REPORT

Pilot Monitoring of High Food Price Impact at Household Level in Selected Vulnerable Areas

August – November 2008





EXECUTIVE SUMMARY

Increasingly high food prices (HFP) are presenting the world with a complex challenge for the most vulnerable nations and the most vulnerable people. The government of Indonesia has been handling the national level food availability and food prices effectively so far. However, while the data at the macro level is relatively sufficient, there is very limited data at the village and household level on the impact of HFP on food security and the nutrition situation.

To fill the information gap and at the request of the Government of Indonesia-GoI/United Nations Task Force on High Food Price set up in May 2008. WFP Indonesia (World Food Programme) initiated a 4-month pilot (August - December 2008) on monitoring the impact of high food prices on households in vulnerable areas of four regions of WFP current operation (Nusa Tenggara Timur - NTT, Nusa Tenggara Barat - NTB, East Java and Greater Jakarta). The pilot included 960 households, 320 traders (retailers) and 80 village health posts in 80 selected villages (31 in big cities, 21 in provincial and district towns and 28 in rural). The pilot was designed, facilitated, analyzed and reported by Technical Support/Vulnerability Analyzed and Mapping Unit (VAM), WFP and co-funded by WFP and UNICEF. Three data collection rounds were carried out in August, October and November 2008, but not in the fasting month (September). Key variables of household demography, livelihood strategies, sources of income and food, food and non-food expenditure, dietary diversity and frequency, coping strategies, market availability and function, food and non-food prices, and secondary data on underweight and mortality among under-five children available at the village health posts were monitored and reported. Data was disaggregated for Cities. Towns, and Rural, rather than for each geographical region.

Main findings

- 1. High food prices, high fuel/transport, debt payment and employment loss were four major difficulties experienced by the households in the selected vulnerable areas during January - November 2008. High food price, fuel/transport and debt payments gradually reduced from August. But employment loss increased during October - November in Cities (by 7%) and Rural (by 6%);
- 2. It is challenge to differentiate the impact of high food prices with other factors because chronic food insecurity was already widely prevalent. Thus, high food prices should be regarded as just an additional shock;
- In August 2008, 22% of households in Rural, 19% in Town and 3% in Cities were estimated to be food insecure. The difference was significant between the three areas (P<0.05). The percentage of the food insecure increased in Rural to 29% in October –November, while slightly decreased by 1-2% in Town and Cities, respectively;

4. In October 2008, the highest proportion of food insecure households was found in NTT (34%), followed by NTB (24%), both significantly higher than in Jabotabek and East Java (1% each).

More rural households in NTT were found to be food insecure than in Rural of NTB (48% vs. 25%, P<0.05), but no difference was found between Towns in two regions. In the meantime, more vulnerable households were reported in Rural and Town of NTB than in the respective areas of NTT (P<0.05);

- 5. In the piloted vulnerable areas, higher proportion of food insecure households were found in Rural than in provincial/district Towns and Cities. The severity of shocks including high food prices was likely to be higher among rural households;
- 6. Across areas, food insecurity was reported more among sellers of agriculture products (food or cash crops, vegetables, fruits, livestock), unskilled and skilled agricultural wage laborers, unskilled non-agricultural wage laborers and farmers having less than 0.5 ha land, and households without access to improved water sources;
- 7. Despite the fact that prices of food and essential non-food items reduced or stabilized from September 2008, no significant improvement has been seen since then in the food security in all areas. Food insecurity seems to have even worsened in Rural from October, due likely to running out of stocks as the lean season was approaching and/or it competed with the need for increased agricultural inputs for the planting season;
- 8. Higher food insecurity in Rural was likely to be due to their chronically limited food access as a result of: (i) lack or limited agricultural land, with a very low staple production; (ii) largely engaged in casual wage labor, hence, strongly dependent on food purchase from markets; (iii) mainly engaged in irregular, unstable, low remuneration cash income jobs; and (iii) reliance on one or two cash income sources;
- 9. Eating less quality and less expensive foods was adopted as a coping strategy by a majority of the households in all areas and even increased in Rural in November. Other main strategies included relying on help through the informal community network (friend, relatives, neighbors) and purchasing food and goods on credit. Food related coping strategies such as reduced meals or portion size, giving meals to children first, gradually reduced from August to November. Overall, the adopted coping strategies were ranked at an acceptable, non-depleted level;
- 10. Overall, malnutrition (underweight) rates reduced from 14% in August to 11% in October. The rate was slightly higher in Rural and Town (14%). The severe rate reduced from 4.5% in July to 3% in August and has stabilized since then. However, the low underweight rate should be interpreted with caution. It was likely to have been underreported as only around half of all under-fives were weighed during September October, much lower than the Ministry of Health's target of 70%. Only 4 deaths related to malnutrition were reported in 80 surveyed villages during August 2008;

- 11. School attendance remained high, above 85%. Reduced attendance in October in Town and Rural was mainly due to the official long holidays rather than for economic reasons;
- 12. The Government's safety net programmes including Rice-subsidized (RASKIN), Cash Transfer (BLT) and Free Health Care (JPS) were a major assistance to the households. These programmes assisted 52%, 31% and 34% of all households, respectively. A higher coverage was found in Rural and Town;
- 13. Food insecurity seems to be lower among RASKIN beneficiaries as compared with non-beneficiaries and this difference was only seen in Rural. Such difference was not reported for BLT programme in all areas. Indebtedness was found to be higher among beneficiaries of RASKIN and BLT programmes than among respective non-beneficiaries. This may suggest that targeting criteria for these interventions were likely to have been appropriate and compiled satisfactorily;
- 14. There were no or negligible nutrition interventions for the more vulnerable groups (young children, especially malnourished children, pregnant and lactating women), nor were any long-term livelihood and agriculture-supported interventions in all surveyed areas;
- 15. It is a challenge and may be impossible to differentiate the level of impact caused by high food prices and other chronic factors of food insecurity in the vulnerable regions. Hence, high food prices should be regarded as a shock which further depletes the persistently lower resilience to shocks among the poor and vulnerable in chronic food insecure regions; and
- 16. Correlations defined between various food security proxy indicators (cash income sources, proportion of food expenditure, food consumption score, Coping Strategy Index) allowed for calculating the composite household food security to answer four key food security related questions: How many are food insecure, Who are the food insecure, Where were the food insecure and Why are they food insecure ?.

Recommendations on Response Options

- Continue Government safety net programmes until food and fuel prices are returned to and stabilized at the 2007 level, with the same focus on the poor and vulnerable in Rural and Town;
- Stronger focus on promoting longer-term and sustainable interventions to address problems of chronic food insecurity through improving households' resilience to shock;
- Nutrition interventions should address micronutrient and protein deficiencies, especially of vulnerable groups (under-five children, school students, reproductive age women); and
- Strengthen village health posts (Posyandu), especially in Rural, to increase the

coverage of growth monitoring of under-5 children, for more accurate reporting on malnutrition rates and timely interventions.

Recommendations on Future Replication

- Crisis impact on household food security should be monitored because it is sensitive to changes, and it is one of the underlying causes of malnutrition. It should be periodically monitored and can provide early warnings on the impact on the crisis on food security and nutrition in more vulnerable and highly food insecure provinces;
- Food Insecurity Atlas (2005), Nutritional Map (2006), Poverty Map are good tools for selecting vulnerable districts, sub-districts and villages, if expanded to other regions. Sample of households and traders should be fixed for comparing changes over time;
- Revise questionnaires to capture the most sensitive indicators and continue monitoring on quarterly or bi-annual basis;
- Based on the past experience, a real-time monitoring system titled "Food Security and Nutrition Monitoring System FSNMS" should be developed and implemented first in these vulnerable regions;
- Continue monitoring the proven key food security indicators including food consumption score, proportion of food expenditure, coping strategy index. Income source, school absenteeism, job loss, child labor, crop production, assistance should also be considered in order to have a broader understanding on changes and causes;
- Monitor nutrition situation using indicators drawn from several examples of national nutritional surveillance systems including wasting (weigh-for-height) of under-fives, Body Mass Index of their non-pregnant mothers, and morbidity. If resources permit, anemia prevalence rate is strongly recommended; and
- In the future FSNMS, enhance partnership with Government (Planning and Economic Development Ministry, Coordinating Ministry for Economic Affair, Food Security Offices), government research institutions, international organizations (UNICEF, ILO, UNDP, FAO, IFAD, World Bank), NGOs to enhance ownership, complimentarity and sustainability of the monitoring system.

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1.0 BACKGROUND

1.1 RATIONALE OF THE PILOT

High food prices are presenting the world with a complex challenge for the world's most vulnerable nations and the most vulnerable groups. Households in the developing world, where food represents 60-80 percent of household expenditure, suffer the most from increasing high food prices. The negative impact of high food prices on vulnerable households may have not only set back progress towards the reduction of poverty and hunger (Millennium Development Goal 1- MDG1), but will also make it more difficult to achieve the targets for education (MDG2), child and maternal mortality reduction (MDGs 4 and 5), and the spread of major diseases (MDG6).

The government of Indonesia has been handling food availability and food prices at the national level effectively so far. In light of the increased food prices, in April 2008, the Government increased the coverage of the major food assistance programme – Rice-subsidization (RASKIN) for up to 91 million of the total population. In addition, the Government subsidized cooking oil and soybeans to support the poor. Consequently, Indonesia has seen none of the rioting over rising food prices that have affected other countries, nor has there been any panic buying here.

However, periodic monitoring and analysis of the potential impact on food and nutrition security of vulnerable households, particularly the net food buyers in the country is essential. High food prices may pull the transitory nearly-poor population back into poverty, and thus, more people may become increasingly vulnerable to food and nutrition insecurity.

The monitoring activities currently undertaken by the government institutions such as the National Statistics Agency (BPS), Ministries of Agriculture and Health, