made:

- 38% decreased their health expenditures; and
- 7% took their children out of school

Households also struggled to increase their income:

- 29% sought alternative or additional jobs
- 12% sold domestic assets and 1% sold productive assets
- 11% increased the number of migrants for work (this is less than the 33% reported in rural areas).

Food insecurity was associated with more frequent use of strategies likely to have a negative impact on health and nutritional status on the short and medium term:

- up to 40% of the severely food insecure spent entire days without eating and 20% of the moderately food insecure, compared to 7% of the food secure;
between 78% and 86% of the food insecure reduced the number of meals eaten in a day (versus 54% of the food secure);

- between 82% and 88% of the food insecure limited portion sizes at meals (versus 62% of the food secure);

- about half of the food insecure decreased their health expenditures (versus 1/4th of the food secure).

- More frequent use of strategies likely to have a negative impact on livelihoods on the medium-term:
  - more than half of the food insecure incurred debts for food (56-64%) compared to 1/4th of the food secure;
  - 10-12% of the food insecure took their children out of school (compared to 4% of the food secure);
  - 17-19% of the food insecure sold assets (versus 5% of the food secure).

On the other hand, some positive mechanisms were also employed by the food insecure. In particular, they were more likely to have sought alternative or additional jobs to increase their income (34% of them, compared to 23% of the food secure). A higher proportion of moderately food insecure households also increased the number of migrants (19%) than other households (9%).
6 NUTRITIONAL STATUS OF CHILDREN UNDER 5 YEARS OF AGE

6.1 Rates of malnutrition

6.1.1 Background

Nation-wide nutrition surveys have been conducted in Tajikistan since 1999. They are not all comparable due to different sampling criteria and timing of the year corresponding to different seasonal patterns.

Despite difficulties in comparing the surveys general trends can still be recognized. Overall the results suggest a general decline in global chronic malnutrition (GCM). There also seems to be a general decline in the prevalence of global acute malnutrition (GAM) with the exception of 2001 during which time the population is likely to have suffered the worst effects of the severe 1999-2002 drought. Slight increases in GAM seen in the 2005-06 surveys have not been understood properly, but may represent changes in either food security or disease vectors at the specific time of the assessment which was carried out in the spring as opposed to mostly in the fall for earlier surveys.

Age bears a strong relationship to the prevalence of GCM and GAM. Generally, surveys showed that the 6- to 29-month age group had higher rates of acute malnutrition than older children. This situation is likely to be associated with poor infant feeding practices and of course incidence of illness, to which younger children are most susceptible.

In terms of micronutrients, iodine and iron are the main deficiencies affecting the nutritional status of children in Tajikistan. In the last survey of 2006, salt was found to contain 15 ppm or more of iodine in almost half of the households, representing an important progress over the past five years. However a large proportion of the population still does not have sufficient iodine in the diet and Iodine Deficiency Disorders remain a major nutrition concern due to their severe effects on intellectual and physical development. A nation-wide survey conducted in 2003 survey reported iron deficiency as a major cause of anaemia among children 6-59 months.

24 This section is similar to the corresponding one in the rural EFSA report, April/May 2008
25 Global chronic malnutrition (GCM): stunting, measured by the ratio height-for-age (H/A) and the proportion of under-5 children with H/A below -2 Z-scores
26 Global acute malnutrition (GAM): wasting, measured by the ratio weight-for-height (W/H) and the proportion of under-5 children with W/H below -2 Z-scores
27 Multi-Indicator Cluster Survey 2005- Government of Tajikistan
6.1.2 Assessment Results

The assessment results refer only to the 7 towns included in the sample, while the previous national survey conducted in 2005/06 was based on nation-wide urban areas. Comparisons between the two surveys must thus be done with caution. Also, the small number of children under 59 months of age included in the assessment sample (345 valid measurements, 22 to 80 per town) leads to quite wide confidence intervals which preclude differences between towns, and between rural/urban areas, to be significant statistically.

Amongst the 345 children measured, 7.8% were wasted and 20.5% stunted (see Box 6). As per international references at population level, both the wasting and the stunting rates are ‘poor’. These results are not significantly different from the rates of 7.4% and 26.1% respectively obtained in 2005/06 in urban areas a bit sooner in the year, thus showing no improvement in the past 3 years.

The proportion of children acutely malnourished tended to be higher in Sarband and lower in Khorog and Taboshar. Chronic malnutrition tended to be more frequently observed among children in Khorog and Sarband, and lower in Khujand, Dushanbe and Taboshar.

<table>
<thead>
<tr>
<th>June 2008 Urban EFSA – N=345 children</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 7.8% [4.8-10.8] <strong>global acute malnutrition</strong>, including 0.9% [0-2] severe and 6.9% moderate (NHCS reference28)</td>
</tr>
<tr>
<td>→ EFSA April 2008 Rural areas: 4.7% [2.8-6.5], including 0.5% severe (NS)</td>
</tr>
<tr>
<td>→ MICS 2005 Urban areas: 7.4% [5.3-9.5], including 2.4% severe (NS)</td>
</tr>
<tr>
<td>• 20.5% [16.1-24.9] <strong>global chronic malnutrition</strong>, including 7.8% [4.8-10.8] severe and 12.7% moderate (NHCS reference29)</td>
</tr>
<tr>
<td>→ EFSA April 2008 Rural areas: 27.5% [23.5-31.5] rural areas, including 9.4% severe (NS)</td>
</tr>
<tr>
<td>→ MICS 2005 Urban areas: 26.1% [22.5-29.7], including 9.3% severe (NS)</td>
</tr>
<tr>
<td>• 4% mid-upper arm circumference (MUAC) below 12.5 cm, including 1% below 11 cm</td>
</tr>
<tr>
<td>→ EFSA April 2008 Rural areas: 2% below 12.5 cm, including none below 11 cm</td>
</tr>
<tr>
<td>→ MICS 2005 Urban areas: 4.8% below 12.5 cm, including 1.5% below 11 cm</td>
</tr>
</tbody>
</table>

**Nutritional status by town** (Dushanbe: DRD region, Khujand/Taboshar: Sughd region – Kulyab/Kurgan-Tyube/ Sarband: Khatlon region – Khorog: GBAO region)

- **Highest % acute malnutrition** (but differences not statistically significant):
  1. Sarband (N=42): 16.7% [4.2-29.1] global, including 7.1% severe [0-16.1]
  2. Khujand (N=42): 9.5% [0-19.6] global, including 0 severe [0-1.2]
  3. Kulyab (N=80): 8.8% [1-9-15.6] global, including 0 severe [0-0.6]
  4. Kurgan-Tyube (N=59): 8.5% [0.5-16.4], including 0 severe [0-0.8]
  5. Dushanbe (N=45): 6.7% [0-15-1], including 0 severe [0-0.1]
  6. Khorog (N=22): 4.5% [0-15.5], including 0 severe [0-2.3]
  7. Taboshar (N=55): 0 [0-0.9], including 0 severe [0-0.9]

- **Highest % chronic malnutrition** (but differences not statistically significant except Khorog with Sarband and Taboshar, Khorog with Dushanbe, and Kulyab with Taboshar):
  1. Khorog (N=23): 47.8% [25.2-70.4], including 26.1% [6-46.2] severe
  2. Sarband (N= 43): 32.6% [17.4-47.7], including 18.6% [5.8-31.4] severe
  4. Kurgan-Tyube (N=59): 20.3% [9.2-31.5], including 6.8% [0-14] severe
  5. Khujand (N=41): 12.2% [1-23.4], including 2.4% [0-8.4] severe
  6. Dushanbe (N=45): 11.1% [0.8-21.4], including 2.2% [0-7.6] severe
  7. Taboshar (N=55): 7.3% [0-15], including 1.8% [0-6.3] severe

- **Highest % MUAC < 12.5 cm**:
  1. Khorog (N=22): 8% [4-20], including 4% < 11 cm
  2. Taboshar (N=50): 7% [0-15], including 4% < 11 cm
  3. Dushanbe (N=43): 4% [2-11], including 0 < 11 cm
  4. Kulyab (N=77): 3% [1-6], including 1% < 11 cm
  5. Kurgan-Tyube (N= 57): 3% [1-8], including 0 < 11 cm
  6. Sarband (N= 42): 2% [2-7], including 0 < 11 cm
  7. Khujand (N= 43): 0 < 12.5 cm

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28 Global acute malnutrition using new WHO Growth Standards: 8.2% [5.1-11.2], including 2.3% [0.6-4.1] severe
29 Global chronic malnutrition using new WHO Growth Standards: 24.9% [20.2-29.6], including 10.1% [6.8-13.4] severe
6.2 Factors associated with child malnutrition

None of the classical factors potentially related to child malnutrition, including household food consumption and food security, child health status, child feeding practices, and type of water source, was statistically associated with malnutrition in the urban sample. The lack of statistical association is largely explained by the small sample size and the fact that a combination of factors, rather than a single one, is likely to affect children’s nutritional status in the urban areas assessed.

6.2.1 Household food consumption and food security

The proportions of children wasted or stunted did not differ between food insecure and food secure households, or between households having ‘poor’, ‘borderline’ and ‘acceptable’ food consumption patterns. While this is in part due to the small numbers in each group, it can also reflect the widespread practice of restriction of adults’ consumption in order to maintain children’s food intake.

6.2.2 Child feeding practices

The very low number of children in relevant age categories limits the analysis of child feeding practices and results must be taken with caution. However, results confirm the inadequate complementary feeding practices with insufficient frequency and diversity of foods fed to young children which had been observed in rural areas, even though they tended to be slightly better in urban areas.

Only 13% of the children aged 6-23.9 months (n=124) had received less than 4 different food groups the day before:

- of those still breastfed (n=69), only 36% had received other foods at least 3 times the day before, and only 7% received the minimum dietary diversity AND minimum meal frequency;
- of those non breastfed (n=68), 41% had received foods at least 4 times, but only 1% received at least 2 milk feedings AND the minimum dietary diversity AND the minimum meal frequency.

Furthermore, children under-5 were consuming on average less than 3 meals a day. The situation was worse in food insecure households, with children eating 2.4 meals a day only. Up to 22% of the children in severely food insecure households had eaten only once the day before.

Even in the absence of statistical significance, it is clear that the poor pattern of child feeding is a factor contributing to the relatively high rates of child malnutrition in the urban sample.

6.2.3 Water

The vast majority of households (91%) used a safe source of water\textsuperscript{30} for drinking (compared to only about 60% of the rural households). For this reason, no relationship was found with child malnutrition, given the small number of children sampled.

Problems of irregular/unsafe water were reported by 16% of households but only 3% ranked it as the first priority. Water was an issue essentially for households in Taboshar (mentioned by 38%, including 11% for which it was the first priority).

Key Informants (KIs) and Focus Group (FG) participants were much more likely to point out water shortages, perhaps because they had a broader view than the sampled households and were more reminiscent of the difficulties faced during the winter:

- 40% of the KIs listed water shortages amongst the main difficulties of the inhabitants, including 16% which ranked it as the first one and 24% as the second one; Key Informants in Taboshar, Kulyab and Sarband tended to report it more often than in the other towns;
- about 30% of the FGs in Dushanbe and Taboshar, and about 40% in Kulyab and Sarband mentioned water supply problems.

\textsuperscript{30} Safe sources of water were defined as: piped water, public tape, tube well/borehole, protected well, protected spring water, rain water, bottle water. Unsafe sources of water: river, unprotected well, spring water, canal.
6.2.4 Health status

Child sickness in the previous 2 weeks

Half of the under-5 children had been sick during the 2 weeks prior to the survey (a large proportion). Of these children, 37% had fever, 17% difficulties breathing, 33% diarrhoea and 2% measles. Compared to the rural EFSA, the proportion of sick urban children is much higher (31% in rural), fever seems less frequent (59% rural) and diarrhoea more frequent (14% rural).

![Figure 17 – Main reported diseases for children under 59 months]

There were some differences across towns although the results must be taken with caution given the small number of children:

- fever tended to be more often reported in Dushanbe and Kulyab;
- respiratory infections were more frequently mentioned in Kurgan-Tyube;

Even though no relationship could be demonstrated with the nutritional status, the high proportion of children sick, at a time when the weather was clement, is a cause for concern and a likely contributor to poor nutritional status when combined with other factors such as the poor feeding practices mentioned earlier.

Use of health services in case of child sickness, ORS and vitamin A

Slightly more than half of the sick children had been taken to a health centre. The main reasons for not bringing the child for treatment were the mildness of the disease (40%) or the lack of money (41%) (see also Figure 18). Indeed, sick children in severely food insecure households were less likely to be brought to a health centre for treatment, compared to sick children in other households.

Only 38% of the children who had diarrhoea in the previous 2 weeks received Oral Re-hydration salts (less than in rural areas: 54%), which they essentially got from health services.

About 73% of children had received vitamin A in the previous 6 months, without differences between household food security groups. The coverage seems higher than in rural areas (60%), but a lower proportion of urban children in food insecure households benefited from vitamin A (68%) than children in food secure households (79%).
Importance of health amongst the difficulties faced

Some 42% of the households mentioned sickness and related health expenditures amongst the main problems they had to face in the previous 6 months. It was ranked **number one by 19% of the households**. There were some variations across towns in the proportion of households identifying sickness/health expenditures as a problem. In particular, it was:

- less of an issue in Dushanbe (26%) and Kulyab (18%);
- more frequently mentioned in **Khujand** (59%, including 31% who ranked it first) **Taboshar** (56%, including 41% who ranked it first), and **Kurgan-Tuybe** (58%, including 26% who ranked it first).

Only some Focus Group participants – in Taboshar, Kulyab, Sarband and Khorog - mentioned health as one of the prominent problems of the inhabitants. The main reasons identified for deterioration in the health situation were a combination of inadequate health services, malnutrition due to lack of food, and harsh winter.

Very few of the Key Informants identified health as a problem for the inhabitants. The difference with households and FGs is not surprising as KIs probably take a larger perspective view and are less sensitive to shocks and problems that affect individual households.

Overall, access to, and use of health services was much less affected by the cold winter than in rural areas. This reflects the much easier physical access to these centres, as well as the lesser effects of the electricity cuts on heating, which had forced many rural people to share habitations and thus contributed to the spread of infections. However, as noted, most Key Informants and Focus Group participants felt that diseases had increased in the past 6 months compared to ‘usually’ at this period of the year. The majority of Key Informants also indicated that **lack of financial means was hindering the use of health services as a result of income being prioritized for food**.

### 6.3 Access to nutrition programmes

- Therapeutic feeding programmes are implemented at a very small scale in Kulyab town. Caritas Switzerland has been working for 10 years with urban poor and pension receivers i.e. the single elderly, which lost their relatives either after the civil war (mainly ethnic minorities) or now due to recent labour migration (ethnic Tajiks and Uzbeks), disabled adults
7 MAIN PROBLEMS & PRIORITIES OF HOUSEHOLDS AND KEY INFORMANTS

7.1 Main problems

7.1.1 Main problems and priority problem
As in rural areas, virtually all households, Focus Group participants and Key Informants reported that they had more difficulties this year than last year. The rise in food prices was mentioned as a problem by more than 80% of the households and Key Informants. Some Focus Group participants mentioned it less often, but it then emerged as the underlying cause of other problems such as increased diseases (malnutrition for lack of proper food, decreased health expenditures as income is prioritised for food).

The other problems mentioned by households were electricity/gas cuts (50%), sickness and related health expenditures (42%), unemployment (30%), irregular/unsafe water supply (16%), debt reimbursement (14%) and high fuel and transportation costs (12%). The frequencies were slightly different from the perspective of the Key Informants, reflecting their somewhat lesser sensitivity to power supplies and health issues. Some 40% of the KIs mentioned unemployment and water shortages as problems for inhabitants.

When requested to prioritize their difficulties, high food prices came first for 42% of the households and 72% of the Key Informants. Other difficulties were much less frequently ranked number one by households: sickness/health expenditures (19%), unemployment (14%), and electricity/gas cuts (9%). Similarly, Key Informants were much less likely to rank other difficulties than price rise as number one. Compared to the food secure, food insecure households were more likely to mention sickness/health expenditures as a problem (about half of the households, compared to one third of the food secure) as well as unemployment.

7.1.2 Differences between towns in the perception of problems
The proportion of households indicating different types of problems and ranking them as number one, differed between towns. The variations are likely to reflect the economic context (different levels of price increases and losses of purchasing power), quality of infrastructures (water, electricity, health) and the social context (demographic profile). They are summarized in Figure 19.

Figure 19 – Main problems faced by households in the past six months (January to June)

<table>
<thead>
<tr>
<th>Difficulty</th>
<th>Dushanbe</th>
<th>Khujand</th>
<th>Taboshar</th>
<th>Kulyab</th>
<th>Kurgan-Tuyo</th>
<th>Sarban</th>
<th>Khorg</th>
<th>Note: all difficulties cited combined (1st, 2nd and 3rd). Difficulties representing less than 5% of all responses were excluded from figure.</th>
</tr>
</thead>
</table>
7.2 Priorities

Key Informants and Focus Group participants were invited to rank their main priorities for interventions to alleviate their difficulties.

Almost half of the Key Informants ranked employment as the first priority, followed by the improvement of water supply (30%). Few prioritized the improvement of power supply (10%) and education services (3%). However, better power supply was the most frequent second priority (38%), followed by employment (22%). Water, health services and action to mitigate the price increase were identified as second priorities by 7% to 12% of the Key informants. The prioritization of interventions by KIs was rather homogeneous between towns. In Taboshar, Kulyab and Sarband, water was more often ranked as a first priority.

The ranking of priorities by Focus Group participants differed quite a lot between towns (see Table 3) but employment was ranked first or second priority in 5 out of 7 of the cities. Food assistance was ranked as number one priority in at least one of the town with a high proportion of food insecure households (Sarband) and priority number two in another town with a high proportion of food insecure (Khujand).

<table>
<thead>
<tr>
<th>Focus Groups</th>
<th>First priority</th>
<th>Second priority</th>
<th>Third priority</th>
<th>Fourth priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dushanbe</td>
<td>Water supply</td>
<td>Roads/sidewalks</td>
<td>Employment</td>
<td>Power supply</td>
</tr>
<tr>
<td>Khujand</td>
<td>Employment</td>
<td>Food</td>
<td>Social assistance</td>
<td>Salary increase</td>
</tr>
<tr>
<td>Taboshar</td>
<td>Water supply</td>
<td>Food price control</td>
<td>Food</td>
<td>Power supply/health</td>
</tr>
<tr>
<td>Kulyab</td>
<td>Employment</td>
<td>Health/water</td>
<td>Infrastructures</td>
<td>-</td>
</tr>
<tr>
<td>Kurgan-Tyube</td>
<td>Salary/pension increase</td>
<td>Employment</td>
<td>Power supply</td>
<td>Price control</td>
</tr>
<tr>
<td>Sarband</td>
<td>Food</td>
<td>Power &amp; water supplies</td>
<td>Employment</td>
<td>Price control</td>
</tr>
<tr>
<td>Khorog</td>
<td>Food for vulnerable groups</td>
<td>Employment</td>
<td>Infrastructures</td>
<td>Price control</td>
</tr>
</tbody>
</table>

Table 3 – Main priorities according to focus group interviews
8 CONCLUSIONS ON THE SEVERITY OF THE NUTRITION AND FOOD SECURITY SITUATION

8.1 Summary of the situation analysis of household food security and nutrition
1. The most significant shock having affected households (as well as many local shop-keepers and traders) in the 7 towns was the food prices rise. Households’ purchasing power decreased, particularly for those who did not benefit from adjustments of their wages - such as day-time casual labourers – or their pensions, and those could not mobilise more remittances from migrants. Households with only one income-earning member, of which many are women-headed, faced more difficulties than others.

2. Government employees and other ‘regular’ workers whose salaries were increased were better able to mitigate the impact. The self-employed seemed quite able to intensify their activities and thus augment their revenues and therefore withstand the effect of the higher prices. Some petty traders actually benefited from price increases but not all of them, as many reported a significant decrease of households’ demand.

3. The patterns of food expenditures and food consumption of these households reflect the economic impact of the high prices on the above population groups. Households have significantly reduced their purchase and consumption of animal products as well as other nutrient-rich food items such as fruits, vegetables and pulses. Yet, food expenditures represent 62% of their total expenditures, leaving little scope for increasing the amount of income that can be allocated to food purchases.

4. Non-food expenditures have also been affected by the rise of food prices, as households must prioritize the allocation of their resources. Health expenditures have been cut down and in some cases children have been taken out of school. Debts have been incurred to purchase food and to pay for the ticket of new migrants expected to provide remittances in future.

5. To cope with their economic difficulties, the most severely affected (pensioners, day-time/casual labourers, and particularly those amongst them who are women-headed) have resorted to a much higher degree than other groups to harmful coping strategies likely to impact negatively their health, nutritional status and livelihoods, including spending days without eating, reducing amounts consumed and dietary diversity, foregoing health treatment and incurring debts. On the other hand, about 1/3rd of the food insecure also tried to increase their income by seeking additional or alternative jobs and by sending migrants abroad.

6. Also on the positive side, solidarity mechanisms were more widespread than could be expected. More than half of the food insecure benefited from food assistance from their relatives, and many of the less severely affected could rely on their relatives to obtain some credit. The limits of this assistance are nonetheless clear, given the unsatisfactory food consumption pattern still reported by the households benefiting from such support.

7. The proportions of children acutely and chronically malnourished reflect a ‘poor’ situation according to international standards. The combination of inadequate complementary feeding practices (low number of meals and dietary diversity) and frequent sicknesses, possibly worsened in the context of households’ food and economic insecurity, are likely contributing factors to these high levels of malnutrition.

8.2 Groups most affected by food insecurity and at risk for their lives and livelihoods

8.2.1 Summary characteristics of food insecure households
The severely food insecure households typically consume a poor diet consisting of bread, pasta and/or potatoes on a daily basis, very rarely complemented with vegetables. Oil is added irregularly, and sugar is consumed 2-3 times in a week. The number of meals of both adults and children is no
more than two in a day. Their average food expenditures on a weekly basis is below the cost of a very basic food basket containing only wheat, oil and sugar. Health is the main post of non-food expenditures and a higher concern for these households than other groups.

Some 60% of the severely food insecure households have only 1 member able to earn an income. Almost 30% depend on pensions/allowances as their main income source, 21% depend on remittances, 21% rely on day time/casual work, 20% receive government salaries, and the rest is typically combining two of these various sources. These sources of income tend to provide low, irregular and uncertain earnings.

Severely food insecure households also own very few assets and very few (8%) have any cash or other savings. Most of them do not have access to a home garden and for the few who have (15%), the average acreage cultivated is small (0.02 ha). As a result the degree of self-sufficiency in vegetables or fruits does not go beyond 1 month. Only 8% of these households own animals, essentially sheep/goats and a few poultry.

Almost half of the severely food insecure households are female-headed households, twice as much as the food secure households. The severely food insecure households are also smaller (4.4 members) and have a higher dependency ratio

Moderately food insecure households have a slightly better diet even though still unsatisfactory from a nutritional point of view. They consume bread, pasta or potatoes, with oil, and sugar daily or almost daily, but vegetables only 3-4 times a week, fruits 2 times and very seldom pulses or animal products. Combined with a low average of 2 meals a day for adults and children, this diet entails risk of minerals and vitamin deficiencies on the short or medium term. The average food expenditures are marginally higher than the cost of a very basic and unbalanced food basket (13 somoni/capita/week, i.e. about US$0.54 per day).

About 64% of the moderately food insecure households have only 1 member earning an income and rely on just one source of income. Almost 40% receive government salaries, 32% depend on remittances, 10% rely on day time/casual work and the rest is engaged in petty trade, self-employment or combination of activities.

Slightly more than half of the moderately food insecure households possess more than 2 domestic equipments and half do not own any productive assets. Only 13% have cash or other savings. Similarly as the severely food insecure, very few have access to a home garden (17%) and the acreage is small (0.022 ha). However, slightly more than half of them manage to secure 1 to 3 months of self-sufficiency in fruits, vegetables and/or potatoes (yet, they represent only 9% of the whole moderately food insecure households). About 15% of the moderately food insecure households raise animals (mostly sheep/goats and poultry).

About 1/3rd of the moderately food insecure are headed by a woman.

The food secure households consume a more varied diet and more frequent meals, and are able to incur higher food expenditures (on average 20 somoni/capita/week – US$0.83/day). Their asset base is also larger. This reflects a higher number of income-earning members (2 for almost half of these households) and income sources. Although apparently similar in nature, the positions occupied and levels of income obtained are likely to explain their better economic situation. Almost 30% of the food secure households rely essentially on Government salaries and 20% on remittances. Self-employment and petty trading are relatively frequent (18% and 20% respectively).

Almost 3 out of 10 food secure households has access to a home garden (twice as many as the other households) and they cultivate a larger acreage (0.032 ha). More than 70% of them are self-sufficient in fruits/vegetables and/or potatoes for 1-3 months. Some 26% raise animals, and they are more likely to own cattle than the food insecure.

8.2.2 Distinction between chronic and transitory food insecurity

As in rural areas, the separation of households who are transitory food insecure as a result of food price increases from households who are food insecure on a more permanent basis (chronically) is

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31 Dependency ratio DR: \[\text{number of members < 15 years + number of members > 59 years} / \text{number of members 15-59 years}\]

- Low DR: \(\leq 2\)
- High DR: \(> 2\)
difficult. **The structural characteristics of the severely food insecure households** put them in the category of the **chronically food insecure**: women-headed, small family size, lack of access to gardens and animals, dependence on pensions or unskilled, irregular labour. While social assistance and interventions on the longer term are warranted, the severity of their situation also requires immediate action to restore a minimum level of food consumption and prevent a deterioration of the health and nutritional status.

Most of the moderately food insecure also present structural factors of food insecurity and the food price rise is likely to have worsened their situation rather than created it. However, part of this group seemed better able to mobilise networks of relatives for support (particularly credit) and to send migrants abroad with the expectation of receiving remittances. In the absence of better basis, it can be assumed that **almost 20% of the moderately food insecure** will have better chances to restore an adequate food and economic situation in future. This group would represent the “**transitory** food insecure”, i.e. those “newly” food insecure as a result of the food price rise.

In sum, amongst the 37% food insecure households in urban areas, the **proportion of chronically food insecure can be estimated at 33%** (including all of the 15% severely food insecure and 80% of the 22% moderately food insecure), while **only 4% would be transitory food insecure**.

**8.2.3 Main factors associated with food insecurity and risks for lives and livelihoods**

- As noted, food insecurity among urban households is the result of mainly structural factors. Box 8 lists the main ones and shows (in a rather simplistic way) how they contribute to chronic and transitory, severe and moderate, food insecurity. These factors should guide response options (see Section 9) by:
  - prioritising short-term interventions to address conjectural factors that contribute to severe food insecurity and acute malnutrition, and
  - launching in parallel medium and longer-term interventions addressing structural factors notably in the economic, social, health and education sectors.

<table>
<thead>
<tr>
<th>Structural factors</th>
<th>Conjectural factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment</td>
<td>High food prices</td>
</tr>
<tr>
<td>Low salaries</td>
<td>High fuel prices for those engaged in activities involving transportation (traders, taxi-drives)</td>
</tr>
<tr>
<td>Low pensions/allowances</td>
<td>Infectious diseases</td>
</tr>
<tr>
<td>Insufficient personnel and supplies in health services</td>
<td></td>
</tr>
<tr>
<td>Inadequate school infrastructures (heating)</td>
<td></td>
</tr>
<tr>
<td>Insufficient knowledge/awareness of young children feeding practices</td>
<td></td>
</tr>
</tbody>
</table>

**Effects on nutrition and food security:**

<table>
<thead>
<tr>
<th>Chronic malnutrition</th>
<th>Acute malnutrition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic food insecurity (moderate and severe)</td>
<td>Transitory food insecurity (moderate)</td>
</tr>
<tr>
<td>Chronic food insecurity (severe, with alarmingly poor food consumption)</td>
<td>Chronic food insecurity (severe)</td>
</tr>
</tbody>
</table>

**8.2.4 Tentative targeting criteria to identify food insecure households**

Based on the above analysis, some criteria can be proposed to identify food insecure households in urban areas who may be targeted for interventions.

<table>
<thead>
<tr>
<th>Severe food insecure (chronic)</th>
<th>Moderately food insecure (chronic)</th>
<th>Moderately food secure (transitory)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elderly/pensioner living alone</td>
<td>Families hosting elderly/pensioners or other dependent members but able to receive some support (remittances, relatives nearby)</td>
<td>Families relying exclusively on moderate amounts of remittances</td>
</tr>
<tr>
<td>and not receiving significant and reliable support (remittances)</td>
<td>- or no very small home garden</td>
<td>Families whose only income-earner member is a government or other salaried worker at medium level of the salary scale</td>
</tr>
<tr>
<td>Large families with only one able-working member and not receiving significant and reliable support (remittances)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women-headed households with</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4 – Targeting criteria to identify food insecure households in urban areas

<table>
<thead>
<tr>
<th>Severely food insecure (chronic)</th>
<th>Moderately food insecure (chronic)</th>
<th>Moderately food secure (transitory)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only one able-working member and not receiving significant and reliable support (remittances)</td>
<td>- Families whose only income-earner member is a day-time casual worker</td>
<td>- Families whose main income earnings come from very small petty trade</td>
</tr>
<tr>
<td>Families whose only income-earner member is a day-time casual worker</td>
<td>- No animals or only poultry</td>
<td>- Additional screening: Same as the chronically moderately food insecure</td>
</tr>
<tr>
<td>- Additional screening:</td>
<td>- Limited assets and no satellite dish, no vehicles</td>
<td></td>
</tr>
<tr>
<td>- No home garden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- No animals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- No fridge and oven</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2.5 Estimated numbers of food insecure people in urban areas

As described in previous Sections, it was not possible to distinguish a pattern between towns that would enable to group them according to given characteristics and thus extrapolate the results to other towns presenting the same characteristics (size, geographical location, economic opportunities, type of population etc.). The specificities of each town reflect the unique combination of infrastructures, economic opportunities and socio-demographic profile of the population, and result in different proportions of severely and moderately food insecure households gives an illustration of the diversity of circumstances in the various towns.

Box 8 – Main characteristics of towns with the highest proportion of food insecure households

Khujand (Sughd region):
- High proportion of female-headed households (40%)
- Low average household size (4.9 members)
- Low proportion of households relying on remittances (6%) and low proportion of households with migrants (21%)
- Low levels of food expenditures (on average 9 somoni/capita/week) and high proportion of expenditures dedicated to food (75%)
- Low proportion of households having access to a home garden (4%) or raising animals (2%) – This is also related to a high proportion of households living in multi-storey buildings (60%)
- High proportion of households mentioning illness as a difficulty (59%) – High proportion of Key Informants mentioning high food prices (all of them)
- “Higher” acute malnutrition amongst under-5 children (9.5%) but “lower” chronic malnutrition (12.2%) – Differences however not statistically significant with the other towns

Taboshar (Sughd region):
- High proportion of female-headed households (46%)
- Low average household size (4.6 members)
- High proportion of households relying on remittances (60%) and low proportion depending on government salaries
- Low levels of food expenditures (on average 11 somoni/capita/week)
- High proportion of households cultivating a home garden (35%) but low acreage for the food insecure
- High proportion of households raising animals (32%) but only 16% of the severely food insecure
- High proportion of households living in multi-storey buildings (58%)
- Low proportion of households mentioning high food prices as a difficulty (51%), high proportion mentioning electricity/gas cuts (56%) and irregular/shortages of water (38%)
- “Lower” acute malnutrition amongst under-5 children (only 3 children out of 55) and “lower” chronic malnutrition (7.3%) – Differences however not statistically significant with the other towns

Kurgan-Tyube (Khatlon region):
- Slightly lower proportion of expenditures dedicated to food (56%) and larger share of food expenditures for bread (41%)
- High proportion of households with less than 2 domestic assets (24%) and no productive assets (55%)
- Low proportion of households with migrants (20%)
- Low proportion of households having access to a home garden (7%)
- Low proportion of households can receive food support from relatives (26%) and only 23% received such support in the past 6 months
- High proportion of households mentioning illness as a difficulty (58%) – High proportion of Key Informants mentioning high food prices (all of them)
- “Higher” acute malnutrition amongst under-5 children (8.5%), slightly “lower” chronic malnutrition (20.2%)
Box 8 – Main characteristics of towns with the highest proportion of food insecure households

- Differences however not statistically significant with the other towns

Sarband (Khatlon region):
- Relatively high proportion of female-headed households (33%)
- High proportion of households relying on government salaries (36%) or remittances (26%) for their income
- High proportion of households currently actively looking for work (67%)
- High proportion of households indebted (59%)
- High proportion of households with less than 2 domestic assets (35%)
- Low proportion of households cultivating a home garden (8%) or raising animals (8%)
- High proportion of households living in multi-storey buildings (72%)
- High proportion of households mentioning electricity/gas cuts as a difficulty (71%) or debts (31%)
- “Higher” acute malnutrition amongst under-5 children (16.7%) and “higher” chronic malnutrition (32.6%) – Differences however not statistically significant with the other towns

In the absence of objective criteria to extrapolate the results of the sampled towns to others, it was decided to apply the average proportions of food insecure households obtained from the sample, to the other towns that were not included. The estimates for the whole urban areas were then calculated taking into account the different population size of each town. On this basis, 15% of the urban population would be severely food insecure, 22% moderately and 63% would be food secure.

Based on an estimated number of 1.37 million urban people, these figures result in about 200,760 severely food insecure people and 295,360 moderately food insecure, i.e. almost half a million urban food insecure. Of these 437,050 would be chronically food insecure and 59,070 would be transitorily food insecure, representing the added caseload from the price increase.

Table 5 – Estimated numbers of food insecure people by town and total urban

<table>
<thead>
<tr>
<th>Town</th>
<th>Population</th>
<th>% severely food insecure</th>
<th>% moderately food insecure</th>
<th>% food secure</th>
<th># severely food insecure</th>
<th># moderately food insecure</th>
<th># food secure</th>
</tr>
</thead>
<tbody>
<tr>
<td>DrD</td>
<td>Dushanbe</td>
<td>660,900</td>
<td>4</td>
<td>8</td>
<td>88</td>
<td>26,436</td>
<td>52,872</td>
</tr>
<tr>
<td></td>
<td>Vahdat (*)</td>
<td>48,400</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>10,164</td>
<td>16,456</td>
</tr>
<tr>
<td></td>
<td>Tursunzoda (*)</td>
<td>42,500</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>8,925</td>
<td>14,450</td>
</tr>
<tr>
<td></td>
<td>Roghun (*)</td>
<td>9,400</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>1,974</td>
<td>3,196</td>
</tr>
<tr>
<td>GBAO</td>
<td>Khorog</td>
<td>28,800</td>
<td>12</td>
<td>27</td>
<td>61</td>
<td>3,468</td>
<td>7,803</td>
</tr>
<tr>
<td></td>
<td>Khujand</td>
<td>154,700</td>
<td>45</td>
<td>37</td>
<td>18</td>
<td>69,615</td>
<td>57,239</td>
</tr>
<tr>
<td></td>
<td>Isafara (*)</td>
<td>40,000</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>8,400</td>
<td>13,600</td>
</tr>
<tr>
<td></td>
<td>Kairokum (*)</td>
<td>12,400</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>2,604</td>
<td>4,216</td>
</tr>
<tr>
<td></td>
<td>Konibodom (*)</td>
<td>47,000</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>9,870</td>
<td>15,980</td>
</tr>
<tr>
<td></td>
<td>Panjant (*)</td>
<td>35,500</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>7,455</td>
<td>12,070</td>
</tr>
<tr>
<td></td>
<td>Istaravishan (*)</td>
<td>59,200</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>12,432</td>
<td>20,128</td>
</tr>
<tr>
<td></td>
<td>Taboshar</td>
<td>12,500</td>
<td>46</td>
<td>43</td>
<td>11</td>
<td>5,750</td>
<td>5,375</td>
</tr>
<tr>
<td></td>
<td>Chkalov (*)</td>
<td>21,800</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>4,578</td>
<td>7,412</td>
</tr>
<tr>
<td>Khatalon</td>
<td>Kurgan-Tuybe</td>
<td>69,900</td>
<td>17</td>
<td>42</td>
<td>42</td>
<td>11,883</td>
<td>29,358</td>
</tr>
<tr>
<td></td>
<td>Kulyab</td>
<td>91,900</td>
<td>12</td>
<td>22</td>
<td>66</td>
<td>11,028</td>
<td>20,218</td>
</tr>
<tr>
<td></td>
<td>Norak (*)</td>
<td>22,200</td>
<td>21</td>
<td>34</td>
<td>45</td>
<td>4,662</td>
<td>7,548</td>
</tr>
<tr>
<td></td>
<td>Sarband</td>
<td>12,600</td>
<td>12</td>
<td>59</td>
<td>29</td>
<td>1,512</td>
<td>7,434</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,369,800</strong></td>
<td><strong>15%</strong></td>
<td><strong>22%</strong></td>
<td><strong>64%</strong></td>
<td><strong>200,756</strong></td>
<td><strong>295,355</strong></td>
<td><strong>874,388</strong></td>
</tr>
</tbody>
</table>

(*) Proportions of food insecure households estimated to be similar to the average of the 7 towns included in the assessment: 21% severely, 34% moderately, 45% food secure

1 Tajikistan State Committee of Statistics, 1st January 2007
8.3 Location of the food insecure and at risk urban households

Only 7 towns were included in the assessment and no firm conclusion on the prevalence of food insecurity can be done for the non-sampled ones. The highest proportions of severely food insecure households were found in Khujand (45%) and Taboshar (46%) which are both in Sughd region. The highest proportions of moderately food insecure households were in Sarband (59%), Taboshar (43%), Kurgan-Tuybe (42%) and Khujand (37%). As a result, the highest proportions of total food insecure households were in Taboshar (89%), Khujand (82%), Sarband (71%) and Kurgan-Tuybe (58%).

As mentioned, no clear pattern emerged to explain the high food insecurity in these towns, except for the fact that high proportions of households were living in multi-storey buildings and generally few had access to a home garden or were raising animals.
9 SCENARIO AND RESPONSE OPTIONS

9.1 Forecast and scenario for the next 12 months August 2008-July 2009

The forecast for the next 12 month with regard to the economic situation of urban households is similar to the one done for rural households. Most of the food insecurity is structural, related to low incomes, which have been further depressed in real terms by the rising food prices. Incomes of the majority of the food insecure are not expected to increase in the near future, with the exception perhaps of salary and pension levels if a government decision is made to index them to the inflation rates (unlikely). Conversely, food prices are expected to remain high for the whole of next year. As a result, the situation of the majority of the chronically food insecure households is not expected to improve in the next 12 months, in the absence of external assistance.

For the 4% transitory (moderately) food insecure households, the evolution of their situation in the next 12 months depends essentially of the capacity of the additional migrants to send more remittances, or on their ability to intensify the income-earning efforts through additional activities, such as petty trade. However, many of these households will also need to use part of the extra income to reimburse the debts they have incurred in the recent months.

Compared to rural areas, seasonal considerations related to the harvests of wheat and potatoes have much less importance as urban market supplies and prices are more insulated from the agricultural production. The prices of potatoes, fruits and vegetables are expected to decrease for a short time after the harvests (spring, autumn) and this should temporarily help the food insecure households who are dedicating a large share of their expenditures to potatoes and have had to cut down their consumption of fresh items. However, the relief will be short-lived and the diet will remain grossly inadequate in terms of proteins (pulses, animal products), vitamins and minerals.

For households with school-aged children, additional expenditures will need to be made in September. While most of them are eager to maintain regular school attendance, drop-out is expected especially in the families with only one income-earner relying on poorly remunerative occupations (e.g. day-time casual labour, government employee at the lowest scale). Girls who could attend secondary schools seem particularly at risk of not enrolling, in order to decrease school expenditures.

The nutritional status of children seems much influenced by of socio-cultural factors that affect feeding and care practices. However, the arbitrage that households have to make in terms of prioritization of their resources in a context of high food prices, can worsen the situation by forcing them to:

- further decrease the quality of children’s diet,
- spend time searching for, or being engaged into, income-earning activities outside the home, with less time for child care, and
- delay the use of health services until the situation is serious, in order to save on health expenditures.

9.2 Response options in the short- and medium-term

The situation analysis and forecasting indicate that assistance is required to prevent a worsening of food insecurity and malnutrition in the next 12 months, under two main modalities and timelines: short-term/early interventions, and medium-term interventions. The first ones aim at protecting lives and already jeopardized livelihoods, while the second ones aim at protecting and strengthening livelihoods.

9.2.1 Short-term, early interventions

The aim is to mitigate the most negative effects of the high food prices and infections on the health and nutritional status of the affected population, by addressing the immediate factors of severe food insecurity and malnutrition. These factors include: poor diet, inadequate child feeding practices and frequent infectious diseases.

Interventions that can be considered for short-term relief include:
Direct food and/or cash or vouchers distributions to the severely food insecure households (see Section 8.2.4 for targeting). Approximate caseload: about 40,150 households\textsuperscript{33} for 3 to 6 months.

Nutritional assistance targeted to the most vulnerable in the poorest families (young children, chronically sick, pregnant and lactating women): targeted supplementary feeding combined with, or conditional to, communication/sensitization sessions on feeding and care practices. Caseload: about 9,780 under-5 children\textsuperscript{34} for 3 to 6 months.

Distribution of essential drugs to health centres and/or cash or voucher support for the poorest households to purchase drugs and pay for treatment. Caseload: about 40,150 households (one-off or 3 months).

9.2.2 Short- and medium-term interventions

The objective is essentially to protect and strengthen livelihoods of the food insecure. The contributing factors that must be addressed are essentially economic and cover the sectors of social assistance, employment, health, nutrition and education.

Possible interventions include:

- **Safety nets targeted to the chronically food insecure households** who cannot ensure an adequate food access even in normal times: direct food, cash, vouchers or a combination of food and cash distributions. This assistance may be conditional to attendance at school or at health services in some cases and the level may vary according to the severity of food insecurity. Approximate caseload: about 48,980 households\textsuperscript{35}.

- **Increased pensions and allowances** (particularly to match the inflation rates). Approximate caseload: about 13,790 households\textsuperscript{36}.

- **Public works** targeted to the food insecure households with working-able members, using cash, food, or a combination of both for the remuneration of workers. Approximate caseload: 39,642 households\textsuperscript{37}.

- **School feeding**: either within schools, or take-home ration. If targeting is feasible, the approximate caseload would be 56,560 primary school-aged children\textsuperscript{38}.

- **Education support through exemption of school, cash and clothes** distribution to food insecure families with a large number of school-age children. Approximate caseload: 56,560 primary school-aged children.

- **Health support through cash or vouchers for the poorest households and individuals to pay for drugs and treatment** at health facilities. Approximate caseload (chronically food insecure): 87,407 households\textsuperscript{39}.

- **Improve performance of local markets through credit and/or vouchers for fuel and transportation of commodities**, and/or support to create associations that can pool the transport and storage of goods (if this does not exist already).

\textsuperscript{33} Based on an average household size of 5 members and an estimated 200,760 severely food insecure people

\textsuperscript{34} Estimation based on 139,720 urban under-5 children (based on a total number of urban households - assuming 5 members/household- of 273,960, and 51% hosting one under-5 child as per the EFSA statistics) and considering 7% moderate acute malnutrition

\textsuperscript{35} Estimation steps: 1) Excluding 27% of the severely food insecure and 5% of the moderately food insecure who rely on pensions (see 2\textsuperscript{nd} intervention): total remaining is 85,431 (29,310 severe + 56,121 moderate); 2) Considering that 74,207 food insecure households are chronically food insecure (all of the severely = 29,310 households and 80% of the moderately=44,897 households); and 3) Assuming that 66% of these 74,207 food insecure have only one income-earning member and are thus amongst the most vulnerable

\textsuperscript{36} Includes 27% severely food insecure households (10,840) and 5% moderately food insecure households (2,950) relying on pensions for their income

\textsuperscript{37} Considering 34% of the severely food insecure households (13,651) and 44% of the moderately food insecure households (25,991) who reported that at least one member was currently actively looking for work

\textsuperscript{38} Considering that 57% food insecure households host a primary school-aged children, the number of children targeted would be about 56,560 (=22,890 representing 57% of 40,150 severely food insecure households + 33,670 representing 57% of 59,071 moderately food insecure households)

\textsuperscript{39} Chronically food insecure households including 40,150 severely and 47,257 moderately (80% of the total of 59,071 moderately food insecure households)
9.3 **Analysis of response options: Strengths, Weaknesses, Opportunities and Threats**

To help prioritize and eventually recommend interventions among the various options mentioned previously, a SWOT analysis of the main ones is presented below.

### 9.3.1 SWOT analysis of food distributions (targeted food rations)

<table>
<thead>
<tr>
<th><strong>Strengths</strong></th>
<th><strong>Weaknesses</strong></th>
</tr>
</thead>
</table>
| - Enhance nutritional value of the diet consumed by beneficiaries, especially if fortified commodities are included and if distributions coincide with times of shortages of fresh food supplies on local markets  
- Maintain access to food despite higher prices  
- Provide economic transfer (cash saved for other essential needs) and decrease need to sell assets or to migrate | - Potential disincentive to local traders  
- No guarantee that target beneficiaries within the household (e.g. malnourished children, elderly, sick, pregnant and lactating women) benefit from a fair share of the ration  
- Do not address the basic causes of food insecurity |

<table>
<thead>
<tr>
<th><strong>Opportunities</strong></th>
<th><strong>Threats</strong></th>
</tr>
</thead>
</table>
| - WFP has experience in food aid distributions in several areas of the country  
- Food aid respond to priorities of households where high numbers are food insecure;  
- At the time of the assessment, food aid procured and delivered by WFP remained cheaper than the cost of food bought by households directly | - Decreasing resources for food aid generally (not only for WFP and for Tajikistan) |

### 9.3.2 SWOT analysis of supplementary feeding for vulnerable individuals

<table>
<thead>
<tr>
<th><strong>Strengths</strong></th>
<th><strong>Weaknesses</strong></th>
</tr>
</thead>
</table>
| - Directly improves the diet of individuals most at risk for their nutritional status (moderately malnourished children, under-3 children in chronically food insecure households, elderly, chronically sick, pregnant and lactating women)  
- Can use existing infrastructures (health centres) as a support for distributions | - Supplementary rations may be shared with other household members and thus not benefit fully the target individuals  
- As the causes of malnutrition are very much linked to feeding and care practices, supplementary food may have limited nutritional impact if not accompanied by communication/sensitization activities  
- Need resources (staff, time, funds) to target and monitor beneficiaries  
- Sustainability is not ensured as Government health services may not have the capacity and funding to provide regular nutritional support to vulnerable individuals |

<table>
<thead>
<tr>
<th><strong>Opportunities</strong></th>
<th><strong>Threats</strong></th>
</tr>
</thead>
</table>
| - Combines supplementary rations with household food rations for the chronically severely and moderately food insecure households  
- Attracts target individuals to health centres to benefit from other services | - Poor health infrastructures and resources unable to provide services needed by beneficiaries  
- Care-takers lack time to take children or other dependent individuals to health services and/or to attend specific sessions |
### 9.3.3 SWOT analysis of school feeding

<table>
<thead>
<tr>
<th><strong>Strengths</strong></th>
<th><strong>Weaknesses</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Encourages child attendance at school, thus contributing to strengthen future livelihoods</td>
<td>- May attract children from other neighbourhoods and results in overcrowding</td>
</tr>
<tr>
<td>- Provides economic transfer to households (cash saved for other basic needs), provided the ration is of sufficient size and economic value</td>
<td>- Does not reach households whose children are out of school</td>
</tr>
<tr>
<td></td>
<td>- Sustainability is not ensured, as transfer to the Government may not be possible in the near future given the economic and budgetary situation</td>
</tr>
<tr>
<td></td>
<td>- Distributions are suspended during the school holidays season, while food assistance may still be required by the most vulnerable households with school-age children</td>
</tr>
<tr>
<td></td>
<td>- Does not address other causes of poor school attendance such as poor school facilities (e.g. heating, clothing)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Opportunities</strong></th>
<th><strong>Threats</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- WFP has experience in school feeding programmes in several areas of the country</td>
<td>- Poor school infrastructure (cold classrooms in particular) is a strong disincentive for children to attend</td>
</tr>
<tr>
<td>- School feeding is highly appreciated by households and they consistently confirm that it encourages attendance</td>
<td></td>
</tr>
<tr>
<td>- Tajik population has a tradition of being educated and values education for both boys and girls</td>
<td></td>
</tr>
</tbody>
</table>

### 9.3.4 SWOT Analysis for Cash transfers

<table>
<thead>
<tr>
<th><strong>Strengths</strong></th>
<th><strong>Weaknesses</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Enable beneficiaries to decide on their priorities, including food and non-food needs</td>
<td>- Transfers need constant adjustments to keep up with inflation and maintain the same economic value (heavy to administer)</td>
</tr>
<tr>
<td>- Reduce the need for assets depletion, excess out-migration and indebtedness</td>
<td>- Can contribute to higher prices on local markets if traders cannot increase their supplies in a timely manner or adopt speculative behaviours</td>
</tr>
<tr>
<td>- Restore households’ demand for food on local markets, hence encourage local economy</td>
<td>- Traders may over-estimate their capacity to increase supplies</td>
</tr>
<tr>
<td>- May facilitate access to formal credit and bank institutions (opening of bank account, ‘guarantee’)</td>
<td>- Target beneficiaries must establish a bank account</td>
</tr>
<tr>
<td></td>
<td>- Sustainability of transfers to chronically food insecure is not guaranteed given low government financial capacity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Opportunities</strong></th>
<th><strong>Threats</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Can use existing systems for pensions and salary transfers, and possibly be combined with them (e.g. ‘extra’ allowance to the most vulnerable pensioners)</td>
<td>- Implementing partners with experience in cash transfers and Tajikistan difficult to find although some have recently implemented these following the winter crisis</td>
</tr>
<tr>
<td>- Population is literate, thus facilitating communication on, and understanding of the programme</td>
<td>- If transfers are conditional to health and/or school attendance, services may not be able to respond to the demand (infrastructures, supplies, staff)</td>
</tr>
<tr>
<td>- Can be conditional to the use of services such as health centres and schools</td>
<td>- Persistent and large price increases may render the programme less cost-effective than food aid</td>
</tr>
<tr>
<td>- Donors are increasingly interested in non-food responses to crises, particularly cash transfers</td>
<td></td>
</tr>
</tbody>
</table>
### 9.3.5 SWOT Analysis for Vouchers Transfers

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A fixed bundle of commodities (food and/or non-food) or services (e.g. access to health services) is guaranteed in physical or monetary terms (but beneficiaries still have more choices than with a food ration for instance)</td>
<td>• Restrict beneficiaries’ choice to the commodities or services authorized by the voucher</td>
</tr>
<tr>
<td>• Vouchers redemption can be staged along time to coincide with periods of shortages or high prices</td>
<td>• If expressed in monetary terms, must be constantly adjusted to keep up with inflation and maintain the same economic value</td>
</tr>
<tr>
<td>• Traders can programme their supplies and local economy is stimulated</td>
<td>• Can be heavy to administer and monitor</td>
</tr>
<tr>
<td></td>
<td>• A parallel ‘black market’ can appear</td>
</tr>
<tr>
<td></td>
<td>• Can exclude some traders who cannot advance the funds until they redeem the vouchers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Vouchers can be conditional to attendance to services (e.g. health)</td>
<td>• Implementing partners with experience in voucher transfers and Tajikistan difficult to find</td>
</tr>
<tr>
<td>• Population is literate thus facilitating communication on, and understanding of the programme</td>
<td>• If vouchers are conditional to health and/or school attendance, services may not be able to respond to the demand (infrastructures, supplies, staff)</td>
</tr>
<tr>
<td>• Donors are increasingly interested in alternatives to food aid in-kind</td>
<td>• If expressed in monetary terms, large price increased may render the programme less cost-effective than food aid</td>
</tr>
</tbody>
</table>

### 9.3.6 SWOT Analysis for a Combination of Food and Cash/ Voucher Transfers

The table below reflects only the SWOT additional to those already mentioned for separate food or cash/vouchers transfers (described in previous tables).

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Amount of food transferred is protected even if prices increase</td>
<td>• Heavier to programme and administer than transfers of food or cash separately</td>
</tr>
<tr>
<td>• Less food is sold as cash is available for purchase of other commodities and non-food items</td>
<td>• Benefits on food security and livelihoods are more difficult to evaluate as multiple uses are made of the food and cash distributed</td>
</tr>
<tr>
<td>• Combination can be simultaneous (during the same distribution) or sequenced in time (to adjust with periods of high/low prices and high/low market supplies)</td>
<td>• Different household members may control food and cash resources and intra-household issues may arise</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Food insecurity in Tajikistan is more a problem of access than availability, hence economic transfers make sense</td>
<td>• Both food and cash resources need to be mobilized at the same time, in an international context of competition for these resources</td>
</tr>
<tr>
<td>• Donors are increasingly interested in cash transfers and innovative uses of food aid</td>
<td></td>
</tr>
</tbody>
</table>
### 9.3.7 SWOT Analysis for public works using food- and/or cash-for-work programmes

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
</table>
| • Direct economic transfer to households  
  • Enables improvement of infrastructures and preparedness for winter (health centres, schools, water systems), thus addressing some of the underlying causes of food insecurity | • Need for material and technical inputs in addition to food and/or cash  
  • May need heavy administration and inputs costs  
  • Resource limitations require small-scale interventions and thus do not cover many neighbourhoods where poor households live  
  • Households with no or just one able-working member may not be able to participate |

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
</table>
| • Address the high unemployment and under-employment rates and a priority for households  
  • Some of the material and technical expertise may be mobilized locally or from other areas of Tajikistan, thus stimulating the economy  
  • The higher cost of ticket fares and difficulties to send remittances (higher prices also in Russia) may discourage future migrants (thus manpower available) | • Sustainability of employment not ensured, hence the economic situation of participating households remains unchanged once works are completed |
10 RECOMMENDATIONS

Based on the situation analysis, forecasting and response options analysis done in the previous Sections, the following recommendations are made for the next 12 to 24 months. Note that for each one, particular attention should be paid to the ‘weaknesses’ and ‘threats’ identified in order to take appropriate preventive and mitigation measures.

10.1 Immediate interventions (August-October 2008)

Immediate interventions to transfer food and/or cash resources are critical to restore adequate food consumption of the target groups (severely food insecure and malnourished individuals) and thus prevent the deterioration of health and nutritional status on the short-term.

The decrease of potatoes, fruits and vegetable prices on local markets (harvest time) will not last for more than a month or two. If no assistance can be provided, the target households may have no other choice than to get more indebted (if they can) and to decrease again their food consumption. This will weaken their resistance to disease and impair their nutritional status just before the cold season starts with its added burden of opportunistic infections. Families may also opt for not sending their children at school this autumn if they cannot restore a minimum cash flow to afford the clothing and fees.

