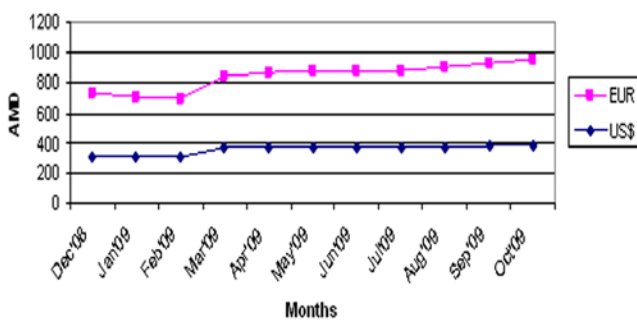


# Effects of the Financial Crisis on Vulnerable Households: Follow-up Study

## ARMENIA

Exchange rates of the dram (AMD) against the US\$ and the EURO



March 2010

Data collected in  
February-March 2010



World Food Programme

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## **EXECUTIVE SUMMARY**

### **Update on the situation at macro-economic level**

- Economic growth in Armenia has been more severely affected by the global economic crisis than originally foreseen. Real GDP growth in 2009 is now projected to decline by -15.6% against -8% anticipated earlier.
- Most of the economic slowdown was due to the collapse of the construction sector which had become a key driver of the economy in the previous years and is highly dependent on remittances sent by migrants abroad. The volume of remittances has sharply decreased as a result of the depressed economy in Russia (-30% in the first 9 months of 2009).
- Exports are estimated to have fallen by 1/4<sup>th</sup> in 2009 compared to 2008. While imports are also projected to fall to a similar degree due to decreased domestic demand, the balance of trade will remain negative, though slightly less than in 2008.
- The national balance revenue/expenditure is anticipated to be negative and much worse than in previous years, as a result of decreased revenues from imports and grants. Foreign Direct Investment in 2009 is expected to reach only about 1/4<sup>th</sup> of the amount received in 2008.
- The rate of inflation remained contained in 2009 (around 3%-4%) and better than in 2008 as food and fuel prices decreased. However, at retail level food prices continued to increase in 2009 and early 2010.
- The poverty rate which had markedly declined thanks to previous years of economic growth and remittances, increased from 26% in the 2<sup>nd</sup> quarter of 2008 to 28% in the 2<sup>nd</sup> quarter of 2009, representing some 90,000 additional poor people in the country. The level of extreme poverty nearly doubled from almost 4% in the 2<sup>nd</sup> quarter of 2008 to about 7% in the 2<sup>nd</sup> quarter of 2009, increasing the number of extremely poor individuals by over 107,000.

### **Update on the situation at household level**

- The decline noted in April 2009 on agricultural food production in areas where households have been directly hit by the crisis (e.g. high concentration of migrants to Russia, remittance receivers and/or workers engaged in construction in Armenia) was confirmed in February 2010. Households have decreased the acreage of land cultivated due to the lack of income to purchase agricultural inputs and pay for services. In some areas, large numbers of animals have been slaughtered in order to generate income from the sale of meat and be able to reimburse loans taken for food in the shops and for unsuccessful out-migration to Russia. This affects directly food availability (and thus food consumption) at household level, as well as incomes from the sales of agricultural produce and future coping capacities.
- Employment opportunities in Russia remain severely depressed and most of those who migrated in 2008 did not migrate in 2009 due to the lack of work or low salaries. Many hesitate to migrate in 2010 due to a high risk of getting further indebted for the ticket and unable to find a job once there.
- Many jobs were lost early in the crisis within Armenia, particularly in construction and manufacturing, even though wage rates and working hours remained stable among those who continued to be employed. In rural areas, additional job losses occurred due to depressed village budget which forced laying down regular employees in the village administration and services (health, education).
- Irregular labour in construction or small trade also declined as demand continued to be low.
- At this stage of the crisis, the main income source of the poor is the benefits and pensions obtained from the government social assistance system. While these transfers are too low to cover essential food and non-food (particularly utilities and clothing for children) requirements, they are the only stable income received, including by those who before could find casual labour or could migrate.
- Households who were already fully dependent on these transfers for their income before

the crisis have seen their situation worsen as their purchasing power has declined due to the continued rise of food prices.

- The planned rise of gas price as from 1<sup>st</sup> April 2010 (by about 37%) is a critical concern for the poor as many are already indebted with payment of their utility bills. In addition, it will entail automatic increases of the price of food (bread first, and other commodities as well which are produced industrially or transported) and cost of transportation.
- The trend noted in April and August 2009 of a deterioration of the diet was confirmed in February 2010. Loss of jobs and remittances and insufficient benefits and pensions compared to the cost of living have led to the virtual elimination of meat in the diet, decreased consumption of dairy products, and heavy reliance on bread, potatoes and cabbages as the staples in the diet.
- While probably meeting the kilocalorie needs on average, this pattern of food consumption is likely to induce micronutrient deficiencies and growth retardation in the youngest age groups (below 2 years). At the same time, it may favour overweight and obesity among the older age groups due to a high concentration of carbohydrates and fats.
- Crisis-affected households obtain most of their food through loans from shop-keepers, as benefits and pensions are too low to cover household needs. When transfers are received they are used to pay back the debt and sometimes the utilities bill, so that new loans for food can be taken in the shops. Overall, the prevalence and depth of indebtedness seem to have increased throughout 2009.
- Health issues are a key concern for the households who cannot afford anymore the payment of drugs or hospital treatment. Inadequately treated infections among young children and other vulnerable individuals (e.g. elderly) and delayed or suspension of treatment of chronic diseases are likely to affect their nutritional status.
- While enrolment at school is not affected, attendance has become more irregular as parents face difficulties to ensure sufficient clothing. Enrolment in tertiary level education and above is decreasing as tuitions and transportation costs have become unaffordable for those who have lost their income sources.

#### **Update on responses and perspectives**

- The government took swift measures to contain the crisis, including mobilising additional external funding from the International Monetary Fund (US\$540 million), World Bank (US\$50 million) and Russia (US\$500 million), supporting bank lending to small and medium enterprises, prioritising essential public expenditures and maintaining a flexible exchange rate regime. Social spending was protected, including an increase of the level of pensions.
- WFP responded to the crisis by launching small-scale food- or cash-for-work projects in villages most affected but the coverage was low due to the lack of resources available. Even though the interventions were short-term and the remuneration was limited, they were very much appreciated by the beneficiaries who indicated that they could cover their basic food needs for up to 6 months without incurring new debts.
- Despite the negative economic and social results in 2009, projections from the World Bank and International Monetary Fund are optimistic for 2010 and beyond at macro-economic level, with a resumption of real GDP growth (anticipated at +1.2% in 2010) and improvement of the various economic indicators.
- Growth resumption is however dependent on the recovery of the economy in Russia and as well as global economic recovery, given the high dependence on exports and remittances. The successful re-opening of the Turkish border would also go a long way to support the revival of the economy in Armenia.
- Recovery at household level will take much longer than at macro-economic level. Key Informants and households met in February 2010 were pessimistic about regular or irregular labour opportunities in the coming months. Opinions were divided on external migration, with some feeling that the decline will continue as economic recovery is slow in

Russia while others maintained that out-migration remained the best option for earning an income in the current situation in Armenia.

- In terms of food security, this will translate by the maintenance of low incomes and depressed purchasing power for food and other basic needs such as health and utilities. Future livelihoods will continue to be jeopardized by the foregoing of tertiary and higher level education, decreased engagement in agriculture, sale of animals and unsustainable debts.

### **Recommendations**

- The main recommendations at macro-level are to:
  - increase public spending for the Family Benefit Programme and improve targeting;
  - raise and expand unemployment benefits to capture new job seekers and returning migrants;
  - enhance the current public works programme to increase coverage and efficiency;
  - protect access to health services for the poor, and to higher education for the needy students.
- Considering the positive effects of the cash- and food-for-work interventions and the time that economic recovery at household level will take, recommendations for WFP are to:
  - provide capacity building of national and local authorities to strengthen their ability to identify and target food insecure households and to design responses accordingly, building upon existing assessment and monitoring systems such as the Integrated Living Conditions Survey;
  - revive the school feeding programme, giving priority to areas of heightened food insecurity due to the global economic crisis and establishing clear hand-over procedures to the government from the outset;
  - support the expansion of the national social assistance system (with food and cash) to cover households and individuals affected by the global crisis (e.g. returned migrants, recent unemployed etc.) and deprived persons in areas of heightened food insecurity, who are not yet enrolled in the national system.

## **I - INTRODUCTION**

### **1.1 - Rationale for the study**

This study was conducted to provide an update on the effects of the global economic crisis in Armenia, both at macroeconomic level and at household level. It is a follow-up to the rapid WFP study done in April 2009 and the nation-wide WFP/Government household survey carried out in August 2009.

The present report complements similar studies and follow-ups implemented by WFP in February/March 2010 in Bangladesh, Nicaragua, Gambia and Zambia, as an effort to continue documenting the impact of the global economic crisis on vulnerable households in a variety of settings.

Armenia was selected due to its specific vulnerability to the effects of the global economic crisis at macroeconomic and at household levels. This vulnerability stems from a combination of:

- high dependence on Russia and some European Union countries for its exports, while demand for commodities in these countries is decreasing due to the crisis there as well;
- high households' and government budget dependence on remittances, most of which come from Russia, where migrants' employment is negatively affected by the crisis;
- high reliance on Foreign Direct Investment and other international funding for budget support, which are under strain in the crisis context;
- significant proportion of poor people (despite recent progress) with a well-targeted though insufficient social assistance system to cover current and future crisis-induced.

### **1.2 – Methods used for the update**

A secondary data review was conducted to obtain the latest statistics on macro-economic indicators (Section II). Discussions were also held with a number of representatives of international and government institutions on specific topics (economic growth, unemployment, overall social situation). The results of the 2008 Armenia Integrated Living Conditions Survey (ILCS), which were not available before, were used as a kind of pre-crisis reference. The WFP August 2009 nation-wide household survey provided a mid-term trend of the food security and social situation of the households compared to the study done in April 2009.

Additional data from households and Key Informants were collected during a rapid qualitative assessment in February/March 2010. The same locations and livelihood groups that were visited in April 2009 were included with the exception of:

- farmers, because the April 2009 did not reveal major direct effects of the global crisis on this group;
- two new locations in order to interview beneficiaries of WFP assistance;
- one location of remittance-receivers substituted for another one deemed to be more vulnerable.

Livelihood groups of interest were: recipients of pensions and/or family benefits, remittance receivers, migrants, construction workers and mining industry workers. A total of 9 locations were covered (urban and rural), and discussions took place with 46 Key Informants, 78 individual households (6 per location or livelihood group) and 22 focus groups (2 per location or livelihood group). (See table 1).



**Table 1 – Locations and livelihood groups covered by the rapid follow-up study, February 2010**

<b>Livelihood group</b>	<b>Location</b>	<b>Key Informants</b>	<b>Focus Groups</b>	<b>Households</b>
Benefits/pension receivers	Charentsavan	5	2	6
	Yerevan (Shengavit)	5	2	6
Remittance receivers	Yerevan	3	2	6
	Gyumri	7	2	6
	Aregnadem	3	2	6
Migrants	Vardenik	5	2	6
Construction workers	Yerevan	1	2	6
	Vanadzor	7	2	6
Mining industry workers	Lernadzor	5	2	6
Beneficiaries/non-beneficiaries of WFP assistance	Saramej	3	2 (1/1)	12 (6/6)
	Tavshut	3	2 (1/1)	12 (6/6)
<b>Total</b>		<b>46</b>	<b>22</b>	<b>78</b>

## **II – UPDATE ON THE EFFECTS OF THE GLOBAL ECONOMIC CRISIS ON THE MACRO-ECONOMY IN ARMENIA**

### **2.1 - Economic, political and social context in Armenia<sup>1</sup>**

Armenia is a small land-locked country in the Caucasus. Most of its territory (80%) is mountainous. The population was estimated at 3.24 million in January 2009. It is relatively homogeneous, with 95% Armenians, 1% Azeris, 2% Kurds and 2% Russians. Just under 2/3<sup>d</sup> of the population lives in urban areas, and more than half of the urban population lives in the capital, Yerevan (1.1 million inhabitants).

With income per capita that averaged US\$3,200 over 2006-2008, Armenia ranks as a low middle-income country. The economy is market-oriented, highly opened to trade, capital and technological innovation, and is based on services (particularly construction), light industry and metals, although a significant share of the population is still dependent on agriculture (44%).

The GDP expanded by double-digit rates annually over the past dozen years, averaging 12% annually during 2004-2008, with growth led by non-tradables (construction and services) and fuelled by high remittances and capital inflows. Between 2004 and 2008:

- the construction sector progressed<sup>2</sup>; it represented 27% of total GDP in 2008 compared to 24% in 2007 and 2006;
- the contribution of the agriculture sector to GDP decreased: 16% of GDP in 2008 compared to 18% in 2007 and 19% in 2006 and 2005;
- the industry sector share of GDP also decreased: 13% in 2008 compared to 15% in 2007 and 17% in 200;
- while limited, the contribution of the financial, real estate and business activities to GDP increased: 7% of total GDP in 2008 compared to 6% in 2007 and 2006, and 5% in 2005 and 2004.

Macroeconomic policies were supportive during this period, with fiscal deficits being small and monetary and exchange rate policies being prudent. The national currency continued to appreciate relative to the US dollar and other foreign currencies during 2008, as a result of a continuous increase in inflows of remittances, state grants and direct foreign investments. Inflation was kept low despite fuel and food prices shocks. Revenue collection and tax administration improved significantly since 2008 thanks to the reform of the system.

A decline in export volumes began in 2006, but growing prices for non-ferrous metals, a main export for Armenia, helped to compensate. In contrast, import growth both in volume and value terms was very strong in recent years driven by large remittances, Foreign Direct Investment (FDI), commercial bank external borrowing and a large real exchange rate appreciation. Armenia's economy is indeed highly dependent on remittances, which amounted to US\$2 billion and represented 17% of GDP in 2008. FDI amounted to US\$940 million in 2008<sup>3</sup>.

The overall size of the government was restrained as private initiative was permitted to drive the economy, and public external debt was also extremely low. Rising budget revenues were directed at raising real spending on public provision of public goods and services. The authorities pursued structural reforms centred on sharpening competition, improving governance, and mitigating social and environmental risks.

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<sup>1</sup> Armenia: Country Partnership Strategy. International Monetary Fund, April 2009

<sup>2</sup> According to discussions with IMF in Armenia, the statistics on the construction sector should be taken with caution as some overestimation of the contribution of the sector to GDP is suspected due to a rather outdated statistical method/index being used.

<sup>3</sup> Armenia: Country Partnership Strategy. International Monetary Fund, April 2009.

Economic growth until the 3<sup>rd</sup> quarter of 2008 brought about an increase in real wages, stabilized employment and increased government budget spending on social services and benefits. The share of budget expenditures dedicated to social sectors amounted to 48% in 2008, including primary health care, basic education and social programmes (pensions especially).

These positive changes, combined with a growing stream of private transfers, contributed to poverty reduction in Armenia. Between 2004 and 2008, the overall incidence of poverty decreased from 35% to 23%, while the incidence of extreme poverty decreased from 6% to 3%. The poverty gap and the severity of poverty (see Annex 1 for definitions) also declined.

Progress was also achieved towards several of the Millennium Development Goals, including:

- gross enrolment ratio in primary education: rising from 88% in 2000 to 93% in 2007;
- under-5 mortality rate per 1,000 live births: down from 19.3 in 2000 to 12.3 in 2007;
- maternal mortality ratio: decreasing from 52 per 100,000 in 2000 to 15 per 100,000 in 2007;
- access of the population to improved water: up from 88% in 2000 to 94% in 2007;
- access of the population to improved sanitation facilities: up from 63% in 2000 to 67% in 2007.

## **2.2 - Transmission channels of the global economic crisis at macro-level in Armenia**

The most important transmission channels through which the global economic crisis affects Armenia's economy at macro-level include:

- lower raw material and mineral ore prices on global markets (traditional Armenia exports);
- reduced exports of commodities and services due to the international depressed commodity market,
- lower earnings from taxes such as the value-added tax on imports, as a result of low domestic demand and decreased remittances;
- decline of Foreign Direct Investment and grants;
- depressed economic activity in key branches such as construction (due to the sharp decline of household remittances and reduced investment).

At the beginning of 2009, the World Bank anticipated:

- a decline of real GDP by 8% in 2009 (down to -5%) and by 2% in 2010;
- a decline in government revenues by 6% in 2009 compared to 2008;
- a decrease of remittances by 25% from immediate family sources, and by 50% from non-immediate family sources;
- a 3-percentage points increase Consumer Price Index (CPI) inflation due to exchange rate depreciation and increased utility tariffs;

The rapid study conducted by WFP in April 2009<sup>4</sup> reported early negative effects of the crisis on exports and capital inflows in the construction and mining sectors, and in the chemical industry. Overall, in the first quarter of 2009 compared to 2008:

- exports had declined by 47%;
- imports had declined by 22%;
- remittances had decreased by 33%;
- more than 15,000 persons were newly registered with official unemployment agencies.

*The subsequent paragraphs of this Section provide an update on the actual effects of the crisis at macro-economic level in Armenia as of early 2010.*

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<sup>4</sup> Impact of the Global Financial Crisis. Armenia Case Study. World Food Programme, May 2009.

### 2.3 – Update on the effects of the global economic crisis on economic growth

Armenia, similarly as other energy-importing countries in the Caucasus and Central Asia, has been hard hit by the global economic crisis (see Box 1).

#### **Box 1 – Effects of the global economic crisis in the Europe, Caucasus and Central Asia region**

The region has been hit by a crisis on multiple fronts:

- 1) the global growth slowdown has led to falling export market demand; the prospects for inflows of remittances are low as economic activity in migrant host countries had declined;
- 2) the financial deleveraging by major banks and other financial institutions in developed economies has markedly reduced the availability, and increased the cost, of external finance across public, corporate and financial sectors;
- 3) the recent commodity price changes have involved a reversal of much of the commodity price boom of 2007 and 2008.

While the global economic crisis has severely impacted countries of the region, important differences are noted across countries. Most Caucasus and Central Asia energy exporters (Azerbaijan, Kazakhstan, Turkmenistan, Uzbekistan) are projected to record solid growth in 2009, given limited linkages to international markets, long-term energy export contracts, and supportive policies. In these countries, all of which have ample public savings accumulated during previous boom years, growth has been supported mainly by public spending, despite a large drop in exports. The exception is Kazakhstan, which, despite a large publicly financed anti-crisis programme, is facing a contraction of real GDP, in part driven by a banking crisis.

The energy importers (Armenia, Georgia, Kyrgyzstan, Tajikistan), however, are facing a marked slowdown in growth and deteriorating living standards as a result of a sharp drop in remittances from Russia. Because Armenia is more integrated into global markets, the contraction of its economy is expected to be worse than the others. However, Armenia also grew faster than other countries in previous years, fuelled by an inflow of remittances and construction boom. The Kyrgyz Republic and Tajikistan may achieve modestly positive growth in 2009 driven by a bumper harvest and a marked diversification away from imports.

*Sources: The Crisis Hits Home. Stress-Testing Households in Europe and Central Asia. World Bank, January 2010 - Regional Economic Outlook: Middle East and Central Asia. World Economic and Financial Surveys. International Monetary Fund, October 2009.*

As a result of the global economic crisis, Armenia has been struck by 3 simultaneous shocks: (i) loss of export demand, (ii) collapse of commodity export prices (metals), and (iii) sharp decline in remittances and private capital flows.

While economic growth continued until the 3<sup>rd</sup> quarter of 2008 inclusive, a decrease was observed in the 4<sup>th</sup> quarter of 2008 due to the global economic crisis. The real GDP growth was 6.8% in 2008. Relative to the previous projection of a 8% real GDP contraction, **real GDP is now expected to contract by over 15% in 2009**. This mostly reflects a collapse in the construction sector, as a result of the end of the remittance-fuelled boom, as well as the steep fall in international prices for non-ferrous metals and chemicals in late 2008.

Real GDP fell by 18.5% through the first 8 months of 2009, with about ¾ of this decline due to a plunge in construction output<sup>5</sup>. Other sectors such as agriculture and services have been much less affected by the crisis<sup>6</sup>.

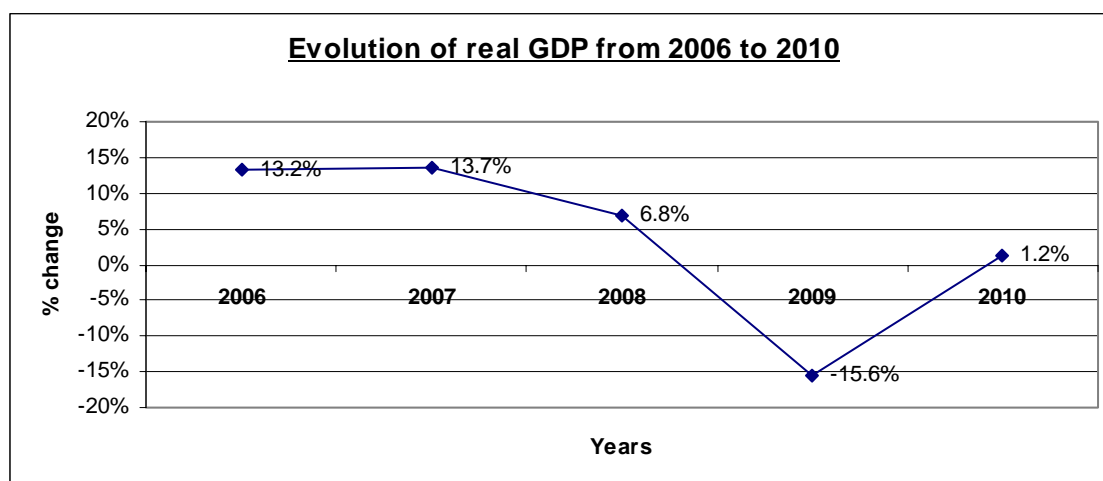
<sup>5</sup> According to discussions with IMF in Armenia, GDP figures should be taken with caution as statistics are not deemed fully reliable. As a result, the extent of GDP decline would be less than the one reported because the pre-crisis GDP could be lower than previously estimated. Similarly, the contribution of the construction sector to the GDP could also be less than previously calculated.

<sup>6</sup> Armenia: Second Review Under the Stand-By Arrangement. International Monetary Fund, October 2009

**Table 2 - Evolution of GDP growth and per capita**

	2006 (act.)	2007 (act.)	2008 (prel.)	2009 (proj.)	2010 (proj.)
<b>Real GDP (% change)</b>	13.2%	13.7%	6.8%	-15.6%	1.2%
<b>GDP per capita (US\$)</b>	1982	2853	3685	2658	2485

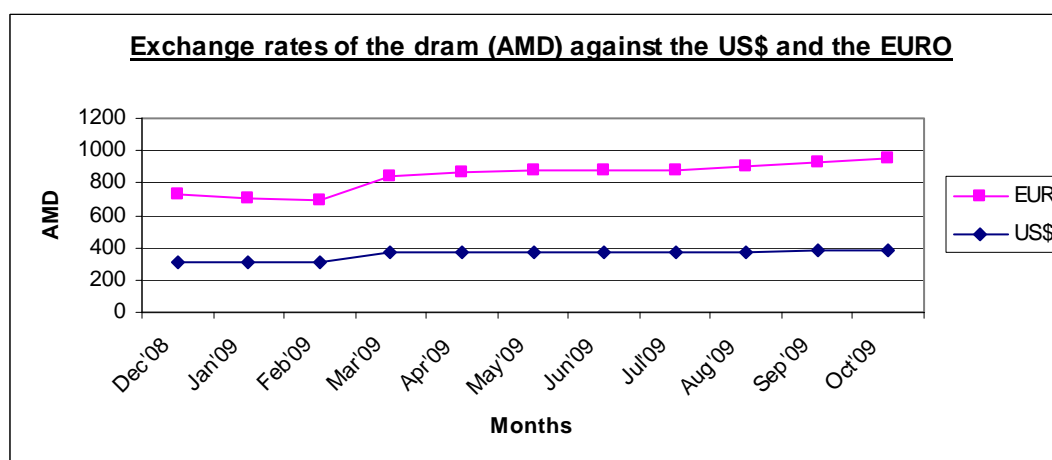
Source: Armenia: Second Review Under the Stand-By Arrangement. International Monetary Fund, October 2009



## 2.4 – Update on the effects of the crisis on the banking system

The banking system in Armenia is well capitalized, the open foreign exchange is small, end-borrowers are not exposed to currency risk, and stress tests undertaken by the IMF have shown that the system is robust<sup>7</sup>. However, the economic downturn could further lead to deterioration in asset quality.

With the growth slowdown and inflation falling rapidly, the Central Bank of Armenia (CBA) has pursued monetary easing through cuts in its main policy rate and direct liquidity support to the banking sector. At the beginning of March 2009, as the financial system was sufficiently capitalized and had enough liquidity, the CBA gave up the policy of active foreign exchange market interventions and returned to the policy of floating exchange rate<sup>8</sup>.



Source: Central Bank of Armenia, November 2009

<sup>7</sup> Armenia: Country Partnership Strategy. International Monetary Fund, April 2009.

<sup>8</sup> Summary Report on the Implementation of the Republic of Armenia Government Anti-Crisis Action Plan. November 2009.

Nevertheless, the effectiveness of monetary policy in easing credit conditions has been limited given the small size of the financial sector.

## **2.5 – Update on the effects of the crisis on key economic sectors**

### **2.5.1 - Industry and mining sector**

Before the crisis, the 'industry and mining' sector contributed to 34% of total GDP (2006-07 estimates<sup>9</sup>). It employed about 11% of the labour force in 2008. The main industries are diamond-processing, metal-cutting machine tools, forging-pressing machines, electric motors, tires, knitted wear, hosiery, shoes, silk fabric, chemicals, trucks, instruments, microelectronics, jewellery manufacturing, software development, food processing and brandy.

The metallurgy sector has contracted due to the crisis. **Two major and several minor mining plants stopped working.** The country's two largest chemical enterprises continued to operate at a fraction of their capacity, owing to decreased global demand for their main products (synthetic rubber and calcium carbide).

Despite rising international prices for metals since the 2<sup>nd</sup> quarter of 2009, a 40% fall was recorded in Armenia exports of base metals. However, **rising metals prices, together with a weaker currency and government support, are helping the mining sector to recover.**

### **2.5.2 - Construction and real estate sector**

The construction sector employed about 5% of the labour force in 2008<sup>10</sup>. It has become the leading engine of the economy in recent years<sup>11</sup>, largely financed by either credits from international finance institutions (World Bank, European Bank for Reconstruction and Development) or by grants from the Armenian diaspora abroad (i.e. the Lincy Foundation in the US). However, during the first half of 2009 **real estate transactions and prices fell by 34% and 16%** year-on-year respectively. Overall, the construction sector shrank by 53% in January-August 2009 compared to the same period in 2008<sup>12</sup>. Some 10,000 construction workers lost their job in 2009<sup>13</sup>.

Construction output and real estate prices are highly correlated with remittances, which have collapsed (see below). However, preliminary data suggest that **the fall in construction output and real estate prices is coming to an end.** On the other hand, most of the 'profitable' construction requirements in Armenia, essentially located in the capital city, have now been covered, and **the sector's ability to offer significant job opportunities to the labour force and wealth to the economy is expected to decrease in the coming years.**

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<sup>9</sup> Armenia. The World Factbook. Central Intelligence Agency (CIA). November 2009.

<sup>10</sup> Armenia Integrated Living Conditions Survey, National Statistics Service. 2008

<sup>11</sup> As mentioned, according to discussions with IMF in Armenia, the statistics on the construction sector should be taken with caution as some overestimation of the contribution of the sector to GDP is suspected due to a rather outdated statistical method/index being used.

<sup>12</sup> Country Report Armenia. Economist Intelligence Unit, November 2009.

<sup>13</sup> Personal communication from the Head of the State Employment Agency, 24 February 2010.

### 2.5.3 - Agriculture sector

Since the breakup of the former Soviet Union, Armenia has switched to small-scale agriculture and away from large agro-industrial complexes. The main productions are vegetables, fruits (especially grapes) and livestock. The sector contributes only to about 16% of total GDP but employed about 44% of the labour force in 2008<sup>14</sup>.

During January-August 2009, agricultural output fell by 1.5% year-on-year, mainly attributable to an almost 3% drop in the production of meat and dairy products, reflecting the weakened purchasing power of many households. The sector's full-year performance will depend on yields in important autumn crops such as wheat and grapes<sup>15</sup>.

In addition to downward consumers' demand for animal products especially, the global economic crisis negatively affects farmers who depend on other sources of income to procure inputs and feed animals. The loss of jobs and/or remittances hence constrains their ability to cultivate. Crop and livestock production at household level is further examined in paragraph 3.5.1, focusing in areas and population groups most impacted by the crisis.

### 2.6 – Update on the effects of the crisis on external trade

The main exports from Armenia are pig iron, unwrought copper, nonferrous metals, diamonds, mineral products, foodstuffs and energy. Export partners (2008 figures) are essentially Russia (20% of total exports), Germany (17%), Netherlands (12%), Belgium (8%), Georgia (8%), Bulgaria (6%) and USA (5%). Imports consist essentially of natural gas, petroleum, tobacco products, foodstuffs and diamonds. The main source countries are Russia (19%), China (9%), Ukraine (7%), Turkey (6%), Germany (6%), USA (5%) and Iran (5%).

**Imports decreased by 27% year-on-year in January-November 2009**, due to weak consumer demand, **while exports fell by 37%**, especially the base metals exports (Armenia's primary export). The trade deficit shrank by 22% year-on-year during the period, equivalent to almost 31% of GDP<sup>16</sup>.

In previous years, the trade imbalance was somewhat offset by international aid, Foreign Direct Investment and remittances from households abroad. Trade is now affected by weak global demand and Armenia is particularly affected as it relies heavily on exports to Russia and to some European Union countries also touched by the crisis. The trade balance is expected to continue to worsen, although slightly less than in 2008, as the decline in exports is not fully compensated by the decrease in imports. The trade deficit should reach US\$2,040 million in 2009.

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<sup>14</sup> Armenia. The World Factbook. Central Intelligence Agency (CIA). November 2009 – Armenia Integrated Living Conditions Survey, National Statistics Service, 2008.

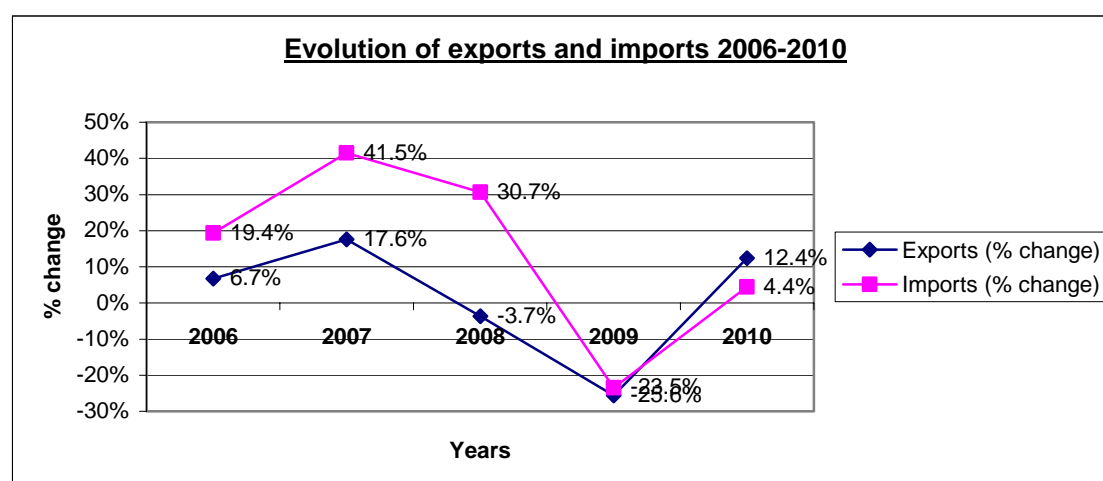
<sup>15</sup> Country Report Armenia. Economist Intelligence Unit, November 2009.

<sup>16</sup> Country Report Armenia. Economist Intelligence Unit, November 2009.

**Table 3 - Evolution of exports, imports and trade balance**

	2006 (act.)	2007 (act.)	2008 (prel.)	2009 (proj.)	2010 (proj.)
<b>Exports</b> (% change)	6.7%	17.6%	-3.7%	-25.6%	12.4%
<b>Imports</b> (% change)	19.4%	41.5%	30.7%	-23.5%	4.4%
<b>Exports</b> (US\$ millions)	1510	1777	1711	1272	1431
<b>Imports</b> (US\$ millions)	-2536	-3589	-4692	-3588	-3744
<b>Trade balance</b> (US\$ millions)	-	-1600	-2654	-2040	-2108

Source: Armenia: Second Review Under the Stand-By Arrangement. International Monetary Fund, October 2009



## **2.7 – Update on the effects of the crisis on public debt and account deficit**

Despite the external shocks and larger external borrowing than originally anticipated, **the debt outlook continues to be favourable** with a low risk of debt distress<sup>17</sup>. Although there was a large drop in tax revenues (by more than 18% year-on-year), exports, remittances and Foreign Direct Investment (mostly from Russia), external financing (IMF) and other donors (Russia, ADB) have allowed the authorities to largely implement planned budget expenditures, while increasing spending on priority infrastructure projects.

However, as mentioned, the fall of imports did not offset the fall in exports and the drop of remittances, and as a result the current account deficit is expected to widen to about 13.5% of GDP in 2009<sup>18</sup>. Loans taken by the government will sharply increase the debt, which will represent 37.4% of GDP in 2009 compared to 15.9% in 2008.

<sup>17</sup> Armenia: Country Partnership Strategy. International Monetary Fund, April 2009.

<sup>18</sup> Armenia: Second Review Under the Stand-By Arrangement. International Monetary Fund, October 2009.



**Table 4 - Evolution of government revenue, expenditure, account balance and debt**

<i>AMD billions</i>	2007	2008 (prel.)	2009 (proj.)	2010 (proj.)
<b>Total revenue</b>	632.5	730.8	639.2	674.3
Of which:				
→ VAT (from imports)	248.0	296.3	238.4	255.2
→ grants	23.5	15.1	16.1	15.0
<b>Total expenditure</b>	706.1	793.4	872.6	862.2
Of which:				
→ wages	61.3	73.0	88.9	91.8
→ pensions	21.1	4.1	4.9	4.9
→ subsidies	58.9	38.4	19.7	26.8
<b>Total account balance</b>	-69.4	-46.6	-233.4	-187.9
<b>Account balance as % GDP</b>	-6.4%	-11.5%	-13.5%	-13.5%
<b>Government debt (% GDP)</b>	16.1%	15.9%	37.4%	44.1%

Source: Armenia: Second Review Under the Stand-By Arrangement. International Monetary Fund, October 2009

## **2.8 – Update on the effects of the crisis on Foreign Direct Investment (FDI)**

Of the members of the Commonwealth of Independent States (CIS), Armenia receives the highest inflows per head of foreign financial and technical assistance. The IMF, World Bank and EU have supported many programmes since 1992. The Armenian diaspora is also an important source of foreign financing, such as for instance the US-based Lincy Foundation. Russia has emerged as the country's leading foreign investor (local energy, metallurgy and telecoms sectors). Lebanon is the 2<sup>nd</sup> largest investor (mobile phone services).

Net Foreign Direct Investment peaked in 2008 at US\$929 million but **is projected to decline sharply to US\$263 million in 2009**, as a result of the recession in Russia.

**Table 5 - Evolution of Foreign Direct Investment**

	2006 (act.)	2007 (act.)	2008 (prel.)	2009 (proj.)	2010 (proj.)
<b>Net FDI (US\$ million)</b>	450	701	929	263	305

Source: Armenia: Second Review Under the Stand-By Arrangement. International Monetary Fund, October 2009

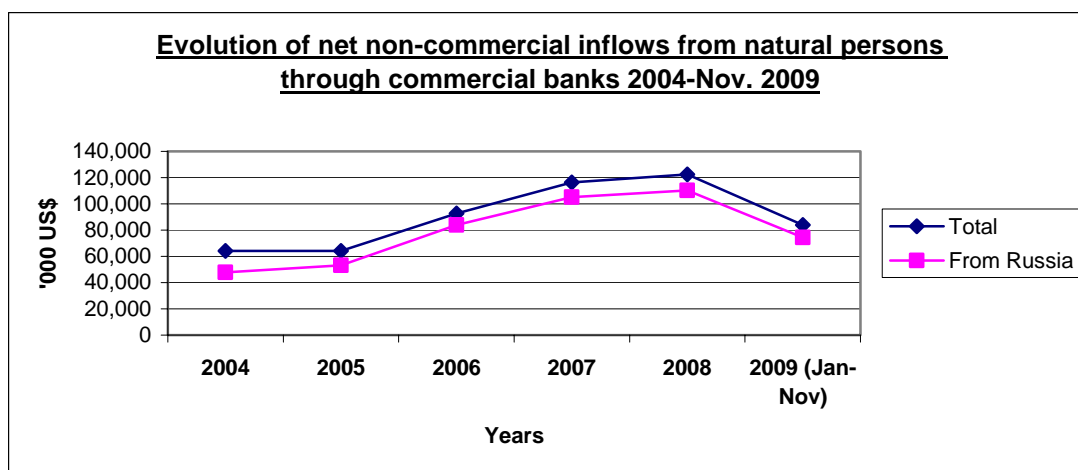
## **2.9 – Update on the effects of the crisis on remittances**

Of the 8 million Armenians worldwide, about 60% are estimated to live abroad, including about 1 million each in Russia and the USA<sup>19</sup>.

Remittances quintupled in dollar terms between 2003 and 2008, reaching US\$1,062 million or almost 9% of GDP in 2008, but **collapsed by about 30% during the first 7 months of 2009**<sup>20</sup>, as the global crisis centred in remittance source countries (particularly Russia). According to statistics from the Central Bank of Armenia, total net non-commercial transfer inflows of natural persons via the banking system amounted to US\$747 million between January and October 2009 compared to US\$1,168 million during the same period in 2008.

<sup>19</sup> Armenia. The World Factbook. Central Intelligence Agency (CIA). November 2009.

<sup>20</sup> Armenia: Second Review Under the Stand-By Arrangement. International Monetary Fund, October 2009



Source: Central Bank of Armenia, November 2009

The fall in remittances is depressing trade, domestic consumption and investment, particularly in real estate. It also decreases government fiscal revenues obtained through indirect taxation. In the countries of the Caucasus and Central Asia (CCA) in general, including Armenia, private consumption is highly correlated with remittances, with a 10% decrease in the latter dampening consumption by 2% to 4%. The crisis is thus reversing the effect of remittances in previous years, when they fuelled a strong growth through their effects on consumption and investment. For CCA countries as a whole, the decline in remittances is estimated to result in a 14% decline in value-added tax (VAT) revenues in 2009, mostly through lower consumption of domestic and imported goods<sup>21</sup>.

## 2.10 – Update on the effects of the crisis on inflation/Consumer Price Index

Inflation rate<sup>22</sup> in 2008 was the highest from the previous 4 years and reached 9% as a result of the high food and fuel price crisis. The global growth slowdown has contributed to a sharp easing in global food, fuel and other commodity prices since mid-2008.

Despite the March 2009 depreciation of the national currency, inflation has remained low at about 3.5% in 2009, given weak domestic demand and low import prices<sup>23</sup>. It could increase as a result of higher international prices at the end of 2009 (raw materials, some food products such as vegetable oil) and the exchange rate pass-through but is **likely to remain within the inflation target band of 4 ± 1.5%**.

Table 6 - Evolution of Consumer Price Index

	2006 (act.)	2007 (act.)	2008 (prel.)	2009 (proj.)	2010 (proj.)
CPI (% change)	2.9%	4.4%	9.0%	3.2%	3.7%

Source: Armenia: Second Review Under the Stand-By Arrangement. International Monetary Fund, October 2009

<sup>21</sup> Regional Economic Outlook: Middle East and Central Asia. World Economic and Financial Surveys. International Monetary Fund, October 2009.

<sup>22</sup> Consumer Price Index monitoring covers 11 large population centres and the capital city Yerevan.

<sup>23</sup> Armenia: Second Review Under the Stand-By Arrangement. International Monetary Fund, October 2009.

### **III – UPDATE ON THE EFFECTS OF THE GLOBAL ECONOMIC CRISIS ON HOUSEHOLDS IN ARMENIA**

#### **3.1 - Background on the demographic situation in Armenia**

During the course of 2008 the population increased by about 7,900, reaching some 3,238,000 inhabitants as of 1<sup>st</sup> January 2009. The change was due to natural increase and net migration. The shares of urban and rural population did not change, at 64% and 36% respectively.<sup>24</sup>

In 2008, national mortality rate increased by 2.4% compared to 2007, and by 3.6% for the rural population. Deaths from cardio-vascular diseases and cancer dominate, but the number of deaths from infectious and parasitic diseases, digestive system diseases, and accidents/injuries/poisoning increased compared to 2007. However, it is not possible to attribute clearly these changes to indirect effects of the global economic crisis on households (for example through a decrease of health expenditures).

While most households are male-headed (68%), the proportion of female-headed households increased compared to 2004 and is greater in urban areas than in rural areas (35% and 26% respectively in 2008). The average household size in 2008 was 3.8 members (3.7 and 3.9 in urban and rural areas respectively). Large households (6 and more members) are mainly found in rural areas (27% of rural households).

#### **3.2 - Transmission channels of the global economic crisis on households in Armenia**

The main transmission channels of the global economic crisis on household welfare and poverty in Armenia pass through a decrease of monetary income and cash availability as well as depressed purchasing power<sup>25, 26</sup>.

- **Effects on households' monetary income and cash availability:**
  - labour markets are depressed with lower employment and wages (contributing to more than 60% of the effects on poverty);
  - remittances are reduced due to economic slowdown in source countries (contributing to more than 20% of the effects on poverty);
  - allowances/benefits and pensions are at risk due to reduced government (and non governmental) spending on social services such as education, health and social protection, itself linked to decreased exports and foreign capital inflows;
  - access to credit is reduced due to depressed financial markets;
  - savings and asset values are eroded due to depressed financial and economic context.
  
- **Effects on households' purchasing power**, through price changes (about 16% of the effects on poverty) due to depressed financial markets, including:
  - exchange rate adjustments;
  - utility tariff increases;
  - consumer price inflation.

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<sup>24</sup> Armenia Integrated Living Conditions Survey (ILCS) 2008, National Statistics Service, Armenia.

<sup>25</sup> Armenia Integrated Living Conditions Survey (ILCS) 2008, National Statistics Service, Armenia – Armenia, a Rapid Assessment of the Impact of the Global Financial Crisis, WFP, 2009.

<sup>26</sup> Armenia: Social Impact of the Global Economic Crisis, Gohar Gyulumyan, World Bank. June 2009.

### **3.3 - Initial effects of the global economic crisis on households early 2009**

The rapid assessment conducted by WFP in April 2009<sup>27</sup> with a series of focus group discussions in selected villages and towns, showed that in the 1<sup>st</sup> quarter of 2009:

- households' purchasing power decreased due to reduced income as a result of less remittances, loss of employment and substantial pay-cuts in the private sector, combined with increased living costs;
- households coped with crisis-induced difficulties to access food by increasing food purchases on credit (with a risk to fall into a debt trap), substituting wheat products with potatoes, and reducing consumption of meat and dairy products;

Households directly affected by the crisis included

- **remittance receivers**, due to delayed payments of seasonal migrants, loss of opportunities of employment within Armenia or abroad; they also expected less or no remittances from long-term migrants in 2009;
- **workers in the construction and industrial (mine) sectors**, as many had already lost their jobs, more unemployment was expected, and wages were decreased.

Additional groups also suffered consequences of the economic crisis indirectly:

- **farmers and livestock breeders**, particularly the small-scale producers in low production zones at high altitude who often combine agriculture with seasonal labour migration; they faced higher costs of agricultural inputs and loss of income due to lower consumer demand, and increased difficulties to access credit and remittances;
- **small traders**: some were forced to close business due to decreased consumer demand and tightening credit conditions from banks;
- **social assistance beneficiaries**, comprising mostly large families with children or elderly members, former refugees and women-headed households, especially those living in urban areas, high altitude rural areas or border areas, and those who depended on only one source of income, which could come under jeopardy in the crisis context.

**"Newly vulnerable"** people, including the youth entering the labour market, middle-aged men and those working under very low salary payments (many of whom do not benefit from social benefits) were also pointed out as a group at risk in the crisis context.

*The subsequent paragraphs in this Section provide an update of the situation of households based on results from:*

- the most recent nation-wide Integrated Living Conditions Survey (ILCS) for the year 2008, which were not available before (see Annex 2 for details on the survey);
- a nation-wide household survey carried out by WFP in August 2009 to monitor the effects of the crisis on rural and urban households; and
- additional information collected by WFP in February 2010 in the same areas and population groups visited one year before.

### **3.4 – Update on the effects of the crisis on household food consumption**

#### **3.4.1 – Food consumption based on the 2008 ILCS**

The 2008 ILCS requests households to maintain a diary during a whole month to record a detailed description of what has been bought (name of the product, quantity, cost, place of purchase), as well as the consumption of products which were received or utilized from their own or other farms or from other sources (e.g. gifts, humanitarian aid). The amount of food and kilocalories consumed *per capita* can be estimated on that basis.

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<sup>27</sup> Impact of the Global Financial Crisis. Armenia Case Study. World Food Programme, May 2009.

Results indicate that on average 2,300 kcal are consumed *per capita* per day<sup>28</sup>, which is above the 'minimum' standard requirement of 2,100 kcal but not by a very large margin, suggesting that a number of individuals are likely to consume less than the minimum requirements (see table 7). Indeed, **the poorest quintile of households consumed about 2,055 kcal per capita per day** on average<sup>29</sup>, with decreased consumption of bread & bakery products, fruits & berries, and animal products in general (meat & meat products, milk, eggs, fish) compared to the rest of the population. The second poorer quintile of households consumed about 2,175 kcal *per capita* per day on average<sup>30</sup>, slightly above the 'minimum' standard requirement.

**Table 7 – Estimated food consumption per capita per day in 2008**

Food items	Average		Poorest quintile		Second poorer quintile	
	Amounts per cap./day	Kcal/cap./day <sup>31</sup>	Amounts per cap./day	Kcal/cap./day	Amounts per cap./day	Kcal/cap./day
<b>TOTAL</b>	-	<b>2300 kcal</b>	-	<b>2055 kcal</b>	-	<b>2175 kcal</b>
Bread & bakery products	424 g	1480	387 g	1350	412 g	1440
Potatoes	129 g	100	113 g	90	124 g	100
Vegetables	209 g	80	177 g	70	196 g	80
Fruit & berries	130 g	80	74 g	45	101 g	60
Sugar	23 g	90	26 g	100	22 g	90
Vegetable oil	12 ml	110	13 ml	120	11 ml	100
Meat & meat products	67 g	130	37 g	75	47 g	90
Cheese (various)	35 g	120	42 g	140	37 g	130
Milk & matsun	58 ml	35	46 ml	30	55 ml	30
Butter	6 g	50	3 g	20	4 g	30
Eggs	0.33 piece	20	0.23 piece	15	0.29 piece	20
Fish & fish products	5 g	5	2 g	~ 0	4 g	5

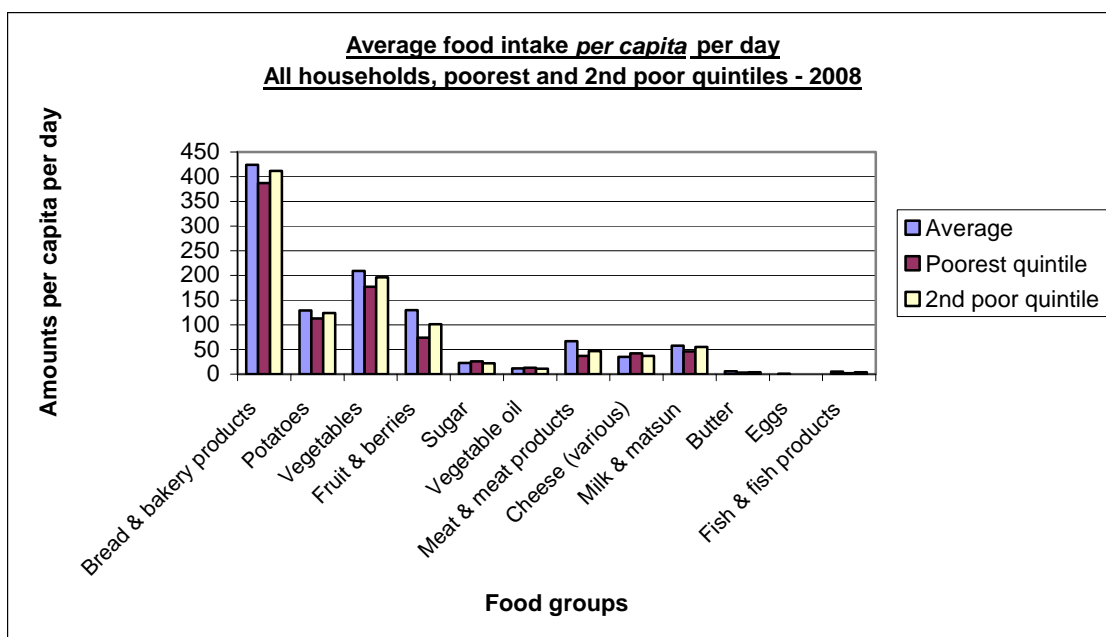
Source: Own calculations using data from the Armenia Integrated Living Conditions Survey 2008. National Statistics Service, Armenia

<sup>28</sup> This figure is an estimate based on amounts reported by households in the ILCS and average kcal values (see next footnote). It is closed to the value reported by the 2008 ILCS of 2,220 kcal/cap./day.

<sup>29</sup> This figure is much higher than the one reported by the 2008 ILCS of 1,560 kcal/cap./day. Reasons for such a large difference are unknown, but the low figure of the 2008 ILCS would be below 'survival' and thus seems a bit doubtful.

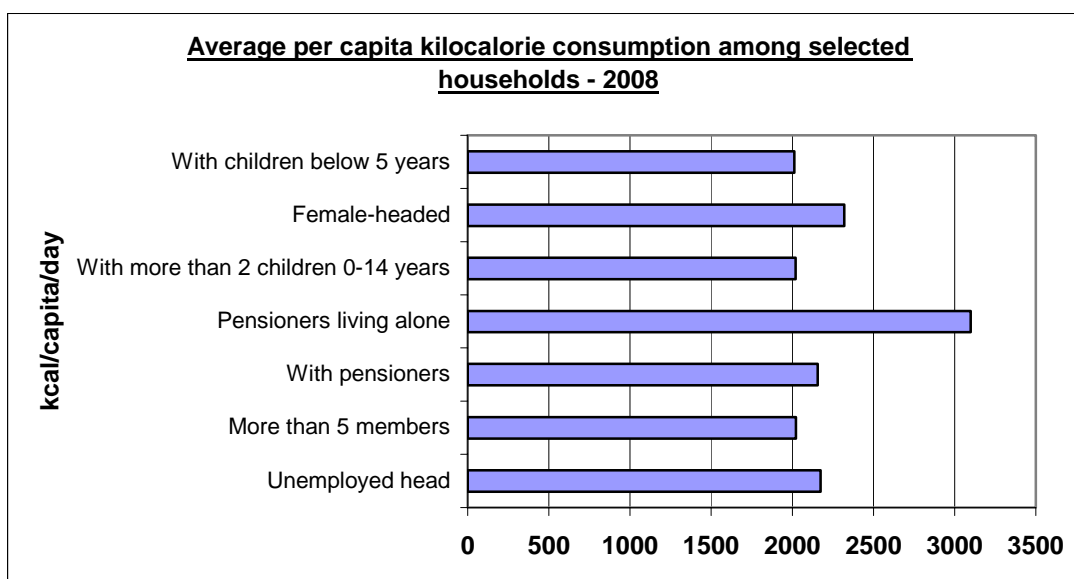
<sup>30</sup> The 2008 ILCS reported a figure of 1,960 kcal/cap./day for the second poverty quintile.

<sup>31</sup> The following kcal values were used for 100 g or 100 ml: Bread & bakery products: 350 kcal; Potatoes: 80 kcal; Vegetables: 40 kcal; Fruits & berries: 60 kcal; Sugar: 400 kcal; Vegetable oil: 900 kcal; Meat & meat products: 200 kcal; Cheese (various): 350 kcal; Milk & matsun: 60 kcal; Butter: 780 kcal; Eggs: 60 kcal/piece; Fish & fish products: 100 kcal.



Source: Own calculations using data from the Armenia Integrated Living Conditions Survey 2008. National Statistics Service. Armenia

Average *per capita* kilocalorie consumption was **lower among households with unemployed head, with more than 5 members, with pensioners, with 3 or more children aged 0-14 years, or with children below 5 years of age**, compared to the rest of the population. Pensioners living alone had the highest *per capita* kilocalorie consumption, essentially explained by a larger intake of bread & bakery products, animal products and fats. Women-headed households were not particularly disadvantaged with regards to *per capita* kilocalorie intake,



Source: Own calculations using data from the Armenia Integrated Living Conditions Survey 2008. National Statistics Service. Armenia

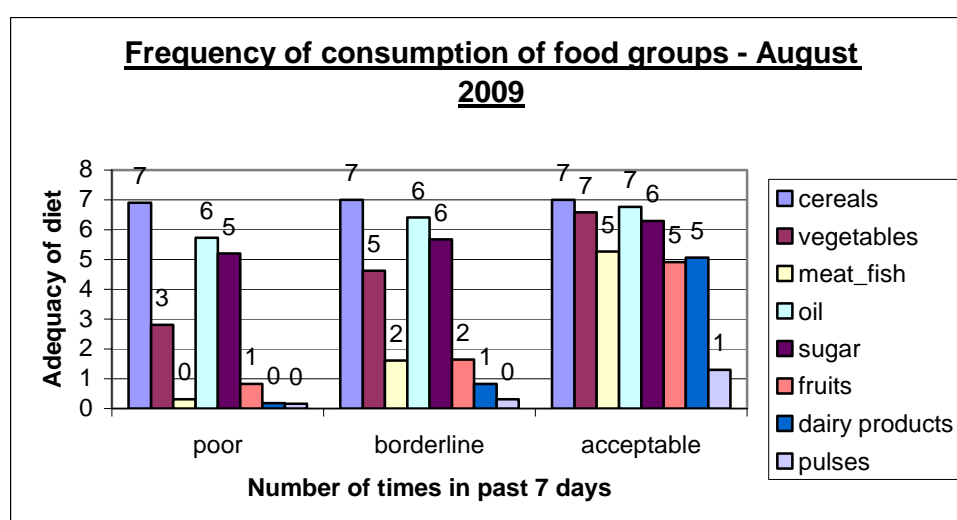
### 3.4.2 - Food consumption patterns, food insecurity and vulnerability in August 2009

In the 2009 WFP nation-wide household survey, households were categorized as 'food insecure', 'vulnerable' or 'food secure' according to their type of food consumption and their level of indebtedness for food. The latter reflected their risk to become food insecure

especially in the event of economic shocks such as those caused by the global economic crisis and ensuing decreased income<sup>32</sup>.

	Food consumption pattern		
	Poor	Borderline	Acceptable
<b>Non-sustainable source of food*</b> <ul style="list-style-type: none"> <li>Households with more 33% of food consumed that came from purchase on credit or borrowing/gift or</li> <li>Households unable to pay back their debts</li> </ul>	Food insecure	Food insecure	Vulnerable
<b>Sustainable source of food</b>	Food insecure	Food insecure	Food secure

The survey found a low proportion of households having inadequate food consumption, based on the frequency and diversity of the food consumed during the 7 days preceding the survey. **Less than 1% of households nation-wide consumed a 'poor' diet and 4% consumed a 'borderline' diet.** A 'poor' diet consisted essentially of staples (bread, potatoes), oil and sugar, with limited consumption of vegetables (3 times) and fruits (once) and practically no consumption of animal products. The borderline diet included more frequent consumption of vegetables (5 times), meat or fish (twice) and fruits (twice). However, consumption of dairy products remained very low (once). These diets are likely to bring low amounts of good quality proteins and lead to micronutrient deficiencies (especially iron, folic acid, possibly vitamins A and C) especially among household members with extra nutritional requirements (growing children, pregnant and lactating women, the chronically sick).



Source: Household Food Security Survey, WFP, August 2009

On the other hand, **18% of the households were vulnerable to food insecurity**, as they had obtained the food consumed the week before the survey through debts or gifts, or they were unable to reimburse their debts.

### 3.4.3 – Food consumption patterns in February 2010

The trend towards reduced consumption of more expensive food products, particularly meat, was confirmed by the follow-up study. While the number of daily meals of both adults and children remained unchanged, almost half of the households interviewed indicated that they were eating less of certain items. In rural areas, the diet consisted mostly in potatoes, bread, pasta, dairy products (for those with animals) and occasionally beans. This corresponds to the 'poor' and 'borderline' patterns described in August 2009.

<sup>32</sup> For this purpose the share of food sources in the past week were used. Non-sustainable sources of food were considered as more than 33% of the food consumed in the past week coming from purchase on credit or/and borrowing or received as gift.

The only groups which managed to better protect their diet were the remittance receivers, construction workers in Yerevan and mining workers in Lernadzor, perhaps because they could maintain a more steady flow of cash income.

### **3.5 – Update on the effects of the crisis on food availability**

#### **3.5.1 – Agricultural production 2007-2009**

##### *Main characteristics of household agricultural production*

At country level, Armenia produces only 30% to 40% of the wheat (main staple food) that its population consumes and therefore relies heavily on imports for its food. The small size of private farms has been a structural constraint on the development of the sector. In addition, as the irrigation network covers only a fraction of the country's arable land, adverse weather conditions have a notable impact on agricultural output.

Cold temperatures and floods in 2007-08, the rise of fuel prices in 2008 which increased production costs, and decreased households' purchasing power due to the high food and fuel price crisis which constrained economic access to improved seeds and other inputs, have negatively affected agricultural production during the 2007-08 season. The 2008-09 season was slightly down by August 2009 due to decreased animal production<sup>33</sup>.

Agricultural production is a key source of employment (about 44% of the population and above 70% in several *marzes*), income (main one for 10%) and food (see Box 2) and decrease of outputs can alter rural households' own food production stocks and income obtained from sales.

On the other hand, **subsistence agriculture is believed to play an important role in protecting rural people from falling into extreme poverty**. Compared to urban households, the availability of potatoes, vegetables and fruits is also likely to be higher, hence enabling to protect food consumption to some extent.

#### **Box 2 – Household agricultural production in Armenia**

In 2007:

- 86% of rural households were engaged in farming, 64% in cattle breeding, and 62% in both farming and cattle breeding;
- about 2/3<sup>rd</sup> of rural households that owned land or livestock generated some revenues from their agricultural activities; however, only 39% of total per capita rural household income was generated through agricultural activities (compared to 52% in 2004);
- 23% of the rural population was poor, compared to the national average of 23% and 24% in urban areas; less than 2% were extremely poor, compared to 4% in urban areas.
- Between 2004 and 2007, the share of households with 3/4<sup>th</sup> or more of their land cultivated increased (67% versus 64% in 2004). Nevertheless, the share of non-cultivated land remained relatively high. Some of the main reasons mentioned by households who did not cultivate included the lack of irrigation (20%), limited financial resources (19%) and non-profitability of agricultural activity (18%).
- During this period, the proportion of rural households cultivating high-value crops (vegetables, potatoes, fruits and berries, grapes) increased, while the proportion of those cultivating grains and fodder crops declined. Marketability of potatoes, grains, melons and gourds increased in 2007 while marketability of vegetables and grapes somewhat declined.

The proportion of workers in the agriculture sector was above 70% in Aragatson, Ararat, Armavir, Gegharkunik and Vayots Dzor *marzes*, and about 61% in Tavush *marz*.

*Source: Armenia Integrated Living Conditions Survey 2008. National Statistics Service. Armenia*

<sup>33</sup> Country Report Armenia. Economist Intelligence Unit, November 2009.



### *Household agricultural production in August 2009*

In August 2009, 87% of rural households and 9% of urban households owned land. However, overall only 60% of the land was cultivated. The average land acreage cultivated ranged from a low 0.5 ha among the poorest (lowest quintile of expenditures) to a high of 27 ha among the richest (highest quintile). It seems that the global economic crisis encouraged households (mainly in rural areas) to cultivate more. A quarter of rural households reported an increase of their own food production. A rise was also noted in the number of households raising pigs and poultry, mostly for own consumption.

At the same time, the crisis reduced the capacities of households to invest in agriculture. Some 37% indicated that they had to decrease the purchase of quality seeds, fertilizer and irrigation water. The main constraint mentioned was an increase in agricultural labour costs compared to 2008, in a context of reduced cash availability, increased irrigation costs and depressed market demand.

### *Household agricultural production in February 2010*

Information on crops and livestock was obtained from local authorities in Tavush, Gegharkunik and Lori *marzes*. As indicated in Box 2 above, agriculture is a major source of employment in the first two *marzes*.

- In Tavush *marz*: only slightly more than half the acreage was cultivated mostly due to the proximity to the border with Azerbaijan). Furthermore, hail destroyed crops in many communities. Overall the harvests of wheat, potatoes and grapes declined compared to 2009. The number of heads of livestock also decreased, especially sheep and cattle.
- In Gegharkunik *marz*, the acreage sown under potatoes and winter wheat decreased in the 2009 agricultural season. Government's subsidies for spring cereals and fodder cultivation occasioned an increase of the acreage cultivated under these productions. The number of heads of livestock declined in 2009 compared to 2008, particularly cows, sheep and pigs.
- In Lori *marz*, farmers are discouraged from cultivating by the lack of profitable market opportunities for their produce (essentially potatoes and vegetables). The lack of good quality seed was an additional constraint for cultivating beyond subsistence levels. The number of heads of livestock decreased (-6% for cows, -15% for goats) except for sheep (+60%) but the latter was essentially explained by some re-stocking occurring after the slaughters that took place to stop the spread of Swine Flu.

Households, Key Informants and Focus Group discussions in villages where households were directly hit by the crisis (migrants areas, construction work areas) confirmed that the acreage of land cultivated generally decreased in 2009 and was expected to decrease further in 2010, due to the lack of income and loss of remittances to purchase agricultural inputs (seeds, fertilizer) and pay for services (fuel, agricultural machinery). Furthermore, between 1/3<sup>rd</sup> and one-half of households in these villages also slaughtered more than 3/4<sup>th</sup> of their livestock herd in order to generate income from the sale of the meat and reimburse loans taken at the bank for unsuccessful migration to Russia (see paragraph 3.6.5), for food and to pay the utilities bill.

### 3.5.2 – Households' agricultural production and food consumption levels

#### *In August 2009*

Most of the households (78%) interviewed in August 2009 indicated that their production was for own consumption. Only about 10% of the households reported the sale of crops and/or animal productions as their main source of income. **Households who had access to land and who actually cultivated it were more likely to have an acceptable diet** than those

without land or who did not cultivate, mostly because they could not afford the cost of preparations. Only 16% of households with inadequate food consumption had access to land, and 2/3<sup>rd</sup> of them had cultivated, compared to 35% and 91% respectively among households with adequate food consumption. Households vulnerable to food insecurity were similar to those with adequate consumption (38% had access to land and 89% cultivated).

Households with acceptable diet who cultivated were also more likely to have produced vegetables, pulses, fruits or grapes, than households with a worse diet. The better dietary pattern of some households may be linked to a more frequent consumption of self-produced pulses and potatoes compared to other households who were more likely to sell them. The income generated by these sales may have been used to purchase more staple food rather than to diversify the diet by buying expensive items such as animal products or additional pulses.

**Households with an acceptable diet were also more likely to own animals**, especially cattle and chicken, than those with a poorer diet. In addition, the former were less likely to report a decrease in the number of animals between 2008 and 2009, than the latter. It may be assumed that animal ownership facilitated consumption of animal products, thereby improving dietary diversity and quality.

*In February 2010*

Results from the follow-up in February 2010 showed that households in rural areas continued to rely on their own production for the consumption of food such as cabbage, potatoes, vegetables, fruits and dairy products for those still owning animals. As such, they were less dependent from market purchases than households in urban areas.

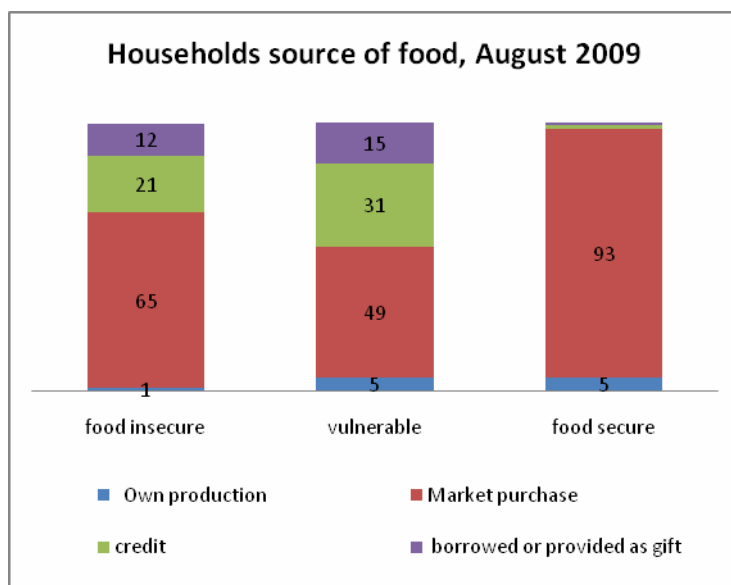
### **3.6 – Update on the effects of the crisis on households' economic access to food**

#### **3.6.1 - Sources of food**

*In August 2009*

In the August 2009 survey, a very low proportion of food consumed in the week prior to the survey came from own production: almost none of it for households with unacceptable food consumption and 5% of it for households with acceptable food consumption. The main source of food was market purchase for households with acceptable food consumption. **A significant share of food was obtained from credit (19%-33%), borrowing or gifts (11%-16%)** by households with unacceptable food consumption, highlighting their difficulties to secure enough cash for food by their own means. Most of the credit and loans were provided by relatives or friends, and by shop-keepers or money lenders.

Households relying on social benefits or on casual labour (skilled or unskilled) as their main sources of income were more likely to have obtained their food using credit (16% and 10% of their food respectively) than other households (between less than 6% of their food). As expected, households relying on agriculture as their main source of income obtained a much higher share of their food from their own consumption (20%).



Source: Household Food Security Survey, WFP, August 2009

*In February 2010*

**Dependence on loans from shops to obtain food** was a striking feature of the Focus Group discussions in February 2010, as more and more households were fully dependent on benefits and pensions as their only source of income. While the level of these transfers was increased in 2009 (see paragraph 3.6.6), it remained below the increase of food prices, and the amounts received are insufficient to cover minimum food and other essential needs. At present, transfers are immediately used to reimburse food debts in the shops (and sometimes pay the utility bills), so that new food debts can be incurred.

While rural households can consume their own production to some extent (cabbage, potatoes, dairy products), urban households depends on purchase. Among those interviewed, about 1/3<sup>rd</sup> occasionally received **food as gift** from relatives residing in rural areas.

### 3.6.2 – Sources of income

#### *Main sources of income*

According to the 2008 ILCS (see table 8), the first source of income is hired employment (49% of total income), followed by state pensions and benefits (16%), remittances (9%), self-employment (8%) and consumption of own food production (8%). In rural areas, the consumption of own produce plays an important role as a source of in-kind income. The share of non-monetary income was 22% for rural households versus only 3% for urban households.

**Table 8 – Sources of household income**

Source of income	Total	Urban areas	Rural areas
<b>Monetary income</b>	<b>91%</b>	<b>97%</b>	<b>78%</b>
- Hired employment	49%	58%	30%
- Self-employment	8%	10%	4%
- Sale agric. products & livestock	6%	1%	18%
- Property	~0	~0	0
- State pensions & benefits	16%	16%	17%
- Remittances	9%	10%	7%
→ from Armenia	→ 1%	→ 2%	→ 1%
→ from abroad	→ 8%	→ 8%	→ 7%
- other income	2%	2%	2%
<b>Non-monetary income</b>	<b>9%</b>	<b>3%</b>	<b>22%</b>
- Consumption home-produced food	8%	2%	21%
- Free non-food products & services	1%	1%	1%
<b>Total income</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: Armenia Integrated Living Conditions Survey 2008. National Statistics Service. Armenia

As mentioned, **the global economic crisis has affected employment opportunities and remittances**, hence two major sources of income. The pension system has also been put under strain in various countries of the Caucasus and Central Asia region, although it has been relatively protected so far in Armenia (see paragraph 3.6.6).

#### *Sources of income and food security*

According to the August 2009 WFP household survey, households whose main sources of income were **pensions, unskilled casual labour, social benefits or loans/credit** were more likely to have an inadequate food consumption than those depending on regular salaries (public or private sector), agriculture, business, or remittances: among the former, between 9% and 16% of the households had an inadequate diet and 25%-26% were vulnerable, compared to 1%-5% among the latter.

This result highlights the likelihood of insufficient food consumption of some of the households relying on social and external assistance or on low-paid and irregular jobs, most probably because the level of remuneration obtained is insufficient to access sufficient amounts and variety of food items.

The vulnerability to poor food consumption of households depending on social benefits was already observed in the focus group discussions that took place in April 2009. A slightly better dietary pattern, though still unsatisfactory, was noted among households who relied on seasonal migration remittances, construction work in Yerevan and marketing of farm produce in the outskirts of Yerevan (due to depressed prices of potatoes). Farmers and livestock breeders in a non-remote village were having a better diet than most of the other households essentially owing to the access to their own food production for consumption and sales and combination with seasonal migration.

The February 2010 follow-up study indicated that **an increasing number of households became fully dependent on social benefits as their only source of income**, due to the loss of jobs (see below) and remittances (see paragraph 3.6.5). Based on the previous survey, the number of households with poor food consumption is also expected to have increased consequently.

### 3.6.3 – Employment and income levels

The proportion of working age population reached 68% at the beginning of 2009, while the elderly (above 65 years of age) represented 12% and children below 16 years of age 20% of the population.

#### *Unemployment rates*

The official unemployment rate as of January 2010 was estimated at 7.1%, up from 6.3% in 2008-2009 and close to the 7%-7.5% rates reported in 2006-2007. The number of unemployed at the beginning of 2010 was about 100,000, and 84,000 more were seeking a job. Unemployment benefits were received by 26,500 persons in 2009, against the planned figure of 14,500.

Official records are believed to under-report the actual number of unemployed people due to the low benefits obtained (AMD 13,910 per month in 2008) and thus low incentives to register. Indeed, according to a recent study conducted by the State Employment Agency and ILO, **the real level of unemployment<sup>34</sup> would be 27.5%**. The 2008 Armenia Integrated Living Conditions Survey (ILCS) reported that 16% of the economically active population were unemployed. Higher unemployment rates (above 17%) were reported in **Shirak, Kotyakh, Vayots Dzor** and **Lori marzes**, and the capital city **Yerevan**.

**The crisis has increased unemployment** as numerous mines have been closed, construction activities have dropped, and migrants working abroad have returned home for lack of employment opportunities outside the country<sup>35</sup>. Indeed, focus group discussions conducted by WFP in April 2009 among construction workers in Yerevan and Vanadzor towns (Lori *marz*), and among mine workers in Lernadzor village (Syunik *marz*) and Masis town (Ararat *marz*) had reported a number of lay-outs, reduced salaries and increased difficulties to find alternative employment opportunities.

In August 2009, 41% of households reported the loss of employment as one of the main difficulties occasioned by the global economic crisis. The follow-up study in February 2010 with households particularly vulnerable to the effects of the crisis (construction and mine workers) **confirmed the decrease in regular salaried employment, especially in urban areas**. Job losses in the construction sector occurred early in 2009 and did not change much during the year. Conversely, additional losses of regular wage labour were incurred in 2009 by those employed in village administration and services (e.g. schools), due to reduced village budget, itself resulting from less tax contribution from villagers and lower allocations from the central government. Irregular labour in construction or small trade also declined as demand continued to be low.

The 2008 ILCS indicated that the unemployed persons looking for work spent almost 1 year and a half (15 months for men and 20 months for women) before finding one. This length of time searching for a job may increase in a context where pressure on jobs has risen with the lay-off of workers, loss of opportunities for seasonal migrants abroad, and some return of long-term migrants. Indeed, Focus Group participants and Key Informants met in February 2010 were pessimistic about perspectives for regular employment in the near future.

**Table 9 - Evolution of unemployment rate**

	2006 (act.)	2007 (act.)	2008 (prel.)	2009 (3 <sup>rd</sup> quarter)	2010 (proj.)
<b>Unemployment rate (%)</b>	7.5%	7.0%	6.3%	6.8%	-

Source: Armenia: Second Review Under the Stand-By Arrangement. International Monetary Fund, October 2009 – Central Bank of Armenia

<sup>34</sup> This estimate includes any person who has been unemployed in the previous 4 weeks, who is looking for a job and willing to take any job.

<sup>35</sup> Armenia: Country Partnership Strategy. International Monetary Fund, April 2009.

*Income levels from employment and self-employment*

The average monetary income (from both employment and self-employment) reported by households interviewed in the 2008 Integrated Living Conditions Survey (ILCS), was lower than the CBA statistics, at AMD 65,328 per month, with a **marked difference between males and females** (AMD 77,742 and AMD 46,599 respectively). This gender difference may explain why women-headed households are more likely to be poor than men-headed households, assuming that women-headed households include less men of working age (see paragraph 3.9.2).

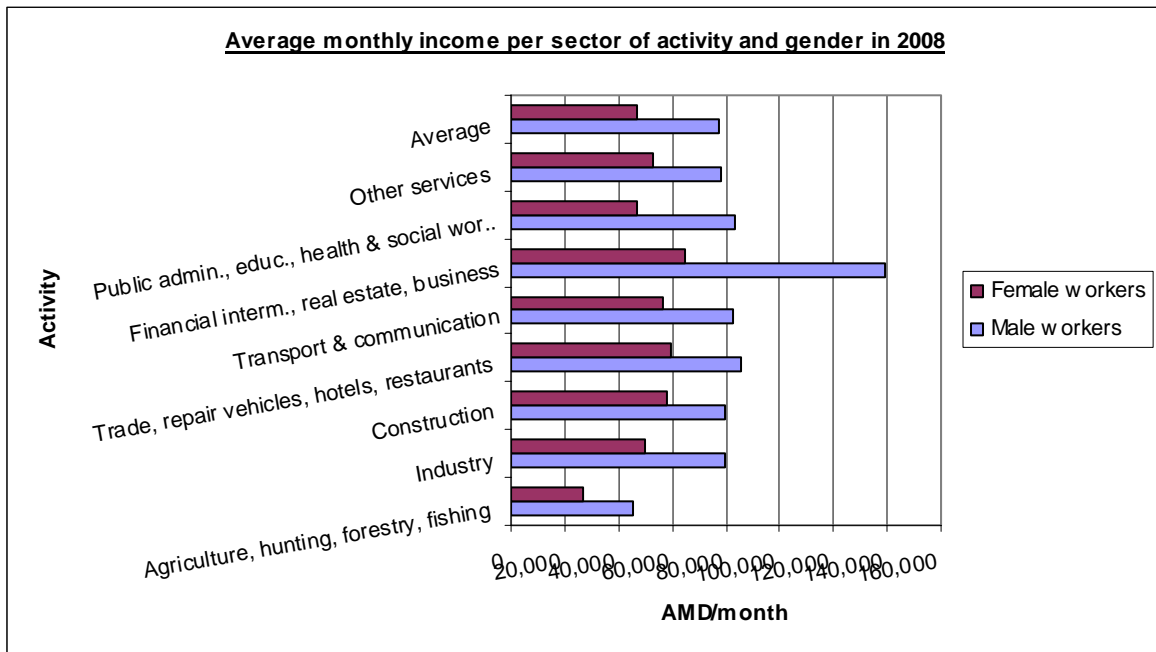
Average monetary income levels also differed across sectors of employment, with lower incomes being recorded for agriculture and related activities, followed by public administration, and higher incomes for financial/real estate/business activities, followed by construction (see table 10).

On average, the level of income increased in both urban and rural areas in 2008 (by 21% and 19% respectively) compared to 2007, but remained stable at the beginning of 2009. The increase in 2008 was particularly significant in **the level of pensions and benefits (by 59%)**, as well as for income received from hired employment (by 13%). Conversely, income obtained from remittances declined by 13%, from the sale of animal products and livestock by 9%, and from self-employment by 4%.

**Table 10 – Average monetary income in 2008 by type of economic activity and gender**

Sector	Monetary income (AMD)	Average	Male workers	Female workers
Agriculture, hunting, forestry, fishing		35,580	45,460	27,140
Industry		71,990	79,880	50,230
Construction		79,010	79,580	58,210
Trade, repair vehicles, hotels, restaurants		74,310	85,410	59,700
Transport & communication		77,750	82,280	56,540
Financial intermediation, real estate, business		114,800	139,000	64,640
Public administration, education, health & social work, personal services		59,450	83,620	46,670
Other services		67,340	78,150	52,800
<b>Average</b>		<b>65,330</b>	<b>77,740</b>	<b>46,600</b>

Source: Armenia Integrated Living Conditions Survey 2008. National Statistics Service. Armenia



Source: Armenia Integrated Living Conditions Survey 2008. National Statistics Service. Armenia

As a result of the global crisis, **income levels in 2009 may have fallen relatively more in the latter two sets of activities (public administration, financial/real estate/business) than in agriculture**, thus lessening the differences in income levels between types of activities.

Households interviewed in August 2009 overwhelmingly reported a decrease of their income compared to 2008, from public sector or private sector regular salaries, earnings from irregular work or self-employment, from remittances (see paragraph 3.6.5). A decrease was also reported from other types of support including in-kind. On the other hand, income had increased from animal breeding and/or sale of animal products, renting out land/property, pensions, unemployment benefits and other social allowances (see paragraph 3.6.6).

Some of these trends were confirmed in February 2010 focusing on households vulnerable to the crisis. They reported that income from regular or irregular wage labour, farming, cattle breeding or remittances decreased. In terms of relative contribution to the total income, **the share of income from self-employment** (mostly in crops and animals breeding) **and family benefits increased**, while **the share of income from wage labour and remittances decreased**.

#### 3.6.4 – Purchasing power

As mentioned in Section II, the Consumer Price Index remained at a relatively low level (about 3.5% in 2009), down from its peak of 9% in 2008 when it reflected the increase of international food and fuel prices. Food prices decreased in 2008 in rural areas (-2.1% between the last and the 1st quarter) but not in urban areas (+6.8% between the last and the 1<sup>st</sup> quarter in the big cities). Prices of imported food rose when the national currency (dram) was depreciated against the US dollar in March 2009.

Almost 3/4<sup>th</sup> of households interviewed in August 2009 reported high food prices as one of the difficulties they had faced, and 43% mentioned high fuel prices. In February 2010, households and Focus Group discussions indicated that **food prices had not abated**. The purchasing power of those depending on social benefits decreased, as the rise of benefits in 2009 did not compensate the increase of food prices.

Real wages have been rising rapidly in recent years. However, wages vary widely across sectors, with employees of banks and other finance companies earning around 3 times higher than the average.

Between January and September 2009, the average monthly nominal salary reported by the Central Bank of Armenia (CBA) statistics was about AMD 98,300 per employee (US\$259, or US\$9 per day<sup>36</sup>). In national currency, the monthly nominal wage increased faster than inflation. However, in US dollar terms the salary actually decreased by about 14% between 2009 and 2008 due to the depreciation of the dram. Combined with inflation, **the purchasing power of working individuals therefore decreased**. The situation is obviously worse for those receiving a lower base salary than the average, having an irregular job, or being unemployed.

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<sup>36</sup> At the September 2009 exchange rate of AMD 380:US\$1 (Central Bank of Armenia).

**Table 11 - Evolution of Consumer Price Index and average monthly salary**

	2006 (act.)	2007 (act.)	2008 (prel.)	2009 (proj.)	2010 (proj.)
<b>CPI</b> (% change)	2.9%	4.4%	9.0%	3.2%	3.7%
<b>Av. nominal monthly salary</b> (AMD)	64,278	77,469	91,331	98,369	-
<b>AMD salary year-on-year changes</b> (% change)	-	20%	18%	8%	-
<b>AMD:US\$ exchange rate</b>	-	-	~305	~380	-
<b>Av. nominal monthly salary</b> (US\$)	-	-	299	259	-
<b>US\$ salary year-on-year change</b>	-	-	-	-14%	-

Sources: Armenia: Second Review Under the Stand-By Arrangement. International Monetary Fund, October 2009 – Central Bank of Armenia, November 2009

As most of the food consumed comes from market purchase (especially in urban areas), and given that most of the expenditures are dedicated to food (see paragraph 3.6.7), the loss of purchasing power caused by the effects of the global crisis directly affects the amount and/or quality of food purchased and consumed.

### 3.6.5 – Remittances

#### Number of migrants

According to statistics from the Ministry of Territorial Administration<sup>37</sup>, the balance of entry/exit from the country between January and November 2009 was about -38,700, indicating that more people left than entered. However, compared to the same period in 2008, this represents some 7,600 less persons who left the country, i.e. **16% less**.

Balance	2006	2007	2008	2009
Arrivals-departures	21,756	-3,223	-23,059	-38,669

Source: Ministry of Territorial Administration, December 2009

A summary of migration patterns in 2008 based on the Armenia Integrated Living Conditions Survey (ILCS) is given in Box 3.

#### **Box 3 – Migration patterns in 2008**

The number of emigrants was 6,700 in 2008, compared to 7,500 in 2007 (11% decrease) and 12,000 in 2000 (44% decrease). The number of immigrants also decreased but to a lesser extent. As a result, the rate of net migration declined by 18% in 2008 compared to 2007, and by 44% compared to 2000<sup>38</sup>.

Most of the emigrants in 2008 moved to the Russian Federation (90%) and the rest to other CIS countries (Ukraine, Belarus and others). While the Russian Federation remains the main destination country, the proportion of migrants leaving for other CIS countries, Europe, USA and Canada slightly declined. Immigrants also arrived mostly from the Russian Federation (84%) and other CIS countries (Georgia, Ukraine and others).

About 9,500 persons migrated internally in 2008. In urban areas, 59% of internal migrants moved from one urban area to another and 41% from urban to rural areas. In rural areas, 73% moved from rural to urban areas, and 27% from one rural area to another.

The 2008 ILCS did not find major changes in the proportion of households with migrant members

<sup>37</sup> Ministry of Territorial Administration, Armenia. <http://backtoarmenia.am>

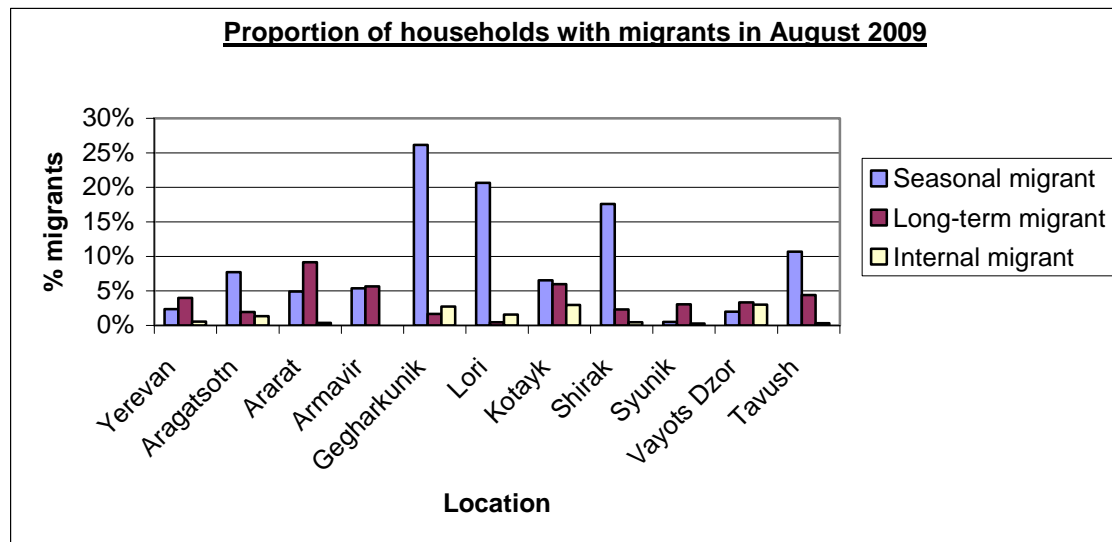
<sup>38</sup> Armenia Integrated Living Conditions Survey (ILCS) 2008, National Statistics Service, Armenia.



compared to 2004 (21% and 20% respectively). In addition, only 4% of households reported a return of previous migrant members, similarly to 2007 and lower than the 10% reported in 2004.

Source: Armenia Integrated Living Conditions Survey 2008. National Statistics Service, Armenia.

In the August 2009 WFP household survey, about 9% of households had a seasonal migrant, 4% a long-term migrant and 1% an internal migrant. The proportion of **seasonal migrants** was higher in **Gegharkunik** (26%), **Lori** (21%) and **Shirak** (18%) *marzes*, and higher in rural areas than in urban areas (15% and 6% respectively). The proportion of **long-term migrants** was higher in **Ararat** (9%), **Kotayk** (6%) and **Armavir** (6%) *marzes*.



Source: Household Food Security Survey, WFP, August 2009

Only 2% of households interviewed in August 2009 reported a decrease (by 4%) of the number of seasonal migrants compared to 2008. The number of internal migrants decreased by 13%, while the number of migrants abroad declined by 5%. In addition, some 12% of labour migrants had either returned since January 2009 or were planning to return. The main reasons for these decreases in labour migration included the absence of jobs (about 31%), very low salaries and high competition (22%) and non-payment or delayed payment of salaries (23%).

In areas of traditional seasonal migration, Focus Group discussions in February 2010 painted a more severe pattern of **loss of migration opportunities**, as jobs could not be found in Russia and salaries offered were also lower. Most of those who used to migrate did not do it in 2009, or had to come back, with huge difficulties to pay back the loan they had incurred to pay for their ticket. According to Key Informants in several locations of traditional migration, while up to 40% of households had external migrants in 2008, they were only 15% in 2009.

While external migration decreased, internal migration within the country seemed to have increased in some locations in 2009, especially from rural to urban areas as households looked for alternative jobs.

Perspectives for external migration in the next few months were uncertain. While some believed that the decline will continue as recovery in Russia will take time, others thought that migration remained one of the best opportunities for income-earning in the current situation in Armenia.

### Remittances in 2008

According to the 2008 ILCS, **remittances contributed to 9% of total income**, bringing on average AMD 2,700 *per capita* per month (US\$8.8)<sup>39</sup>. As a matter of comparison, monetary income from hired employment contributed to 49% of total income, and state pensions and benefits to 16% (see paragraph 3.6.6 below). Most of the remittances came from distant relatives based outside of Armenia (almost 8% of total income). These remittances (almost 80%) are sent from Armenian migrants in Russia, working mainly in construction.

The share of remittances in the monetary income was highest for households in the upper two wealth deciles (11% and 13% of monetary income respectively). However the share also increased significantly for households in the poorest decile (10% of total income).

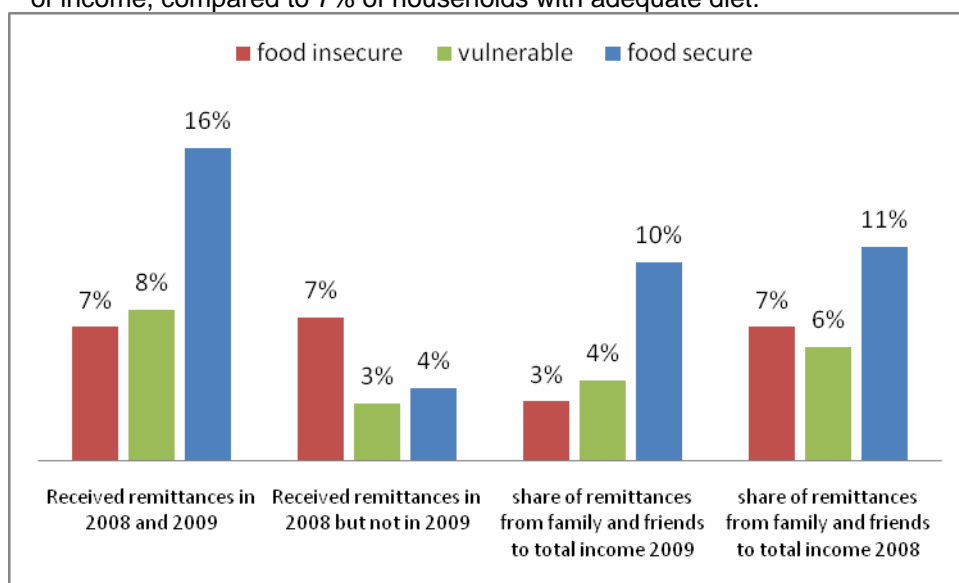
As indicated by various focus group participants in the rapid study conducted by WFP in April/May 2009 and confirmed by Central Bank of Armenia statistics for 2009, the level of remittances and therefore the importance of remittances as a source of income have decreased as a result of the crisis. **The decline in remittances is very much linked to the slowing down of the construction sector in Russia.** Earlier work has also showed that Armenia's remittances originating in Russia are strongly correlated with Russia's GDP growth<sup>40</sup>.

### Remittances in August 2009

By August 2009, the number of households receiving remittances decreased by 6% compared to 2008. The average amount of remittances received also declined by 11%.

About 14% of the households interviewed had received remittances in both 2008 and 2009 and 3% had received remittances in 2008 but not in 2009. **The recent loss of remittances had negative effects on food consumption:**

- only 2% of those who received remittances in both 2008 and 2009 had an inadequate diet (low diversity and frequency of consumption of key food groups), compared with 11% of households who received remittances in 2008 but not in 2009;
- similarly, 2% of households with inadequate diet reported remittances as their main source of income, compared to 7% of households with adequate diet.



Source: Household Food Security Survey, WFP, August 2009

<sup>39</sup> Base on an exchange rate in 2008 of AMD305:US\$1

<sup>40</sup> Armenia. Implications of the Global Economic Crisis for Poverty. Report No.47770-AM. World Bank, September 2009.

The highest proportions of households reporting a loss of remittances in 2009 while they had received some in 2008 were found in **Gegharkunik, Shirak and Vayots Dzor marzes** (about 7%-8% of households in each). Focus group discussions conducted by WFP in April 2009 amongst remittance-receivers in Shirak marz (Guymri town) had already mentioned a decrease of remittances.

#### *Remittances in February 2010*

Key Informants and Focus Group discussions in areas of traditional out-migration confirmed that **both the frequency and amounts of remittances had decreased in 2009, if not disappeared altogether**. On the other hand, households reported a decline in the amounts received rather than in the frequency. Overall, the proportion of households benefiting fell sharply, as well as the share of income provided by remittances.

#### 3.6.6 - Social assistance

The importance of social assistance, already high before in terms of contribution to total income, has increased in the context of the economic crisis to compensate for losses of other income sources. In 2008, social transfers made 16% of total average monthly income of households, a higher share than in previous years (about 12% between 2004 and 2007). **Social assistance contributed to almost half of the total income of households in the poorest decile** in 2008, compared to 8% for households in the highest decile.

At national level, the crisis exacerbates the existing financial imbalance in the public pension system by reducing contribution revenues sharply while leaving expenditures constant or even higher<sup>41</sup>. However, government officials in Armenia have repeatedly ruled out a reduction in spending on pensions, poverty benefits, public sector salaries and other social programmes. The Finance ministry reported double-digit year-on-year increases in these expenditure categories in January-August 2009<sup>42</sup>.

A snap-shot of the current social assistance system is provided in Box 4.

#### **Box 4 – Social assistance in Armenia (Family Benefits Programme and pensions)**

Allowances in Armenia comprise:

- family benefits (AMD 7,500 per month, see below);
- benefit for care for children under 2 years of age (AMD 3,000 per month);
- lump-sum benefit for child's birth (AMD 35,000);
- lump-sums to families eligible for family allowances: lump-sum for the 3<sup>rd</sup> and the next children (AMD 300,000), benefit for child accepted in 1<sup>st</sup> school grade (AMD 20,000), benefit for deceased family member (AMD 50,000);
- emergency assistance assigned for 3 months to families in a grave situation but not eligible for the family benefits (AMD 8,000 per month).

The monthly amount of the family benefit is AMD 7,500 (about US\$19) but if there are children in the family, AMD 7,000 is the base amount of the benefit, to which supplements are added, at a rate dependent on the poverty degree, region (high mountainous versus lower altitude), and the number of minors. (Note: the exchange rate of the dram (AMD) against the US\$ in October 2009 was 386:1)

Entitlement to Family Benefits is determined by a vulnerability score based on a means test procedure combining several indicators including social group of each member of the family, number of family members unable to work, residence place, dwelling conditions, average monthly income etc. Each indicator has a numerical value which determines the family's vulnerability score.

Pensions include:

- 'insurance' pensions: provided to persons reaching 65 years of age with at least 5 years of work insurance. An age-scale is effective for women.

<sup>41</sup> Pensions in Crisis: Europe and Central Asia Regional Policy Note. World Bank. November 2009.

<sup>42</sup> Country Report Armenia. Economist Intelligence Unit, November 2009.

- 'social' pensions: provided to persons reaching 65 years of age without work experience.

The base amount of pension in 2008 was AMD 6,800, resulting in an average 'insurance' pension of AMD 21,840. The average 'social' pension was AMD 8,760.

Source: Ministry of Territorial Administration (website <http://backtoarmenia.am>), Armenia

### *Pensions*

In the nation-wide survey conducted in August 2009, almost 39% of households included pensioners aged 63 years and above and thus could receive pensions. Pensions are an important source of income, and for many pensioners they are the only one (about 26% of urban households and 16% of rural households with pensioners did not have working-able members). Pensions are paid without taking consideration of the poverty level.

In the 2008 ILCS, the average pension size received was AMD 21,840 for an insurance pension but only AMD 8,760 for a social pension. The level of pensions was raised in 2009 but not sufficiently to compensate for the increase in prices that had taken place before. In addition, at retail level food prices remain high and some have continued to increase in 2009 (e.g. onions, butter, meat) and early 2010, while pensions were not further adjusted<sup>43</sup>.

### *Family Benefits*

About 5% of households surveyed in August 2009 were large families with 3 or more children aged 0-14 years. The Family Benefit Programme is the largest in terms of population coverage and funds allocated. In 2008, the eligibility score was lowered to enable families to uphold their entitlements regardless of the growth in family's income during the previous year, and the levels of some of the lump-sums were raised.

A number of households with handicapped members are also fully reliant on benefits (and remittances) for their income. In August 2009, 21% of urban households and 16% of rural households with an handicapped member did not have any working-able member.

The Family Benefit Programme in 2008 included more than 2/3<sup>rd</sup> of extremely poor (based on the food poverty line) and 8% of 'non-poor'. However, considering all social assistance provisions, **less than 60% of the extremely poor in the country benefited. Non-coverage of the poor remains thus a serious issue**<sup>44</sup>. In 2008 it was estimated that less than half of the total amount of social assistance benefited the poorest quintile.

According to the 2008 ILCS, poverty would increase from its base level of 23% to 39% (6 percentage points) if pensions and other benefits were terminated, with particularly severe effects on the extremely poor whose proportion would increase from 3% to almost 20%. In fact, decreased of extreme poverty is basically conditioned by the increase of the social transfer, particularly pensions amounts as well as Family Benefits for many vulnerable families. However, it remains that a number of the poor who receive various forms of social assistance are not lifted out of poverty, reflecting the **low amounts of these transfers**.

### *Pensions and Family benefits in February 2010*

Representatives of charity organisations<sup>45</sup> met in February 2010 confirmed that the number of persons seeking assistance increased during 2009 and this trend continued till now. While previously their beneficiaries were essentially lonely elderly people (75 years old and above), **an increasing number of younger individuals (pensioners 55-60 years old), unemployed persons and whole families** were seeking food at their public kitchens as well as other social assistance, particularly health care. This situation was attributed to the

<sup>43</sup> Personal communication from the President of the German Branch of the Armenian Red Cross, 23 February 2010, confirmed by Focus Group discussions.

<sup>44</sup> Armenia: Social Impact of the Global Economic Crisis, Gohar Gyulumyan, World Bank. June 2009

<sup>45</sup> Personal communications from the President of the German Branch of the Armenian Red Cross, and President of Mission Armenia, 23-24 February 2010.

persistent rise of food prices at retail level without a corresponding indexation of pensions or benefits, as well as to the increased unemployment.

As mentioned, households and Focus Group discussions in areas directly hit by the crisis (concentration of traditional migrants or construction workers) indicated an increased reliance on social benefits as the main source of income, and the insufficiency of these transfers to meet food and other essential needs.

### 3.6.7 - Expenditures

#### *Total expenditures*

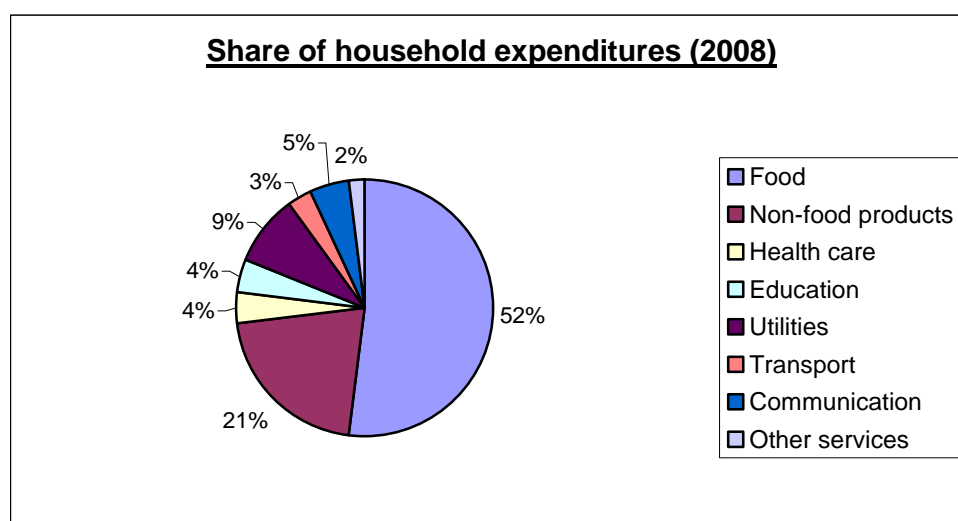
Household consumption expenditure decreased across all main categories by 7% on the 2<sup>nd</sup> quarter of 2009 compared to the 2<sup>nd</sup> quarter of 2008. Expenditures on health care, transportation and purchase of durable goods declined by over 20 percent. On the other hand, spending on alcohol spiked by over 60%.

The estimated total *per capita* monthly expenditures were lower in the WFP August 2009 survey than in the 2008 ILCS but this may also be due to methodological differences as well as difficulties to estimate and convert in monetary terms the amount of own food production that is consumed. The average amount of monthly *per capita total* expenditures of households with a 'poor' diet in August 2009 (accounting for food coming from own production) was estimated at AMD 16,757, i.e. below the 2008 extreme poverty line (AMD 17,232). The average amount of expenditures of households with a 'borderline' diet was AMD 18,765, i.e. below the 2008 poverty line (AMD 25,188).

Bearing methodological differences in mind, even households with an 'acceptable' diet had a level of monthly *per capita* expenditures, at AMD 29,150 only slightly higher than the 2008 poverty line. As a result, while 82% of households with inadequate food consumption fell under the 2008 poverty line in August 2009, 60% of households with adequate food consumption were also poor (see also below). The wealthiest households (highest decile) spent 18 times more than households in the poorest decile.

#### *Food expenditures*

The 2008 ILCS survey indicated that, overall, **households dedicated more than half of their *per capita* expenditures to food (52%)**. This proportion is slightly lower than in previous years (53% in 2007, and 56%-57% between 2004 and 2006). The share of food expenditures was larger in the poorest deciles (66%-67%). A similar proportion of food expenditures was found in the August 2009 WFP survey (53%) with the highest share observed among households with 'borderline' diet (60%).



Source: Armenia Integrated Living Conditions Survey. National Statistics Service. Armenia

The total amount of monthly *per capita* food expenditures on food in 2008 was AMD 20,530, with a clear decrease in the poor quintiles (table 12).

**Table 12 – Food expenditures per poverty quintile in 2008**

	1 <sup>st</sup> quintile (poorest)	2 <sup>nd</sup> quintile	3 <sup>rd</sup> quintile	4 <sup>th</sup> quintile	5 <sup>th</sup> quintile (richest)	Average
% total expenditures	66%-67%	60%-63%	57%	53%-55%	40%-47%	52%
Average per capita per month (AMD)	14,160	17,400	19,840	23,300	27,960	20,530

Source: Armenia Integrated Living Conditions Survey 2008. National Statistics Service. Armenia

A similar pattern was observed in the nation-wide household survey conducted in August 2009. Households in the wealthiest decile spent 7 times more on food than households in the poorest decile.

In the 2008 ILCS, **food expenditures represented at least 2/3<sup>rd</sup> of total expenditures in the poorest two quintiles**, compared to 40% in the highest quintile. The richest decile was also more likely to consume expensive food products such as meat, dairies, fruits and eggs than the poorest decile. Any loss of income among the poor occasioned by the crisis is thus highly likely to jeopardize food consumption, as there is little margin to decrease non-food consumption, or further decrease the consumption of food items of high nutritional quality.

**Table 13 – Main expenditures of households in the lower and upper poverty deciles**

Poverty decile	Food	Non-food products (without alcohol or tobacco)	Services
1 <sup>st</sup> (poorest)	67%	10%	20%
2 <sup>nd</sup>	66%	8%	21%
9 <sup>th</sup>	47%	23%	39%
10 <sup>th</sup> (richest)	40%	23%	33%

Source: Armenia Integrated Living Conditions Survey 2008. National Statistics Service. Armenia.

Similarly, in the August 2009 household survey, **food expenditures represented 71% of total expenditures in the poorest decile** compared to 28% in the wealthiest decile. During the month of July, the main food expenditures were for bread and wheat flour.

The same was confirmed in the follow-up study in February 2010. Food expenditures represented more than half of total expenditures among the households interviewed. The share was higher in urban areas.

#### *Non-food expenditures*

In the 2008 ILCS, non-food products and utilities (the latter particularly important in urban areas) were the main expenditures other than food (16% and 9% of total expenditures respectively). Gas was the dominant source of domestic household heating in 2008 (61%) while it was wood in 2004. Monthly *per capita* expenditures of non-poor households on housing utilities were 3.6 times higher than that of the extremely poor in 2008. Health expenditures represented 4% of total expenditures (see below).

In the August 2009 survey, clothes, electricity and tobacco were the next expenditures after food. The follow-up study in February 2010 did not report significant changes in the share of food and various non-food expenditures. However, as the total amount of expenditures decreased with less income available, spending on food and non-food items also fell.

#### 3.6.8 - Credit and indebtedness

Increased indebtedness to compensate for unemployment, decreased salaries and/or remittances was mentioned by participants in focus group discussions conducted by WFP in

April 2009. Traders met at the time also mentioned difficulties linked to an increased number of households asking for credit as well as to obtain credit themselves for their small business.

In August 2009, almost half of households (40%) had debts. **Households with inadequate food consumption were much more likely to resort to credit for their expenditures.** About 21% of all monthly per capita expenditures were made on credit by these households and 26% on credit by vulnerable households, compared to 4% on credit by households with adequate food consumption. Indebtedness was also more frequent among large households and households with handicapped members (more than 54%).

Interviews and Focus Group discussions conducted in February 2010 in locations directly hit by the crisis and among social assistance beneficiaries revealed that virtually all households were indebted. **The main reason for the debt was food** as well as to pay the ticket for out-migration in areas where migration is a common livelihood strategy. **Delayed payment of utility bills** was also very frequent and a cause of high stress due to the risk of gas and electricity cuts. The social benefits and pensions received were typically used to re-pay back so that new food loans and new delays in bills payment could be incurred.

### **3.7 – Update on the effects of the crisis on human capital**

Through its effects on households' income, the global economic crisis can affect not only food expenditures and consumption, but also expenditures on other essential requirements that protect and develop human assets, particularly health, nutrition and education. Furthermore, expenditures on health and changes in nutritional status are important to monitor in terms of food security because sickness impairs the ability of the body to properly metabolise the food consumed and contributes to malnutrition even if food consumption is adequate. Education is also relevant in terms of livelihood prospects, income earnings and thus households' economic access to food on the medium and longer-term.

#### **3.7.1 - Health**

State expenditures on health remained broadly unchanged as a share of GDP between 2006 and 2008, despite a 25% year-on-year nominal increase. Health care spending per head is one of the indicators targeted in the government's Poverty Reduction Strategy Paper, but it remains low at about US\$50 in 2007, compared with US\$2,000-2,500 in Western Europe<sup>46</sup>.

Despite official commitments to the free provision of some services, private financing (much of it through informal payments) represents about 2/3<sup>rd</sup> of national health expenditures. In the 2008 ILCS, health care expenditures represented only 4% of total household expenditures on average but amounted to 13% of total non-food expenditures of households who sought medical treatment in 2008. This suggests that the **treatment of sickness is expensive in Armenia**, especially for poor households. Recipients of Family Benefits (enrolled on the basis of poverty levels) who had used the health Basic Benefits Package (BBP) in 2008 spent on average AMD 8,420 per person (US\$27.6).

Household expenditures on health care declined by 20% in the 2<sup>nd</sup> quarter of 2009 compared to the same period in 2008. The decline was stronger among the poorest quintile compared to the wealthiest quintile<sup>47</sup>.

In August 2009, an alarmingly high proportion of households reported foregoing health care or medication due to financial difficulties. Some 39% indicated that they had reduced or stopped using health services, and 21% reduced or stopped buying the medicine they required.

This pattern was confirmed by Key Informants, households and Focus Group discussions held in February 2010. **Most households did not seek health care or did not purchase**

<sup>46</sup> Country Profile 2008 Armenia. Economist Intelligence Unit.

<sup>47</sup> Armenia. Poverty and Social Impact of the Global Economic Crisis. L. Ersado. World Bank, November 2009.

**prescribed medicines for lack of income to cover the cost.** Hospital treatment was out of reach (in one case, an operated patient was taken out by their relatives without paying the bill). At the same time, the stress occasioned by the crisis was blamed for occasioning additional health problems and/or deepening existing ones.

Facilitated health care is thus important in the economic crisis context. Free health care is provided under the BBP but only 22% of the poor and 31% of the extremely poor households benefited in 2008.

### 3.7.2 – Nutritional status

There has not been any nation-wide nutritional status survey in Armenia since the Demographic and Health Survey (DHS) of 2005. At that time, stunting among under-5 children was estimated at 13% (with a higher rate of 18% in Yerevan) and wasting at 5%. These results showed no improvement in stunting rates since 2000 and a slight increase in wasting rates (from 2% to 5%). At the same time, significant proportions of women aged 15-49 years were found to be overweight (27%) or obese (16%), representing a significant public health challenge. More than 1/3<sup>rd</sup> of children 6-59 months were anaemic (37%), representing a 50% increase since 2000 (when 24% were anaemic). The proportion of anaemic women also doubled during the period, from 12% in 2000 to 25% in 2005.

In the absence of recent survey, it is not possible to gauge the possible effects of the crisis on the nutritional status of vulnerable groups of the population. It is plausible however, that the consumption of a less diversified diet which brings less minerals and vitamins, and decreased use of health services, are affecting growth, micronutrients status and resistance to infections particularly of children, pregnant and lactating women, the elderly and the chronically sick. It must also be noted that the consumption of a diet essentially based on (cheap) staples (bread, potatoes, cabbage and fat) to the detriment of (more expensive) fruits and vegetables can also contribute to overweight.

UNICEF has set up a pilot surveillance system in selected locations of the country to monitor the effects of the global economic crisis on child well-being, but results are not yet available. Another DHS is scheduled for 2010-2011 and its results will be important to check upon the assumptions made on the effects of the crisis on nutrition.

### 3.7.3 - Education

While government's spending on education has increased in recent years (equivalent of 2.6% of GDP by 2007), it is still low by comparison with OECD countries, where average expenditures on education are around 4-5% of GDP<sup>48</sup>.

In 2008, household expenses for education comprised almost 10% of the total non-food expenditures. While nearly the entire population is literate and primary and secondary education completion rates are high, enrolment and drop-out differences are noted between the rich and the poor. The average expenditures on education for the poorest quintile were 12 times lower than that for better-off households.

According to the 2008 ILCS, the proportion of drop-outs after basic education is especially high among children from poor households. Affordability is also a major reason explaining why students from poor households drop out of school after basic education and especially after upper secondary education.

As the economic crisis is putting a strain on household resources, it **increases the risk that students do not pursue their studies after basic and after upper secondary education, thus limiting future higher income earning opportunities offered to a qualified labour force.** Indeed, the follow-up study in February 2010 in locations directly hit by the crisis

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<sup>48</sup> Country Profile 2008 Armenia. Economist Intelligence Unit.



indicated that attendance became more irregular as parents could not afford adequate clothing and other school expenditures, and that tertiary level and especially higher level education was suspended or discarded due to the inability to pay for tuition and transportation costs.

### **3.8 – Update on the effects of the crisis on poverty**

#### **3.8.1 – Changes in the levels of poverty**

The crisis' effects on rising unemployment and falling remittances are likely to reverse some of the gains in poverty, due to a drop in per capita disposable income (see Box 5 for a brief description of how poverty is measured in Armenia and Annex 1 for more details). The poverty rate increase is exacerbated by the **disproportionately higher impact of the crisis on the construction and mining sectors**.

#### **Box 5 – Measurement of poverty in Armenia**

Official poverty rate estimates in Armenia are based on a consumption aggregate calculated using household food and non-food consumption data collected in the Armenia Integrated Living Conditions Survey (ILCS). A summary of the ILCS approach and methods to estimate poverty incidence can be found in Annex 2.

Two measures of poverty are used:

- the food poverty line, to determine the extremely poor population, representing the amount of consumption necessary to satisfy basic food needs;
- complete poverty, which comprises the food poverty line and a non-food allowance including essential or minimum non-food needs.

The food poverty line was estimated at AMD 17,232 per adult equivalent per month in 2008 (equivalent to about US\$45 in September 2009, or US\$1.5 per day) while the overall poverty line was AMD 25,188 (about US\$66 per month, or US\$2.2. per day).

*Source: Armenia Integrated Living Conditions Survey (ILCS) 2008, National Statistics Service.*

At the beginning of 2009, the World Bank<sup>49</sup> anticipated a fall of income per capita, returning to the 2007 level in 2009-2010 before picking up again. As a result, poverty rates were expected to increase by about 5 percentage points from the base of 23% in 2008 to 2010, translating into 147,000 persons who could fall below the poverty line in 2009 and another 25,000 in 2010. The **projected poverty incidence in 2010 at about 28%** would be higher than the 2006 level (26%), implying that the poverty reduction recorded between 2006 and 2008 would be more than fully offset by poverty increase due to the crisis.

The projections for 2009 were confirmed using the latest data<sup>50</sup> from the ICLS. **Overall poverty rate increased from 26% in the 2<sup>nd</sup> quarter of 2008 to 28% in the 2<sup>nd</sup> quarter of 2009**. This corresponds to some **90,000 additional poor people** in the country.

The poverty gap was also anticipated to worsen as the already poor become poorer. Extreme poverty was projected to rise by a substantially larger margin due to the fact that the poor are concentrated just above the extreme poverty line. The levels of extreme poverty in 2009 and 2010 could easily surpass their corresponding levels in 2004 and **reach 8% of the population**. Indeed, data from the 2008 ICLS indicated that **the level of extreme poverty nearly doubled from almost 4% in the 2<sup>nd</sup> quarter of 2008 to about 7% in the 2<sup>nd</sup> quarter of 2009, increasing the number of extremely poor individuals by over 107,000**. An estimated 31,000 would be added in 2010. The number of extremely poor in 2010 could outnumber that in 2004 by about 77,000 persons.

<sup>49</sup> Armenia: Implications of the Global Economic Crisis for Poverty. Report No.47770-AM. World Bank, September 2009.

<sup>50</sup> Armenia. Poverty and Social Impact of the Global Economic Crisis. L. Ersado. World Bank. November 2009

Interestingly, the 2008 ILCS showed that subjective perceptions of poverty based on the personal judgement of individuals regarding their own welfare<sup>51</sup> tended to be lower than poverty estimates obtained using consumption per adult equivalent as an objective welfare measure (17% and 23% respectively). In addition, the proportion of household members who were facing problems with providing basic food needs declined compared to 2004, from 25% to 15%. About 39% considered the satisfaction of basic non-food needs as one of the primary concerns (similar to 2004).

### 3.8.2 - Relationships between poverty and sources of income

**Social transfers** are the main source of monetary income for households in the poorest decile (49% of total income). The importance of remittances also rose for this group between 2004 and 2008 (from 7% of total income to 10%).

**Table 14 – Main sources of monetary income of households in the lower and upper poverty deciles**

Poverty decile	Employment	State pensions & benefits	Sale agricultural products	Remittances	Other income
1 <sup>st</sup> (poorest)	13%	49%	15%	10%	13%
2 <sup>nd</sup>	31%	41%	17%	6%	5%
9 <sup>th</sup>	72%	11%	4%	11%	2%
10 <sup>th</sup> (richest)	73%	8%	4%	13%	2%

Source: Armenia Integrated Living Conditions Survey 2008. National Statistics Service. Armenia.

**Crisis-induced unemployment and fall of remittances are major causes of rising poverty** as the main breadwinners of lower-income households living abroad face falling incomes and job losses. The effect of decreased remittances is compounded by the contraction of economic activity at home. The World Bank's projections<sup>52</sup> at the beginning of 2009 attributed 62% of the rise of poverty rates to the effects of the crisis on the labour market and 22% to the effects on remittances. The balance (16%) was attributed to the effects of the crisis on price changes.

Few of the unemployed are officially unemployed, as the benefits are rather low (AMD 13,910 per month in 2008).

## **3.9 – Food insecurity and poverty**

### 3.9.1 – Relationships between poverty and food consumption

In August 2009, **about 45% of households with inadequate food consumption belonged to the 1<sup>st</sup> quintile of total monthly per capita expenditures (i.e. the poorest)** and 23% belonged to the 2<sup>nd</sup> quintile. Among the vulnerable (indebted) households, 29% belonged to the 1<sup>st</sup> quintile of total monthly per capita expenditures and 23% to the 2<sup>nd</sup> quintile. However, about 16% of the households with adequate food consumption also belonged to the poorest quintile and 19% to the 2<sup>nd</sup> quintile. These results indicate an imperfect overlap between food consumption patterns and economic access, which can be due to:

- access to own food production which protects food consumption despite low expenditures (although own production was factored in the expenditures estimate, calculations are difficult and inaccurate);
- higher share of food consumed which came from gifts or was bought on credit by poor households.

<sup>51</sup> The ILCS includes questions on primary concerns of household members: to provide for basic food needs, to satisfy basic non-food needs, to solve housing problems, to solve health problems, to ensure good education for their children, and other.

<sup>52</sup> Armenia: Implications of the Global Economic Crisis for Poverty. Report No.47770-AM. World Bank, September 2009.

The study conducted in February 2010 clearly showed that the loss of income is impacting the quality of the diet, by **drastically reducing the consumption of meat** especially as well as bread which are more expensive. In rural areas, those who still owned some animals could access some dairy products, fruits and vegetables more easily than their urban counterparts, though quantities were lower as agricultural production decreased for lack of income to purchase inputs and pay for services.

### 3.9.2 - Profile of food insecure and profile of poor households

Understanding the common characteristics and differences between food insecure and poor households is important to tailor the right interventions to the right groups. While being poor does not necessarily mean facing problems with food consumption, and vice-versa, there are many overlaps in the factors associated with food insecurity and with poverty, and food insecure and poor households share several common characteristics.

#### *Profile of households with inadequate food consumption*

The main characteristics of households with inadequate food consumption identified in the survey conducted by WFP in August 2009 are summarized in Box 6.

#### **Box 6 – Main characteristics of households with inadequate diet in August 2009**

The household survey conducted in August 2009 indicated that inadequate food consumption was more likely to be observed among:

- **female-headed households:**
  - 8% with inadequate consumption versus 3% within male-headed households;
  - among those with inadequate food consumption, 57% were female-headed and 43% male-headed;
- **unmarried heads of household** (single, divorced/separated or widowed): 8%-10% with inadequate food consumption versus 3% within married heads of households;
- **disabled-headed households:**
  - 7% with inadequate consumption versus 4% within other households;
  - among those with inadequate food consumption, 22% had a disabled head;
- households with a **large ratio of dependent members** (more than 70%):
  - 7% with inadequate food consumption versus 4% within households with less than 70% dependent members;
  - among those with inadequate food consumption, 23% had a large dependency ratio;
- households **without a seasonal migrant or without an internal migrant**: 5% with inadequate food consumption versus 2%-3% if there were such migrants;
- households who **never received remittances**: 5% with inadequate food consumption versus 2% within those who received remittances in both 2008 and 2009;
- households who **received remittances in 2008 but not in 2009**: 7% with inadequate food consumption versus 1% within those who received remittances only in 2009;
- households **with men who are not regularly employed**:
  - 7% with inadequate food consumption versus 1% within those without men irregularly employed;
  - among those with inadequate food consumption, 18% had irregularly employed men;
- households **whose main source of income comes from pensions, unskilled casual labour, social benefits or loans/credit**:
  - between 9%-16% with inadequate food consumption and 25%-26% vulnerable, compared to 1%-5% with inadequate food consumption and 7-17% vulnerable among those depending on regular salaries (public or private sector), agriculture, business, or remittances;
  - among those with inadequate food consumption, 32% were relying on pensions and 15% on loans/credit.
  - Among those vulnerable, 17% were relying on pensions and 17% on loans/credit

*Source: Household Food Security Survey, WFP, August 2009*

Conversely, some key characteristics were associated to the consumption of an adequate diet:

- receiving remittances in both 2008 and 2009;
- regular employment; and
- access to land and own agricultural production.

However, remittances and regular employment have been put under strain by the economic crisis, while agriculture was limited by the lack of resources to procure agricultural inputs. It may be therefore that **some households who had a proper diet suffer from a degradation in the future as their sources of income and food deteriorate.**

There were no significant associations between the adequacy of food consumption and:

- the refugee/resident status of the head of household,
- the elderly age of the head of household;
- having or not long-term migrant members.

#### *Profile of poor households*

The main characteristics of the poor identified in the 2008 ILCS survey are summarized in Box 7. A number of these characteristics are 'structural' rather than linked to specific conjunctural factors and not be expected to have changed as a result of the economic crisis. This includes: gender of the head of household, size of the household, number of children below 5 years of age, presence of elderly members and level of education. However, **the crisis is likely to have increased the frequency of other factors associated with poverty, including unemployment and the absence of migrant members.**

#### **Box 7 – Main characteristics of poor households in 2008**

Analysis carried out with the ILCS survey household data in 2008 indicated that:

- There were no significant gender differences in poverty both in 2004 and 2008; however, **female-headed households** were more likely to be poor compared to male-headed households (27% versus 22%); within female-headed households, those with children were more likely to be poor than the national average; reasons could include low wages, unemployment, inability or unwillingness of the migrant father to support the family;
- Poverty incidence declined as **age** increased, with children under 5 more affected by poverty than other age groups and poverty lowest among the 50-59 years age group; this can be explained by increased salaries, transfers and other assistance received by younger members;
- **Larger households with children** faced higher poverty risks, mostly due to their higher dependency ratio;
- **Households with 3 or more children below 5 years of age** seemed to experience higher poverty risks than the national average and than those with fewer children;
- The **presence of elderly members above 60 years of age** increased poverty incidence; however, households consisting of only elderly people experienced a substantially lower poverty incidence than the national average (13% lower); in addition, the highest incidence of extreme poverty was recorded among the pensioners in urban areas other than Yerevan (6%);
- **Less educated people (below primary or none)** were more likely to be poor; overall, poverty declined the most between 2004 and 2008 for those with specialized secondary education;
- **Lack of employment opportunities** increased the risk to be poor, and in particular, to be extremely poor; 33% of households with no employed members were poor in 2008 (compared to 24% when 1 member is employed, 19% when 2 members are employed, and 17% when 3 or more members are employed); decreased poverty incidence between 2004 and 2008 among the unemployed households can be a result of increased social transfers (pensions, family benefits etc.) and remittances which are both important sources of income for these households;
- The **absence of migrant members** decreased household welfare; households whose members migrated for work out of Armenia in 2008 had a 7% higher consumption on average than those with no migrants, as well as households with migrant members who had returned from abroad during the previous 12 months;
- The poor and particularly the extremely poor were more likely to reside in a **sub-standard dwelling.**

In addition, in rural areas poverty levels were higher among households who:

- live in **high altitude settlements** (1,700 meters above sea level),
- **lack access to land or own small piece of land** (less than 1 hectare),
- have **limited access to irrigation**,
- **lack or have very limited agricultural machinery or production capacity**,
- have **limited financial capital** of their own.

The rapid decline in poverty level among households living in high altitude settlements (34% in 2004 down to 25% in 2008) was attributed to well targeted social assistance benefits.

*Source: Armenia Integrated Living Conditions Survey 2008. National Statistics Service. Armenia*

### 3.9.3 - Implications for targeting and interventions

Features such as **gender of the head of household**, **unemployment** or **irregular/low-paid occupations**, **absence of migrant members** and **large number of dependents** were common to households facing food consumption difficulties and poor households. In rural areas, lack of land and difficulties to cultivate were also found in both groups.

This shows that a number of criteria that are usable in practice (observable or measurable) are likely to identify both food insecure and poor households. However, because there is not a perfect overlap between food insecurity and poverty (see for example the low level of food expenditures among some households with adequate food consumption), the use of these criteria implies that some households who are poor but not food insecure, and some households who are food insecure but not poor, will be combined in the same pool. This is potentially problematic for some interventions which are appropriate to address poverty rather than food consumption as such, and vice versa.

From a strictly food security perspective, considering that inclusion and exclusion errors are likely to occur, a combination of interventions would be best in order to maximise results on food security outcomes:

- food insecure households who are poor will benefit especially from interventions aiming to increase their income; cash-based interventions will also alleviate poverty among poor households who are not food insecure;
- food insecure households, whether poor or not poor, will benefit from interventions aiming to increase the quality of the diet, possibly through communication/training/capacity building activities and, in rural areas especially, support to agricultural production.

### 3.9.4 - Geographical distribution of food insecurity and poverty

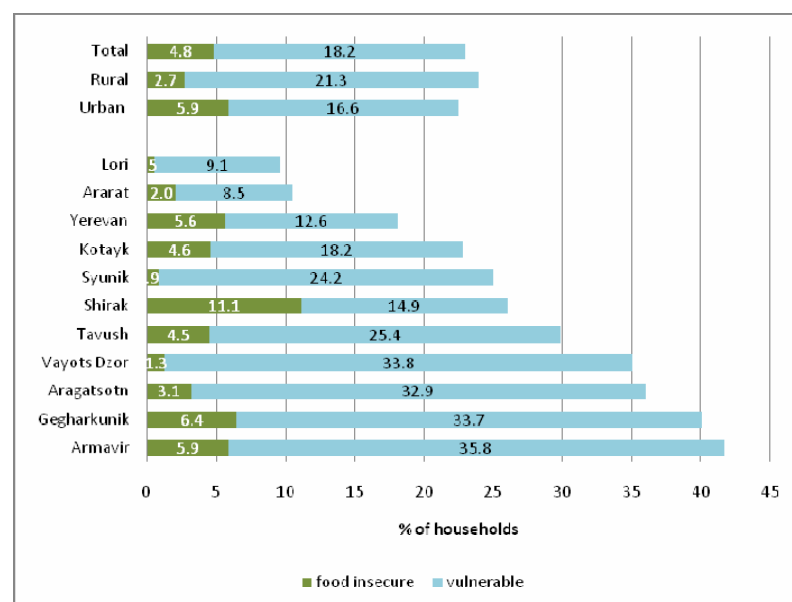
An additional frequently used criteria to target interventions is the prevalence and concentration of food insecurity and poverty.

Taking the results of the 2008 ILCS and the August 2009 household surveys, the proportion of households with inadequate food consumption was consistent with the prevalence of poverty in some of the locations but not all. For example, **the prevalences of poverty and inadequate food consumption were both high in Shirak, Kotyak and Armavir marzes and relatively high in Yerevan**. Conversely, the high proportion of households with inadequate diet in Gegharkunik *marz* did not seem to be associated with a correspondingly high level of poverty, while the relatively high incidence of poverty in Lori, Ararat and Aragatsotn *marzes* did not seem to be associated with correspondingly high levels of inadequate food consumption.

In some cases – but not all - the proportion of households having seasonal or internal migrants could explain some of the discrepancies between poverty and food consumption at *marz* level, given the importance of remittances sent by these particular types of migrants for protecting food consumption. The **proportion of seasonal migrants** was particularly high in

Gegharkunik (26%), Lori (21%) and Shirak (18%) *marzes*, while the proportion of internal migrants was higher in Gegharkunik, Kotyak and Vayots Dzor (about 3% in each) *marzes*.

In other cases – but not all - the **high proportion of households engaged in agriculture** could explain the consumption of an 'acceptable' diet even among the poor. The proportion of workers in agriculture was particularly high in Ararat (70%) and Aragatsotn (74%) *marzes*, but was also high in Armavir (73%), Gegharkunik (72%) and Vayots Dzor (70%) *marzes*.



Source: Household Food Security Survey, WFP, August 2009

### **3.10 – Update on the effects of the crisis on household coping strategies**

Data from the latest ILCS at the beginning of 2009 indicated that besides government support, more than 25% of affected households relied on borrowing or help from relatives and friends. Withdrawing and sale of assets were not considered as viable options to cope with the crisis. The coping strategies which were considered more important - such as government support via pensions and targeted Family Benefits (mentioned by 82% of households) and borrowing from relatives and friends (mentioned by 47%) - substantially increased in the 2<sup>nd</sup> quarter of 2009 compared to the same period in 2008.

#### **3.10.1 – Coping strategies used in August 2009**

The 2009 WFP August survey enquired about a core group of strategies employed by households to cope specifically with food access and consumption difficulties, including how often during the previous 7 days they had eaten less preferred foods, borrowed food/money from friends and relatives, limited portions at meal-time, limited adult intake to protect children's consumption, or reduced the number of meals per day.

Overall, some 30% of households stated that they did not have enough food or money to buy food. Of these households, more than half had been obliged to consume less preferred or cheaper food, a quarter bought food on credit or relied on support from relatives, a fifth reduced the number of meals per day or the amount of food eaten. Only 5% limited adult consumption to protect children's intake.

As expected, the coping strategy index calculated by combining the number and frequency of strategies employed was higher among households consuming an inadequate diet. Almost 2/3<sup>rd</sup> of these households said that there had been times when they had faced difficulties accessing food, compared to less than 30% of the households consuming an adequate diet.

However, comparable proportions of households with inadequate or with adequate diet had used certain strategies every day during the 7 days prior to the survey (see table 14). Among both groups of households, **between 95%-99% had relied on less preferred and cheaper food, 27%-30% had borrowed food or received help from relatives or friends, 18%-21% had limited portions at meal-time, and 12%-14% had reduced the number of meals.**

These results indicate that even though most households may manage to protect their food consumption, many had to employ a series of specific coping strategies on a daily basis to achieve this. On the medium term, **a number of households with an adequate diet may not be able to sustain proper food consumption while using strategies that limit food intake.**

**Table 15 – Proportions of households using food-related coping mechanisms in August 2009**

	Times in the past 7 days when household did not have enough food or money to buy food	Rely on less preferred and less expensive food	Borrow food or rely on help from a relative or friend	Limit portion size of meals at meal times	Restrict consumption by adults in order for small children to eat	Reduce number of meals eaten in a day
<b>Food insecure</b>	65%	98%	71%	64%	29%	61%
<b>Vulnerable</b>	59%	95%	86%	53%	36%	44%
<b>Food secure</b>	21%	99%	31%	48%	21%	48%

Source: Household Food Security Survey, WFP, August 2009

The highest number and frequency of strategies employed to cope with food consumption difficulties was observed among **households whose main source of income was social benefits**, while the lowest index was found among those whose main source of income was agriculture. The latter better ability to cope may be explained by an easier access to own food production, thus enabling to avoid extensive changes in the way food was accessed and type and amount of food eaten.

Besides food-related coping strategies, households coped with income difficulties by foregoing expenditures on some non-food items (68%), reducing/cancelling the use of some health services (39%), switching to cheaper modes of transportation (32%), spending savings (32%), increasing women's involvement in income generation activities (24%), accepting lower wage works (23%), accepting short-term contracts (20%) and looking for alternative sources of income (17%). A few of these strategies are **potentially jeopardizing future livelihoods, including foregoing health expenditures or exhausting savings**. On the other hand, households did not report changing their expenditures on education (primary), thus protecting an important element livelihood asset for the future generation.

### 3.10.2 – Coping strategies reported in February 2010

Scarcity of income was the main 'new' problem reported by households in 2009 compared to before. It was essentially caused by unemployment and decreased remittances. Only households already receiving family benefits or pensions before did not mention a decline of their income, but their purchasing power was depressed by inflation (prices of food remained high) and by the anticipated rise of gas tariffs (as from April 2010).

To cope with these difficulties:

- other economic activities were depressed, in particular cultivation;
- food consumption was modified to save on the most expensive items (essentially meat but also fruits);
- health treatment was foregone;
- use of utilities (water, gas, electricity) was rationed and their payment delayed;
- indebtedness rose, with many households unable to pay back their loans or selling their assets such as animals in order to reimburse;

- search for any labour intensified (even below existing qualifications) and for migrants who came back, cultivation of plots resumed.

## **IV – UPDATE ON RESPONSES TO THE GLOBAL ECONOMIC CRISIS IN ARMENIA**

### **4.1 - Government's measures to tackle the effects of the global economic crisis**

The government developed and adopted an anti-crisis programme in November 2008. The main steps taken include<sup>53</sup> (see Box 8 for additional details):

- business environment improvement, including simplification of tax regulations and considerable reduction in administrative costs for small businesses;
- engagement of financial resources for small and medium-size enterprise lending;
- implementation of sizeable infrastructure-oriented projects and creation of new jobs in these;
- priority for welfare programmes and State's social commitments.

#### **Box 8 - Key ongoing or planned anti-crisis government measures**

- About US\$37 million to the private sector in the form of direct credit, government guarantees, and equity investments;
- About US\$10 million in government guarantees to construction companies with at least a 50% complete rate in residential construction projects;
- Funding a Pan-Armenian bank to help finance large national investment projects;
- Offering on-lending programmes using the Russia loan and World Bank funding;
- Establishing a National Mortgage Foundation with mixed public-private capital, for on-lending to the mortgage market;
- Creating instruments to help young families purchase apartments through non-interest mortgage loans and interest rates subsidies for mortgage loans;
- Offering a subordinated loan facility to banks to support regulatory capital ratios and encourage bank mergers;
- Doubling the coverage for bank deposit insurance;
- Constructing a new nuclear power plant, the north-south railway and the roadway from the Armenian-Iranian border to the Armenian-Georgian border, and completing the reconstruction of the region that was hit by the 1998 earthquake.

*Source: Armenia: Second Review Under the Stand-By Arrangement. International Monetary Fund, October 2009.*

The government re-prioritized its expenditures towards those that protect or create jobs in the short-term (such as public investment programme) and towards social programmes, especially the Family Benefit Programme. The social sector budget represented 18% of the total budget in nominal terms in 2009. Given the importance of State pensions and benefits as a source of income (16% of household income according to the 2008 ILCS), an expansion social assistance to compensate for losses of other sources of income is indeed important.

Funding allocated to public works amount to AMD 700 million but (i) there was no increase over 2008 allocation, (ii) they only fund part of community-designed projects, and (iii) they are of short duration (3 months). Priority is given to first time applicants and to *marzes* with more job seekers and high poverty<sup>54</sup>. In 2009, almost 4,700 persons benefited from the public works programme. The target figure for 2010 is 4,500 persons. The programme's implementation is limited by difficulties of implementation, including corruption during the selection of beneficiaries.

<sup>53</sup> Summary Report: Republic of Armenia Government's Anti-Crisis Action, Progress and Status. November 2009.

<sup>54</sup> Armenia: Social Impact of the Global Economic Crisis, Gohar Gyulumyan, World Bank. June 2009



Some funding from international agencies (such as UNDP) has also been secured to provide training to job seekers<sup>55</sup>.

The large depreciation of the national currency in March 2009 helped to improve competitiveness without threatening financial stability. Measures to improve the efficiency of public expenditures and tax collections continue to be pursued to date.

#### **4.2 – Support from donors and international agencies**

The authorities have also sought external donor support (IMF, World Bank, ADB, Russia) to offset lower private capital inflows and budgetary receipts, and to target them into projects and programmes that will complement the government's anti-crisis measures. In March 2009, Armenia obtained a standby arrangement with the IMF in the amount of US\$540 million, US\$50 million from the World Bank for on-lending to small and medium-size enterprises, and US\$500 million from Russia.

In addition, as of 1st January 2009 Armenia benefited from a preferential trade regime with the European Union, providing favourable treatment to Armenian exporters to the European markets.

In some of the locations visited in the follow-up study in February 2010, assistance from UNICEF and national or international NGOs was mentioned in the form of care centres, public food catering, summer camps, clothing and stationary for children, or sewing classes for women. Although appreciated and likely positive for the beneficiaries, the targeting criteria for these activities were unclear.

#### **4.3 – WFP interventions to address the effects of the global economic crisis in Armenia**

WFP was planning to close down its operations in Armenia at the end of 2008, not so much because food assistance needs had drastically decreased but because of funding difficulties. However, the high food and fuel price crisis followed by the global economic crisis prompted WFP to re-consider its earlier plan and to extend its latest Protracted Relief and Recovery Operations (PRRO) which should have ended in December 2008.

The extended PRRO was supposed to be completed by mid-March 2010 but a further extension till end December 2010 was granted. It will also leave more time to WFP to review the situation and needs in Armenia in light of the ongoing global economic crisis, the Government's request of continuation of WFP assistance to the most vulnerable groups, and new funding possibilities from Russia.

The PRRO aimed to assist 110,000 beneficiaries through general food distribution and cash/food-for-work. Due to insufficient resources, only about 30,000 people eventually benefited in 2009. The activities aimed to address the negative effects of the crisis on food consumption by providing free rations to most vulnerable households unable to work, and cash- or food-for-work for others who can work. The approach is to complement the Government's public work programmes launched in response to the crisis as well as to assist the most vulnerable who cannot work.

Activities are targeted geographically to areas with the highest concentrations of poor households affected by the crisis, including **urban areas of Lori and Shirak marzes** and **Yerevan city**, and **rural areas of Gegharkunik, Shirak, Lori and Tavush marzes** with traditionally high labour migration rates and thus affected by the loss of remittances. Household targeting criteria include:

- the urban poor, refugees and those unable to work;
- those not enrolled in Government's public work programme;

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<sup>55</sup> Personal communication from the Head of the State Employment Agency, 24 February 2010.

- single/female-headed households with many dependents;
- unemployed heads of households, households who have lost access to remittances;
- households heavily indebted to food shops.

Households and Focus Group discussions held in February 2010 confirmed the high appreciation of these programmes by beneficiaries. Although of short duration, in the two villages visited the cash or food received were said to have met basic food requirements of the participants for up to 6 months without having to incur new debts. This was on top of benefits for the whole community in the form of the works undertaken (e.g. water pipeline).

The extended PRRO activities during the period March-December 2010 intend to reach:

- **30,000 persons in urban areas** of Lori and Shirak *marzes* and Yerevan city who will receive **free food rations for 6 months** (500 g wheat flour, 20 g vegetable oil and 35 g lentils per person per day, about 2,060 kcal);
- **2,000 persons (10,000 beneficiaries) in rural areas** of Lori, Shirak, Tavush and Gegharkunik *marzes* with easy access to markets and bank services who will receive **cash** (AMD 2,100, equivalent to about US\$5,6 per day) against participation in work activities **during 3 months**;
- **3,000 persons (15,000 beneficiaries) in rural areas** of the same *marzes* with limited access to food markets who will receive **food** (ration of a similar value as the cash incentive, including 900 g wheat flour, 100 g vegetable oil and 100 g lentils) against participation in work activities during **3 months**.

Planned cash- and food-for-work activities include:

- reconstruction of drinking water and sanitation facilities;
- rehabilitation of secondary irrigation channels for small plots;
- rehabilitation of community roads and repairs of mudflow canals;
- tree planting for soil protection;
- agricultural activities.

## **V – ANTICIPATED EVOLUTION OF THE SITUATION IN 2010 AND BEYOND**

### **5.1 - Prospects for the world economy**

According to the International Monetary Fund (IMF)<sup>56</sup>, after a deep recession, world economic growth in 2010 is expected to turn positive, as wide-ranging public intervention has supported demand and lowered uncertainty and systemic risk in financial markets. **The recovery is expected to be slow**, as financial systems remain impaired, support from public policies will gradually have to be withdrawn, and households in economies that suffered asset price busts will continue to rebuild savings while struggling with high unemployment. Global activity is forecast to contract by about 1% in 2009 and to expand by about 3% in 2010, which is well below the rate achieved before the crisis (5% in 2007).

Downside risks to growth are receding gradually, but remain a concern. **The main short-run risk is that the recovery stalls**. Premature exit from accommodative monetary and fiscal policies seems a significant risk because the policy-induced rebound might be mistaken for the beginning of a strong recovery in private demand. In general, the fragile global economy still seems vulnerable to a range of shocks, including rising oil prices, a virulent return of swine flu, geopolitical events, or resurgent protectionism.

**The food and fuel crisis may not be over**. Food and fuel prices have abated worldwide because of the worsening global financial crisis (economic recession or slowdown in many countries) and, as a result, global demand for commodities has fallen. Increased agricultural

<sup>56</sup> Regional Economic Outlook: Middle East and Central Asia. World Economic and Financial Surveys. International Monetary Fund, October 2009.

production activity has also led to a bountiful 2008 harvest and eased global commodity shortages. However, international commodity price levels have not returned to pre-2007 levels, and long-term challenges in global food production are yet to be addressed<sup>57</sup>.

On the positive side, **the strong rebound in financial market sentiment might induce a larger-than-expected surge in consumption and investment** across a number of advanced and emerging economies.

## **5.2 - Prospects for Armenia**

### 5.2.1 - At macro-economic level

- GDP growth should return positive in 2010, provided output begins to recover towards the end of 2009, with no further worsening in the Russian economy (see Box 9 for economic prospects in Russia); however, while the recent signs of a stabilization of output are encouraging, it is not certain that the downturn has run its course;

#### **Box 9 – Economic prospects in Russia**

The Russian economy is projected to contract by 7.5% in 2009, followed by a modest recovery of 1.5% in 2010 and possibly 4% in 2011. While the contraction appears to have bottomed out and fiscal stimulus is gaining traction, markedly lower oil prices and a sharp reversal of capita inflows are expected to exert a significant drag on domestic demand. With sluggish investment growth dampening labour productivity, real wages are likely to remain stagnant.

For the Caucasus and Central Asia countries, including Armenia, this outlook implies weak export demand from Russia in the near future, and suggests that remittances may not reach their pre-crisis level of 2008 for some time.

*Source: Regional Economic Outlook: Middle East and Central Asia. World Economic and Financial Surveys. International Monetary Fund, October 2009.*

- Medium-term growth is expected to recover only gradually under current policies, underpinned by the successful implementation of the authorities' structural reform agenda; growth prospects would be revised considerably upward if the Turkish-Armenian land border were to be reopened<sup>58</sup>.
- The depreciation of the national currency in real terms will encourage a shift of resources to the tradables sector; balance-of-payments inflows remain volatile and uncertain, although risks appear evenly balanced;
- The rise of metals and minerals prices (Armenia's main exports) and governments' fiscal packages should support prices into 2010 and provide a boost to economic activity;
- Domestic demand will also benefit from the return to growth of Russia as its main trade and investment partner in the 1<sup>st</sup> quarter of 2010, following a contraction of an estimated 7% in 2009;
- With a growth in the share of debt on commercial terms as well as the projected volume of borrowing, the ratio of external public debt to GDP may reach 30% by 2012 (from a low 13% at the end of 2008);
- The 2010 government budget envisages a gradual consolidation, with a deficit falling to about 6% of GDP (down from the projected 7.5% in 2009)<sup>59</sup>;

<sup>57</sup> The Crisis Hits Home. Stress-Testing Households in Europe and Central Asia. World Bank, January 2010.

<sup>58</sup> Opening the Turkish land border would present considerable potential for exports and investment, with lower transport costs improving the competitiveness of Armenian firms and the purchasing power of the Armenian population.

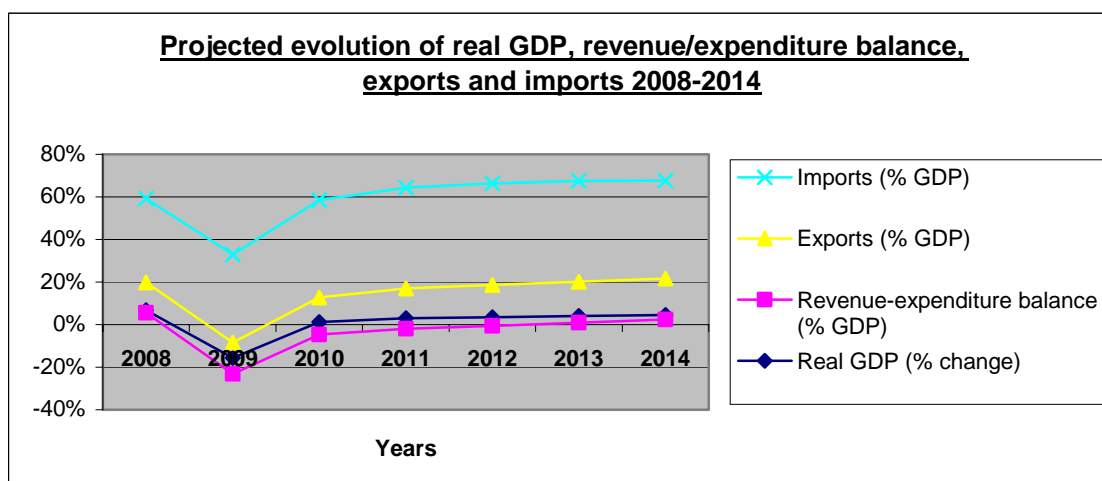
<sup>59</sup> Armenia: Second Review Under the Stand-By Arrangement. International Monetary Fund, October 2009

- Sizable external financing from international finance institutions and bilateral donors is expected to gradually decline over the medium term<sup>60</sup>;
- Net Foreign Direct Investment may recover slightly to US\$305 million (up from US\$263 million in 2009 but far less than the US\$929 million of 2008);
- Gross international reserves should remain at a comfortable level with an import cover of about 6 months of imports.

**Table 16 – Medium-term macroeconomic projections**

	2008 (prel.)	2009 (proj.)	2010 (proj.)	2011 (proj.)	2012 (proj.)	2013 (proj.)	2014 (proj.)
<b>Real GDP</b> (% change)	6.8%	-15.6%	1.2%	3.0%	3.5%	4.0%	4.5%
<b>GNI per capita</b> (US\$)	3830	2758	2593	2677	2830	3052	3321
<b>CPI inflation</b> (% change)	5.2%	5.2%	3.0%	4.0%	4.0%	4.0%	4.0%
<b>Revenue- expenditure balance</b> (% GDP)	-1.3%	-7.5%	-5.8%	-4.9%	-4.1%	-3.1%	-2.1%
<b>Exports</b> (% GDP)	14.4%	14.7%	17.4%	18.9%	19.2%	19.3%	19.2%
<b>Imports</b> (% GDP)	39.4%	41.3%	45.7%	47.3%	47.7%	47.3%	46.1%

Source: Armenia: Second Review Under the Stand-By Arrangement. International Monetary Fund, October 2009



- If the government's efforts to obtain the signature of a free-trade agreement with the European Union succeed, it will increase opportunities for Armenia traders to have access to the European common markets and to sell products of Armenian origin;
- Unemployment rates and related hardship are expected to continue as the government budget for unemployment benefits and public work programmes did not increase for 2010 while unemployment rates and migrant returns continued to rise throughout 2009.
- Remittances are expected to stagnate and may not go back to their pre-crisis level even by 2011, due to slow recovery in Russia; furthermore, the slow-down in the construction sector in Armenia will not encourage remittances to be sent back for investment in this sector; in the near term, returning migrants are likely to add to fiscal pressure through their need for social assistance.

<sup>60</sup> According to an interview of the Prime Minister from "News from Armenia" on 30 October 2009, the government is expected to receive funds from the Millennium Challenge Corporation in 2010.

- The risk of social unrest exists, owing to the increase in unemployment and lower remittance inflows.

### 5.2.2 - At household level

#### *Food availability*

- In rural locations directly hit by the crisis (high concentration of migrants, construction or mine workers), the acreage cultivated continued to decrease in 2009 and prospects for 2010 are pessimistic as incomes are not expected to rise. Animal sales are also likely to continue as debts are increasingly burdening households, interest rates are increasing with delayed reimbursement, and the cost of living will further rise when the price of gas is raised in April 2010.
- While agricultural production in these areas is mostly for self-consumption, **the decline will affect food availability at farm household level**. However, some of the surpluses that used to be sold on markets will also decrease, hence reducing availability on markets and possibly contributing to keeping prices high.
- The excess sales of animals and ensuing reduction of livestock herds will also affect the coping capacity of households as animals are a key source of income in times of difficulty.

#### *Economic access to food*

- **Income levels will remain depressed in 2010 and possibly 2011 for a large number of households**. Even though the economy is expected to rebound slightly in 2010 and continue to improve in the subsequent years, the resumption of employment within and outside Armenia as well as the flow of remittances will pick up slowly. Most affected people include the pre-crisis poor and the 'newly' poor, such as those who have lost their jobs and remittance inflows, and have not been enrolled in the social assistance system or public works. In any event, **while social benefits contribute to avoid falling into extreme poverty, they are not sufficient to lift the poor out of poverty**.
- There are indications that falling global commodity prices have not translated into lower retail food prices locally, in part because hedge contracts may have previously locked in higher prices. In addition, while price levels may have come down, they could still be at levels substantially higher than their pre-2007 or pre-2008 levels. The net effect of a **food price shock**, if it resumes or if food prices do not abate sufficiently, depends on whether households are net producers or net consumers of food, their intensity of food consumption, and the availability of cheaper substitutes, as well as their livelihood strategies, access to agriculture assets and inputs, and ability to take advantage of profitable opportunities in agriculture.
- The 40-50% rise of gas prices that will come into effect in April 2010 will lead to a further increase of the price of bread as well as of other commodities given the dependence on gas for food and other production.
- Because of the high food share of total expenditures (more than 50% overall, and more than 66% amongst the poorest), **the poor will continue to be the worst hit** because they are net consumers with limited access to agricultural assets and inputs.
- By 2010, **about 180,000 'recent poor'** are expected to join the ranks of the pre-crisis poor, due to the fact that many households are close to the poverty line and susceptible to falling into poverty even with modest falls in average income. These 'recent poor' typically have tenuous links to the labour market, with little savings and likely to have benefited from recent credit and construction booms. **Some of these 'recent poor' may not be easily reached by existing social protection programmes**, such as **returning migrants** who do not qualify for unemployment benefits<sup>61</sup>.

<sup>61</sup> The Crisis Hits Home. Stress-Testing Households in Europe and Central Asia. World Bank, January 2010.

- Recent studies in countries of the region suggest that for economic shocks transmitted primarily through the labour markets, **poverty will rise especially among households that have been dependent on remittance inflows and those previously employed in booming construction sectors** whose activity has declined sharply.
- It is unclear whether economic growth, if and when recovery actually begins, will necessarily translate fully into growth in household consumption. In part, the poverty impact of economic recovery depends on whether renewed growth is accompanied by, for example, commensurate increases in wage, employment expansion, and renewed availability of credit for households and enterprises.

#### *Food consumption and nutritional status*

- Lower income levels are associated with decreased consumption of nutritious food items (animal products, fruits and vegetables), difficulties to cover health expenses and foregoing of tertiary level education.
- While overall food availability on markets has not been significantly affected by the crisis, the income-related consequences of the crisis on households will continue to **impair household food consumption in 2010** through low diversity diet, and **increase risks of malnutrition** among young children and other vulnerable groups (e.g. the elderly, the chronically sick). At the same time, a diet essentially based on carbohydrates and fat may contribute to overweight and obesity, particularly in urban areas.
- Decreased expenditures on health for the poorest may also contribute to malnutrition, including stunting among young children and chronic diseases among adults.

#### *Coping strategies and effects on livelihoods*

- During previous crises, households found secondary employment, relied on transfers from friends and families, or left for work abroad to augment family income. Because of the global nature of the crisis, and because macro-economic shocks are hitting households on multiple fronts, **many of these coping strategies are no longer viable**<sup>62</sup>. For the poorest households, subsistence farming may still be feasible but many of the poorest do not have access to agricultural assets and inputs. For some, transitions into informal sector employment may be possible but earnings from these activities will often be insufficient to offset the poverty impact of the crisis.
- As mentioned, the excess sales of animals in rural areas will seriously limit households' ability to sell or slaughter an animal to generate cash in times of urgent need.
- **Negative effects on human capital and lost opportunities for higher income-earning activities in future** are likely to occur for the poorest and the 'new' poor who cannot afford anymore the cost of higher education.

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<sup>62</sup> The Crisis Hits Home. Stress-Testing Households in Europe and Central Asia. World Bank, January 2010.

## **VI – RECOMMENDATIONS TO ADDRESS THE EFFECTS OF THE GLOBAL ECONOMIC CRISIS IN ARMENIA**

### **6.1 - Recommendations at macro-level: restoration of economic growth**

The IMF recommendations to policy-makers worldwide are to continue to restore the health of the financial sector and to maintain supportive macroeconomic policies until the recovery is on a firm footing. At the same time, policy-makers should also begin preparing for an eventual unwinding of extraordinary levels of public intervention. While this should not be done too early in order not to jeopardize progress made in securing financial stability and recovery, leaving these measures in place too long carries the risk of distorting incentives and damaging public balance sheets<sup>63</sup>.

Despite low internal and external debt burdens, the capacity of a small open economy such as that of Armenia to use fiscal space<sup>64</sup> to substitute public sector demand for the private sector contraction and support output is constrained. The current account deficit is large and **stepped-up donor support on concessional terms** is thus required for filling fiscal and external financing gaps as well as supporting the public investment programme and avoiding a build-up of unsustainable debt level<sup>65</sup>.

Efforts to address the chronic revenue weaknesses, notably through **strengthening of tax administration**, will be crucial to ensuring a fair and equitable tax burden and a sustainable fiscal position<sup>66</sup>.

Given the slow recovery projected in Russia and industrial countries, future growth would benefit from a **diversification of exports toward dynamic emerging economies in the Caucasus and Central Asia region**, including China, and not be too much concentrated in a few sectors (such as, currently, the housing sector or income flows from migrant labour). Intra-regional trade is well below potential. Improved infrastructure could help re-open traditional trade routes, such as with Turkey in the case of Armenia.

**Existing statistical monitoring systems must be maintained** and relevant household data collected regularly and made available for analysis to ensure that household vulnerabilities to a range of potential shocks are understood in a timely manner and that households at risk can be reached by the social protection system (see below).

### **6.2 - Recommendations to address rising household poverty and food insecurity**

#### **6.2.1 - Social assistance**

The existing Family Benefit Programme is relatively well targeted but its performance has been decreasing<sup>67</sup>. Recommendations include **increase spending for the Programme and improve targeting** (see Box 10).

#### **Box 10 – Recommendations for the Family Benefits Programme in Armenia**

To address the effects of the global economic crisis, recommendations for the Family Benefits

<sup>63</sup> Regional Economic Outlook: Middle East and Central Asia. World Economic and Financial Surveys. International Monetary Fund, October 2009.

<sup>64</sup> The IMF defines 'fiscal space' as "the scope for financing a deficit without undue crowding out of private activity, sharp increases in funding costs, or undermining debt stability".

<sup>65</sup> Armenia: Country Partnership Strategy. International Monetary Fund, April 2009.

<sup>66</sup> Armenia: Second Review Under the Stand-By Arrangement. International Monetary Fund, October 2009.

<sup>67</sup> Armenia: Social Impact of the Global Economic Crisis, Gohar Gyulumyan, World Bank. June 2009

Programme are to:

- Increase spending for the Programme:
  - increase the Programme budget;
  - increase benefit size;
  - expand coverage to include the “new poor”;
  - raise the eligibility threshold.
- Improve targeting:
  - better integration of the existing data, screening of applicants with readily available filters and categories;
  - upgrade the management information system into a live database, introducing cross-checks and stepping up electronic data verification;
  - consider a regression-based Proxy Means Test, which can address the underreporting of income (but transition has to be gradual);
  - outreach campaigns targeted to poor communities;
  - simplify the application process and annual re-certification.

Sources: Ministry of Territorial Administration (website <http://backtoarmenia.am>), Armenia - Armenia: Social Impact of the Global Economic Crisis, Gohar Gyulumyan, World Bank. June 2009

General recommendations to strengthen the pension system and the role of pensions in alleviating the effects of the global economic crisis on pensioners include<sup>68</sup>:

- move to inflation indexation of pensions after retirement;
- increase the retirement age, equalize the retirement ages of men and women and reduce early retirement.

#### 6.2.2 - Safety nets and employment

As remittances are not expected to reach their pre-crisis levels for a number of years, Armenia will have to find ways to provide returning migrants with gainful employment. Current **unemployment benefits are insufficient and should be temporarily expanded** to address the fact that<sup>69</sup>:

- a large number of job seekers and unemployed remain unregistered;
- coverage is low;
- longer unemployment spells are expected;
- returning migrant workers may not be able to enrol due to lack of work history necessary for unemployment insurance or a lack of permanent residence.

Public works programmes may have considerable merit to address significant seasonal shortfalls in employment. **Current measures for public works could be enhanced** through<sup>70</sup>:

- expanding the programme to generate more jobs and incomes for the poor; absorptive capacity exists as only about 40% of submitted community projects are funded<sup>71</sup>; however, issues linked to corruption and implementation must be tackled;
- increasing the duration of public work projects (currently limited at 3 months);
- ensuring that poor communities with weak capacity are not left out;
- setting public work wage at less than market wage in order not to draw labor away from other productive uses;
- reviewing the eligibility criteria (e.g., one person per family?).

Given the effects of the crisis on some types of skilled labour, temporary employment opportunities should also be offered to skilled labourers.

<sup>68</sup> Pensions in Crisis: Europe and Central Asia Regional Policy Note. World Bank. November 2009.

<sup>69</sup> Armenia: Social Impact of the Global Economic Crisis, Gohar Gyulumyan, World Bank. June 2009

<sup>70</sup> Armenia: Social Impact of the Global Economic Crisis, Gohar Gyulumyan, World Bank. June 2009

<sup>71</sup> Armenia. Implications of the Global Economic Crisis for Poverty. Report No.47770-AM. World Bank, September 2009.



### 6.2.3 - Protecting human capital

**Access to health services** should be protected and strengthened by:

- covering the full cost of services in the Basic Benefits Package (BBP);
- allocating budget for co-payment for the poor and vulnerable.

The effects of the crisis on the education sector at tertiary level could be mitigated by introducing **innovative funds for universities**, and moving from merit-based to **needs-based public funding** for students in universities.

## **6.3 – Recommendations for WFP interventions 2010 and beyond**

### 6.3.1 – Recommendations for WFP interventions, comparative advantage and risks/implications

As indicated by the follow-up study in February 2010, the cash- and food-for-work activities implemented by WFP in 2009 were highly beneficial in terms of food access and decreased indebtedness.

Suggested WFP interventions, objectives and target groups are indicated in Table 17. They include:

- capacity building of national and local authorities to strengthen their ability to identify and target food insecure households and to design responses accordingly; this will build upon existing assessment and monitoring systems such as the Integrated Living Conditions Survey;
- revival of a school feeding programme (which was suspended at the end of 2008 when WFP was planning to close its activities in Armenia), giving priority to areas of heightened food insecurity due to the global economic crisis (e.g. migration areas, areas of employment in affected factories etc.); clear hand-over procedures to the government should be established from the outset;
- assistance for the expansion of the national social assistance system (with food and cash) to cover households and individuals affected by the global crisis (e.g. returned migrants, recent unemployed etc.) and deprived persons in areas of heightened food insecurity, who are not yet enrolled in the national system; this can take the form of free transfers (food or cash or combination) and food/cash-for-work interventions as per the current PRRO.

The rationale for these suggestions is based on the following considerations:

- 1) Capacity building of central and local authorities and partners falls under **Strategic Objective 5**. The activities will **build upon the proven expertise of WFP in food security analysis and monitoring**. The aim is to complement and **reinforce the existing food security and poverty monitoring system of the Government**, which is also in line with Strategic Objective 2.
- 2) Revival of school feeding in areas selected on the basis of the effects of the crisis on poverty and food insecurity aims both at **providing an economic transfer to households with school-age children** through 'savings' made on children's meal, and **supporting learning** through the provision of an adequate meal to children. It falls under **Strategic Objective 4**. WFP's school feeding programme was suspended in 2008 in view of its plan to withdraw from Armenia. However, the Russian Government has recently expressed a strong interest to fund school feeding activities in Armenia, preferably combined with livelihood support interventions which could be addressed through the activities suggested in point 3) below. WFP's re-engagement in school feeding activities should be accompanied by a clear, agreed-upon duration and hand-over modalities to the Government.
- 3) Social assistance through cash or in-kind food transfers has proven to be instrumental to **prevent the deepening of poverty and food insecurity and assist households to cope with the negative effects of the global economic crisis**. The

provision of social assistance with such objectives falls under **Strategic Objective 4**. Even though the Government has been proactive in protecting and strengthening social benefits and launching public work programmes to lessen the effects of the crisis, coverage is insufficient, especially in view of the ‘new poor’ occasioned by the crisis. At present, WFP is topping up benefits already received by the poorest through free food or food- or cash-for-work activities in selected areas of the countries. The proposed expansion of activities would enable to extend the coverage to individuals and households not (yet) enrolled in the national social assistance system. **Geographic and household targeting might be further refined** based on the present review and other assessments.

It will be important to **strengthen the evaluation of impact of WFP interventions** in order to better document the effects on the food security situation of beneficiaries. This will require the implementation of baseline surveys of targeted beneficiaries before the launch of interventions, and ‘expanded’ post-distribution surveys that capture changes (if any) on:

- food consumption;
- food stocks (in rural areas);
- economic access to food: sources of food, sources of income, level of income or of expenditures, share of food expenditures, ownership of assets (land, animals, productive equipment), availability of cash savings, level and reasons for indebtedness;
- health status and use of health services;
- access to education (from primary to tertiary level); and
- coping strategies.

**Table 17: Proposed WFP interventions, objectives and target groups**

WFP interventions	Objectives	Target groups
<b>1) National and local authorities capacity building</b>	<ul style="list-style-type: none"> <li>• To strengthen the capacity of the government at central and local levels to identify food insecure households and individuals and design responses accordingly</li> </ul>	<ul style="list-style-type: none"> <li>• Government counterparts at central level: Ministry of Labour and Social Issues</li> <li>• Local authorities at <i>marz</i>, town and village levels in areas of high poverty (ILCS survey) and food insecurity (August 2009 survey)</li> </ul>
<b>2) Revival of the school feeding programme</b>	<ul style="list-style-type: none"> <li>• To provide an economic support and protect school children food intake and learning capacities at school in areas of increased food insecurity due to the global crisis, by re-starting a school feeding programme</li> <li>• To further build capacities of local authorities and civil societies for the implementation of school feeding interventions in the targeted areas and schools</li> </ul>	<ul style="list-style-type: none"> <li>• Households and school-age children in areas of increased food insecurity due to the global economic crisis (e.g. zones of traditional high out-migration, zones where employment in some sectors has fallen)</li> <li>• Local authorities and civil society in targeted areas and schools</li> </ul>
<b>3) Expansion of coverage of the national social assistance system</b>	<ul style="list-style-type: none"> <li>• To enable access to social assistance (food and cash) to the ‘newly poor’ (such as returned migrants, recently unemployed) as well as to hardship cases in areas of increased food insecurity due to the global crisis</li> </ul>	<ul style="list-style-type: none"> <li>• Households and individuals whose income have fallen as a direct result of the crisis but cannot yet enroll in the national social assistance system for various reasons</li> <li>• Households and individuals who are receiving social benefits but remain extremely poor and unable to meet their food requirements</li> </ul>

Additional details on the proposed interventions, WFP main comparative advantages and risks/implications are indicated in Table 18.

**Table 18 – Recommended WFP interventions, comparative advantage and risks/implications**

WFP interventions	Comparative advantage	Risks/implications
<b>1) National and local authorities capacity building:</b>	<ul style="list-style-type: none"> <li>• WFP well known and trusted by government counterparts</li> </ul>	<ul style="list-style-type: none"> <li>• Funding for WFP technical assistance versus food/cash operations</li> </ul>

WFP interventions	Comparative advantage	Risks/implications
1.1) Improve targeting to reach food insecure households and individuals	<ul style="list-style-type: none"> <li>WFP proven experience with food security analysis and profiling of households, and in food security monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Difficulties to articulate food insecurity criteria with already well-established targeting criteria for social assistance programmes: additional criteria? Implementation of a second screening step for specific interventions?</li> </ul>
1.2) Combine a food security monitoring system with the Integrated Living Conditions Survey (ILCS)	<ul style="list-style-type: none"> <li>WFP will build on the existing, nation-wide, ILCS household survey, by adding a few questions and analyzing key food security indicators (Food Consumption Score, food stocks, coping strategies...)</li> </ul>	<ul style="list-style-type: none"> <li>Delays in processing and analyzing data, hence missing key windows for food security interventions</li> <li>Seasonal variations in food security not captured by an annual survey</li> </ul>
1.3) Carry out specific rapid studies to investigate particular issues and population groups, such as migrants/remittances, social assistance beneficiaries etc.	<ul style="list-style-type: none"> <li>WFP proven experience in conducting household surveys</li> <li>Complement to the yearly ILCS to provide timely information on key issues</li> </ul>	<ul style="list-style-type: none"> <li>Cost of carrying out small household studies</li> <li>Need for strong partnership with Government and other stakeholders to take the results forward, if actions are necessary.</li> </ul>
<b>2) Revival of the school feeding programme</b>	<ul style="list-style-type: none"> <li>WFP proven experience in implementing school feeding programmes</li> <li>WFP will re-start school feeding activities with a clear hand-over plan to the Government after an agreed-upon period (e.g. 2 to 5 years)</li> </ul>	<ul style="list-style-type: none"> <li>Selection criteria for the schools to be supported by WFP</li> <li>Terms of agreement between WFP and the Government: who will provide what?</li> <li>Need for a clear exit strategy: how when will the full hand-over from WFP to the Government take place?</li> </ul>
2.1) Identify areas and communities where school feeding interventions will be implemented	<ul style="list-style-type: none"> <li>Availability of WFP and Government food security assessments</li> </ul>	<ul style="list-style-type: none"> <li>Balance between selection based on assessed food security needs and feasibility to implement school feeding activities (availability of infrastructures, implementing partners)</li> </ul>
2.2) Build capacities of local and central authorities and civil society to implement school feeding activities	<ul style="list-style-type: none"> <li>WFP proven experience in building national counterparts' capacities to design and implement school feeding activities</li> <li>Possibility to link school feeding activities to livelihood support interventions in the same communities</li> <li>Funding available from the Russian Government</li> </ul>	<ul style="list-style-type: none"> <li>Insufficient commitment and/or turnover of local and central authorities</li> <li>Lack of or weak civil society mechanisms to support school feeding activities at community level</li> </ul>
<b>3) Expansion of coverage of the national social assistance system</b>	<ul style="list-style-type: none"> <li>WFP experience in implementing social safety net activities through the current PRRO</li> <li>WFP will support, but not replace or duplicate, the existing national system, thus facilitating phasing down and phasing out as the economic situation improves</li> </ul>	<ul style="list-style-type: none"> <li>Need for a clear exit strategy: how and when will WFP beneficiaries eventually enroll in the national social assistance system? How and when will the level of government's benefits be raised?</li> </ul>
3.1) Short-term cash grants or free food to food insecure households or individuals not receiving social benefits and	<ul style="list-style-type: none"> <li>Available food security assessments from WFP and the Government</li> <li>WFP experience with</li> </ul>	<ul style="list-style-type: none"> <li>Need to define the duration of the assistance</li> <li>Need to define criteria to decide whether beneficiaries</li> </ul>

WFP interventions	Comparative advantage	Risks/implications
unable to participate in public or WFP work programmes	<ul style="list-style-type: none"> <li>identifying food insecure households and individuals</li> <li>WFP experience with delivering food or cash assistance through the current PRRO</li> </ul>	<ul style="list-style-type: none"> <li>can “graduate” (transitory food insecurity) or should enroll in the national social assistance system</li> <li>Need to support effective enrolment of eligible beneficiaries into the national social assistance system</li> </ul>
3.2) Short-term food- or cash-for-work programmes for food insecure households or individuals not receiving social benefits or for whom these benefits are insufficient to meet their minimum food requirements	<ul style="list-style-type: none"> <li>Available food security assessments from WFP and the Government</li> <li>WFP experience with identifying food insecure households and individuals</li> <li>WFP experience with implementing food-/cash-for-work projects through the current PRRO</li> </ul>	<ul style="list-style-type: none"> <li>Same as above</li> </ul>
3.3) Evaluation of impact of cash and food assistance	<ul style="list-style-type: none"> <li>WFP experience with monitoring and evaluation of food distributions and food-/cash-for-work interventions</li> </ul>	<ul style="list-style-type: none"> <li>Funding to carry out baseline and post-intervention surveys that enable impact evaluation on households’ food security</li> </ul>

### 6.3.2 - Targeting criteria for interventions

Based on this review and rapid update on the food security situation, there may be scope to refine the targeting criteria used by WFP for its food assistance interventions under the PRRO, both geographically and at household-level.

#### *Household targeting criteria*

According to respondents in the follow-up study in February 2010, groups most vulnerable to the crisis are:

- large families with unemployed breadwinners or returned migrants;
- women-headed households;
- lonely disabled persons and pensioners;
- in rural areas: large or newly formed families or families with disabled members or with pensioners, who have no or few cattle and no or limited acreage of land.

As mentioned, poor food consumption and poverty are related at household level but not fully overlapping, possibly due to differences in the ways of accessing food (own production, gifts, credit) as well as knowledge of ‘good’ dietary patterns. **Households combining inadequate food consumption with poverty are most probably the worst off.** The main characteristics of both types of households should be used for targeting but in combination rather than in isolation given that no single criteria would perfectly discriminate the groups.

Potential ‘practical’ criteria **to combine** for targeting assistance at household level include:

- gender of the head of household (women-headed tended to be at higher risk);
- disability or chronic illness of the head of household;
- dependency ratio above 70%, including large households of more than 5 members, with more than 2 children below 14 years of age or with under-5 children;
- presence of irregularly or (recently?) unemployed men in the household;
- reliance on pensions, loans/credit and social benefits as main sources of income;
- lack of own food production (no/little land);
- lack of cattle and chicken.

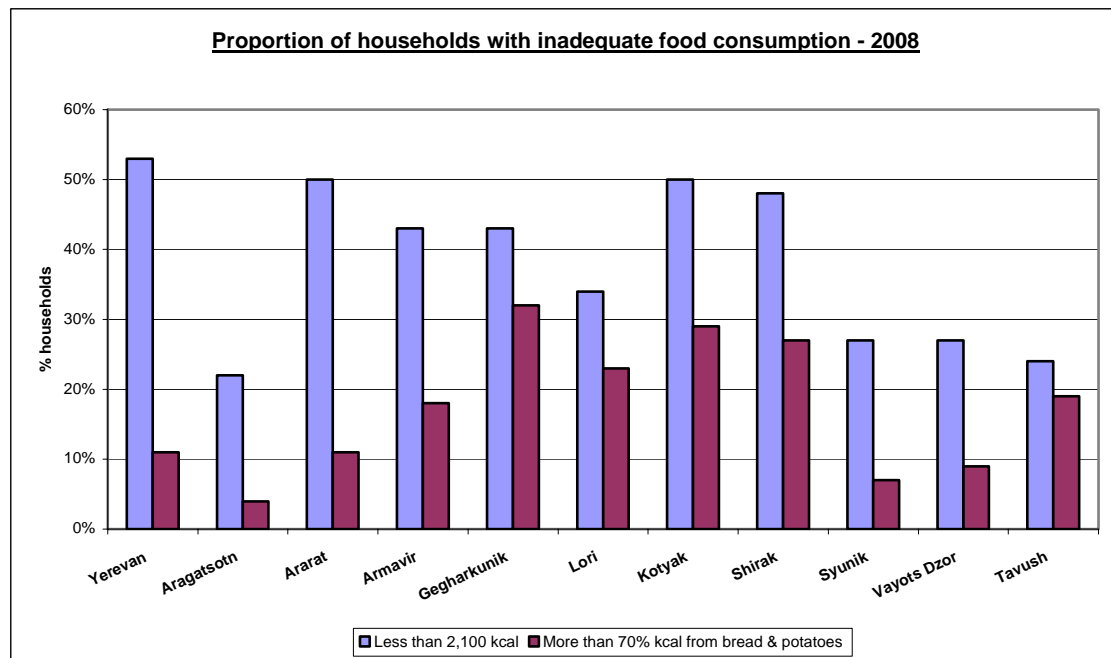
Compared to the current household targeting criteria in the PRRO, the above would suggest considering **disability or chronic illness of the head of household and reliance on**

**pensions and social benefits as main source of income as additional criteria, as well as agricultural production and livestock ownership in rural areas.**

*Geographic targeting with a view to improve food consumption*

For food security interventions specifically aiming to improve food intake (for example through transfers in food in-kind or cash-based, income generation and communication/capacity building activities), areas with a high proportion of households presenting inadequate food consumption are of most interest. The ranking of geographical locations based on the 2008 ILCS estimates of the proportion of households consuming less than 2,100 kcal per capita per day or consuming a diet consisting essentially of bread and potatoes, and based on the August 2009 WFP estimates of the proportion of households with poor or borderline food consumption patterns, is overall consistent.

According to the 2008 ILCS, **Yerevan** and the *marzes* of **Ararat, Kotyak** and **Shirak** presented the largest proportions of households consuming less than 2,100 kcal per capita per day. The proportions of households with a diet essentially based on bread and potatoes were higher in the *marzes* of **Armavir, Gegharkunik, Lori, Kotyak** and **Shirak**.



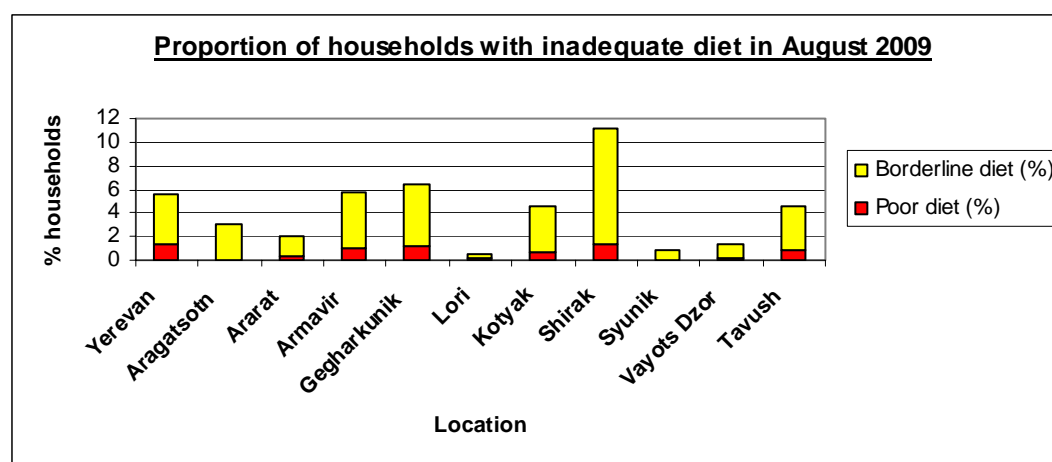
Source: Armenia Integrated Living Conditions Survey 2008. National Statistics Service. Armenia

According to the August 2009 WFP survey, the proportion of households consuming a ‘**poor**’ diet was higher in **Yerevan** and in **Shirak, Gegharkunik** and **Armavir marzes**, while the proportion of households consuming a ‘**borderline**’ diet was the highest in **Shirak marz (10%)**, followed by **Gegharkunik** and **Armavir marzes** and **Yerevan**. Overall, the incidence of inadequate food consumption was higher in urban areas than in rural areas (6% versus 3% respectively), reflecting a similar urban/rural pattern as for poverty.

**Table 19 – Food consumption patterns by *marzes* and in Yerevan in August 2009**

	Poor diet (%)	Borderline diet (%)	Total inadequate diet (%)
<b>Yerevan</b>	<b>1.3</b>	<b>4.3</b>	<b>5.6</b>
Aragatsotn	0	3.1	3.1
Ararat	0.3	1.7	2.0
<b>Armavir</b>	<b>1.0</b>	<b>4.8</b>	<b>5.9</b>
<b>Gegharkunik</b>	<b>1.2</b>	<b>5.2</b>	<b>6.4</b>
Lori	0.2	0.3	0.5
Kotayk	0.6	4.0	4.6
<b>Shirak</b>	<b>1.3</b>	<b>9.9</b>	<b>11.1</b>
Syunik	0	0.9	0.9
Vayots Dzor	0.2	1.1	1.3
Tavush	0.8	3.7	4.5
<b>Total</b>	<b>0.8%</b>	<b>4.0%</b>	<b>4.8%</b>

Source: Household Food Security Survey, WFP, August 2009



With geographical targeting in mind, the results indicated that almost 40% of all households with unacceptable food consumption were found in **Yerevan**, 21% in **Shirak marz** and about 9% each in **Armavir** and **Gegharkunik marzes**. The concentration of households with poor or borderline food consumption is also higher in urban areas than in rural areas (81% and 19% respectively).

Compared to the current geographic targeting criteria used in the PRRO, the above would suggest **including Armavir and reconsidering the inclusion of Tavush and possibly Lori among the targeted marzes**.

*Geographic targeting with a view to improve economic access to food*

For interventions addressing more specifically the economic access factors of food insecurity, an examination of poverty can assist with identifying where most households facing income-related difficulties are found.

The spatial disparities in poverty incidence and the pace of poverty reduction suggest that the benefits of recent economic growth have not been evenly distributed across the country. In 2008, poverty was higher in non-Yerevan urban areas (28%) than in rural areas (23%) or Yerevan (21%). However, the reduction of poverty incidence between 2004 and 2008 was lower in rural areas compared to the national average and urban areas. Yet, in terms of absolute numbers, most of the poor are urban residents, reflecting the urban/rural composition of total population.

**Poverty rates in 2008 were higher in Shirak, Kotayk, Armavir, Lori, Ararat and Gegharkunik marzes** compared to the national average (see table 20). High altitude location and the devastation caused by the 1988 earthquake have contributed to maintain the highest poverty rates in Shirak. Between 2004 and 2008, poverty and extreme poverty rates declined

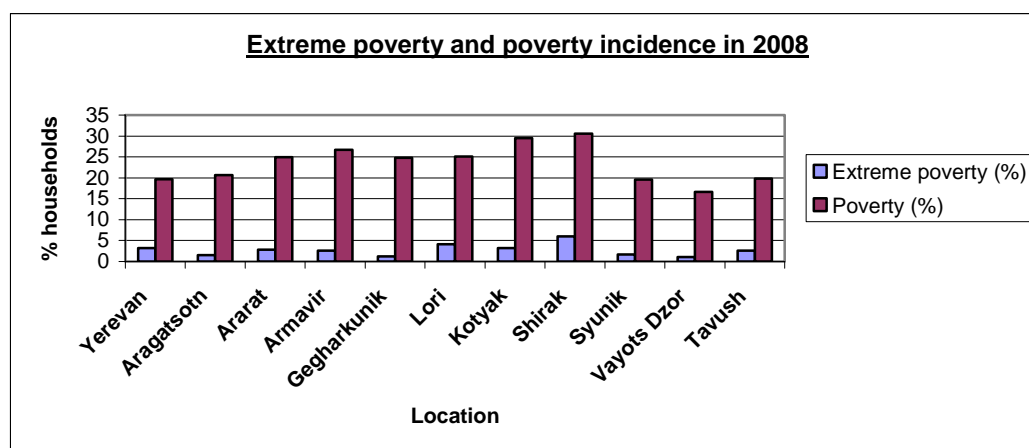
in Vayots Dzor, Gegharkunik, Aragatson, Syunik and Kotayk *marzes*. Poverty but not extreme poverty incidence also declined in Shirak *marz*.

In terms of concentration of the poor, almost 30% were located in **Yerevan** and about 12% each in **Kotayk and Shirak *marzes***.

**Table 20 – Poverty and extreme poverty rates by *marzes* and in Yerevan in 2008**

	Extreme poverty (%)	Poverty (%)	Share of the total poor (%)
<b>Yerevan</b>	3.2	19.7	<b>28.4</b>
Aragatsotn	1.5	20.7	3.6
Ararat	2.8	24.9	8.6
<b>Armavir</b>	2.6	<b>26.7</b>	9.7
Gegharkunik	1.2	24.8	7.2
Lori	<b>4.1</b>	25.1	10.1
<b>Kotayk</b>	3.2	<b>29.5</b>	<b>12.3</b>
<b>Shirak</b>	<b>6.0</b>	<b>30.6</b>	<b>11.7</b>
Syunik	1.7	19.6	3.6
Vayots Dzor	1.1	16.6	1.4
Tavush	2.6	19.8	3.4
<b>Total</b>	<b>3.1%</b>	<b>23.5%</b>	<b>100%</b>

Source: Armenia Integrated Living Conditions Survey 2008. National Statistics Service. Armenia.



## ANNEX 1

### Measurement of poverty in Armenia

Official poverty rate estimates are based on a consumption aggregate calculated using household food and non-food consumption data collected in the Armenia Integrated Living Conditions Survey (ILCS). A brief description of the ILCS is provided in Box A.1.1.

#### **Box A.1.1 – Armenia Integrated Living Conditions Survey (ILCS) – Method for measuring poverty**

Poverty (welfare) is estimated using a consumption aggregate comprising:

- the value of food and non-food consumption, including from home production as well as aid received from humanitarian organizations and other sources;
- the rental value of durable goods.

Information is collected on household purchases of 240 food items and on household food consumption over the 30 days prior to the survey. The estimated prices of purchased items are used to express food consumption in monetary terms. For non-purchased items, the median quarter price in the region (*marz*)-urban/rural is imputed.

Non-food consumption includes alcoholic beverages & tobacco, clothing & footwear, household goods, transportation, utilities, recreation, education, health and the rental value of durable goods. The value of in-kind non-food consumption is estimated by households, while monthly expenditures for non-food items are used for those which are purchased.

As the data are collected throughout the year, consumption is adjusted from different quarters for inflation as well as for regional price differences. Consumption is estimated per adult-equivalent using equivalence scales to take into account differences in consumption between adults and children, and economies of scale for large households.

The latest data available (2008) are based on a random survey of XXX households throughout the country.

*Source: National Statistics Service, Armenia*

Two measures of poverty are used in Armenia (see Box A.1.2):

- the food poverty line, to determine the extremely poor population, representing the amount of consumption necessary to satisfy basic food needs;
- complete poverty, which comprises the food poverty line and a non-food allowance including essential or minimum non-food needs.

The extreme poverty line in 2008 (adjusting 2004 figures with the Consumer Price Index), representing the cost of a 2,232 kcal food basket, was AMD 17,232 per adult equivalent per month. Respective values in previous years were AMD 15,735 in 2007, AMD 14,300 in 2006, AMD 13,266 in 2005 and AMD 12,467 in 2004, representing a 38 percentage-point increase between 2004 and 2008.

The complete poverty line in 2008 (with the same CPI adjustments of 2004 figures) was between AMD 25,188 per adult equivalent per month. Respective values in previous years were AMD 23,169 in 2007, AMD 21,555 in 2006, AMD 20,289 in 2005, and AMD 19,373 in 2004, representing a 30 percentage points increase between 2004 and 2008.

#### **Box A.1.2 – Measures of extreme poverty and poverty using the ILCS data**

The food poverty line (extreme poverty) represents the amount of consumption necessary to satisfy basic food needs. It multiplies the average country caloric requirement by the cost of one calorie:

- the average per capita daily caloric requirement for Armenia (2,232 kcal) is calculated using WHO standards and the demographic profile of the population;
- the kilocalorie cost (mean of AMD 174 and median of AMD 167 per person per month in 2008) is calculated by dividing total country expenditures on food with total country caloric consumption (food expenditures and kilocalorie content of all food items are derived from the ILCS).

The complete poverty line includes the food poverty line and a non-food allowance. The non-food



allowance is estimated using the Food Expenditure Method and the Consumption Basket Method of the World Bank. With the 1<sup>st</sup> method the share of non-food consumption is estimated at 43% of total minimum food consumption and 36% with the 2<sup>nd</sup> method.

- Poverty incidence represents the proportion of individuals with consumption per adult equivalent below the poverty line.
- The poverty gap index indicates how poor the poor people are, i.e. how far their consumption is below the poverty line.
- The severity of poverty measured the inequality of consumption among the poor (some poor people may have consumption close to the poverty line while others may be far from it).

Note that other measures of poverty can be used, such as based on a fixed level of consumption expenditures. Poverty line can be fixed at US\$ 1.25 per capita per day (at purchasing power parity) or above.

*Source: National Statistics Service, Armenia*

## **ANNEX 2**

### **Methodology of the 2008 Armenian Integrated Living Conditions Survey (ILCS)**

*Source: National Statistics Service*

The Integrated Living Conditions Survey (ILCS) was introduced in Armenia in 1996 and has been carried out in 1998/99 and annually since 2001. The survey is conducted throughout the year with monthly rotation of households and settlements. Its primary objective is to assess the level of consumption-based poverty in the country.

The sampling frame of the 2008 ILCS used the database of addresses of the 2001 Population Census. It is representative at the *marz* level and consists of 48 strata including:

- 12 communities of Yerevan city;
- 16 groups of large towns, with population of 15,000 or more;
- 10 groups of villages and other towns.

The sample included 46 urban and 18 rural enumeration areas per month. In 2008, a total of 7,872 households were surveyed, with 4,416 from urban and 3,456 from rural settlements. Refusal rate was high in Yerevan (19%) and Armavir *marz* (11%), and lowest in Gegharkunik *marz* (less than 1%). Apparently well-off households have the higher refusal rate, thus limiting the validity of the results.

A questionnaire is administrated to each household, who also received AMD 1,200 for keeping a diary during the month of the survey. The household is visited a minimum of five times within a month. Information is collected principally on the composition and housing conditions of the household, level of education and health status of household members, their employment status, land ownership, availability and utilization of cattle and agricultural equipment, money and goods flow between households.

The diary is used to record everyday the household's expenses on food, non-food products and services with detailed description of what has been bought (name of the product, quantity, cost, place of purchase), as well as the consumption of products which were received or utilized from their own or other farms or from other sources (e.g. gifts, humanitarian aid). The survey diary sections include: (i) food purchased during the day; (ii) food consumed at home during the day; (iii) expenditures on food consumed outside; (iv) non-food products purchased and services received; (v) all other non-food products and services received free of charge; (vi) household income and revenues; and (vii) purchase and availability of durable goods.

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