<table>
<thead>
<tr>
<th>Type of intervention</th>
<th>Target group</th>
<th>Level/content</th>
<th>Duration</th>
</tr>
</thead>
</table>
| Targeted food, vouchers or cash transfers | • Severely food insecure households  
200,760 persons (40,150 households, assuming 5 members per household)  
could be limited to the towns with ≥ 20% severely food insecure if resources and implementation capacities are insufficient | • Half ration or monetary equivalent  
• Include fortified commodities (iron, vitamin A, iodine) | 3 months |
| Supplementary feeding | • Households with acutely moderately malnourished children  
Approximately 9,780 children and households40 (assuming 7% moderate acute malnutrition)  
• Chronically food insecure households hosting other vulnerable members (e.g. affected by tuberculosis or HIV/AIDS)  
Caseload to determine through specific surveys | • Supplementary ration for target individuals | 4 months |
| School feeding | • Chronically food insecure households with primary school-aged children  
56,560 primary school-age children  
Can be limited to towns with ≥ 50% food insecure households if resources and implementation capacities are insufficient | • Ration for school child  
• Half ration for the whole household, unless already included in targeted food aid distributions | Start the programme (2 months beginning of school year) |
| Education package | • Chronically food insecure households with primary school-aged children  
56,560 primary school-age children  
Can be limited to towns with ≥ 50% food insecure households if resources | • School materials  
• Clothing | One-off |

40 Estimation based on 139,720 urban under-5 children (based on a total number of urban households - assuming 5 members/household- of 273,960, and 51% hosting one under-5 child as per the EFSA statistics) and considering 7% moderate acute malnutrition

41 Estimation based on 57% food insecure households hosting a primary school-aged children, (22,890 children representing 57% of 40,150 severely food insecure households + 33,670 children representing 57% of 59,071 moderately food insecure households)
<table>
<thead>
<tr>
<th>Type of intervention</th>
<th>Target group</th>
<th>Level/content</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health centres support</td>
<td>Towns with ≥ 50% food insecure → Health centres with supply problems (based on specific review of these structures)</td>
<td>• Drugs</td>
<td>One-off</td>
</tr>
</tbody>
</table>

### 10.2 Short- and medium-term interventions (November 2008-July 2009)

Most of these interventions are complementary to the above ones and preparations should thus start at the same time so that they come in full gear as soon as the immediate relief support is over.

<table>
<thead>
<tr>
<th>Type of intervention</th>
<th>Target group</th>
<th>Level/content</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety nets through targeted food, cash or voucher transfers</td>
<td>• Chronically food insecure households unlikely to benefit from public works programmes → Up to 48,980 households(^{42}) (privileging those with only one income-earning member and not pensioners)</td>
<td>• Half ration or monetary equivalent per working member per day</td>
<td>Up to 9 months</td>
</tr>
</tbody>
</table>

| Public works through food- or cash-for-work (combined or sequenced) | • Food insecure households with able-working members → Up to 39,640 households\(^{43}\) → Can be limited to towns with ≥ 50% food insecure households if resources and implementation capacities are insufficient | • Full ration or monetary equivalent per working member per day → Priorities: health, school infrastructures → water and power supply systems → roads | Up to 3 months |

| Supplementary feeding | • Households with acutely moderately malnourished children (residual caseload) → Approximately 6,990 children\(^ {44}\) (assuming a decrease in moderate acute malnutrition from 7% to 5%) → Chronically food insecure households hosting other vulnerable members (e.g. affected by tuberculosis or HIV/AIDS, pregnant and lactating women) → Caseload to determine with specific surveys | • Supplementary ration for target individual | 4 months |

| School feeding | • Chronically food insecure households with primary school-aged children → 56,560 primary school-age children → Can be limited to towns with ≥ 50% food insecure households if resources and implementation capacities are insufficient | • Ration for school child → Half ration for the whole household, unless already included in targeted food aid | Continue the programme for the remaining 8 months (school year) |

\(^{42}\) Estimation steps: 1) Excluding 27% of the severely food insecure and 5% of the moderately food insecure who rely on pensions (see 2\(^{nd}\) intervention): total remaining is 85,431 (29,310 severe + 56,121 moderate); 2) Considering that 74,207 food insecure households are chronically food insecure (all of the severely = 29,310 households and 80% of the moderately=44,897 households); and 3) Assuming that 66% of these 74,207 food insecure have only one income-earning member and are thus amongst the most vulnerable.

\(^{43}\) Considering 34% of the severely food insecure households (13,651) and 44% of the moderately food insecure households (25,991) who reported that at least one member was currently actively looking for work.

\(^{44}\) Estimation based on 139,720 urban under-5 children (based on a total number of urban households - assuming 5 members per household- of 273,960, and 51% hosting one under-5 child as per the EFSA statistics) and considering 5% moderate acute malnutrition.
10.3 Monitoring and Evaluation

The nutritional and food security of the urban population needs to be closely monitored to adjust the recommended interventions as appropriate. The food security and nutrition monitoring system envisaged for rural areas should have a component for urban areas, with a more particular focus on food and labour markets. As for rural areas, the system could be set up in two phases:

1. First phase:
   - Collect information on key food and fuel at central and local markets in the various towns (prices), as well as on wages, including changes in offer and demand.
   - The data would be obtained from government services and traders on a weekly or bi-weekly basis. No household survey would be required.

2. Second phase:
   - As soon as feasible, introduce a household component to: (i) corroborate the data collected at market level, and (ii) monitor changes in type and intensity of coping strategies being used by households. The relevance of taking rapid anthropometric data on children (e.g. mid-upper arm circumference) to monitor changes of the nutritional status should also be considered.
   - Periodic household surveys will be necessary, possibly in only some of the towns (privileging those with the highest proportions of food insecure). It would be preferable to select randomly the households across the town (for instance 20 clusters of 5 to 10 households).
   - A two- to three-months periodicity would be required, depending on: (i) resources available, and (ii) the rapidity of price and other economic changes.

Below is a list of priority indicators and correlated information to collect and use for decision-making.

<table>
<thead>
<tr>
<th>Main data/indicator</th>
<th>Complementary information to collect</th>
<th>Sources</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity supply: frequency of cuts, duration</td>
<td>• Attendance to school (e.g. lack heating) • Prevalence of diseases (e.g. in relation to water cuts, heating problems)</td>
<td>• Village leaders • School teachers • Health agents</td>
<td>• Monthly at school or health service level • Each 2 months at household level</td>
</tr>
<tr>
<td>Local market prices of wheat, potato, vegetables, beef meat, chicken meat, milk, fuel</td>
<td>• Traders’ sales (volumes) • Households’ purchases and consumption • Households’ indebtedness • Child malnutrition rates</td>
<td>• Local traders • Households • Health agents</td>
<td>• Preferably weekly or bi-weekly at market level • Monthly at health centre level • Each 2 months at household level</td>
</tr>
<tr>
<td>Wages, salaries and pensions</td>
<td>• Unemployment rates</td>
<td>• Government statistics • Households</td>
<td>• Monthly • Each 2 months at household level</td>
</tr>
<tr>
<td>Out-migration: numbers</td>
<td>• Comparison with previous year at same time • Households’ indebtedness • Households’ income (remittances received)</td>
<td>• Neighbourhood leaders • Households</td>
<td>• Each 2 months</td>
</tr>
</tbody>
</table>
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12 ANNEXES

All annexes listed below are available on a separate CD-Rom and on the following website: www.untj.org/library

Annex 1 – Maps
Map 1 – Sampling of cities
Map 2 – Food security in towns overlapped with rural food security Zones
Map 3 to 6 – Satellite images used for sampling of households in surveyed cities

Annex 2 - Questionnaires English and Tajik
Annex 2a - Questionnaire household - Urban assessment English
Annex 2b - Questionnaire Key Informants - Urban assessment English
Annex 2c - Checklist Traders - Urban assessment English
Annex 2d - Checklist Neighbourhood Discussions - Urban assessment English
Annex 2e - Questionnaire household – Urban assessment Tajik
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Annex 3 - Synthesis of results
Annex 3a - Synthesis by Towns – Households
Annex 3b - Synthesis by Towns-Children & Nutrition
Annex 3c - Synthesis by Towns – Key Informants
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Annex 4 - Analysis results & tables
Tajikistan Urban assessment - Results - all tables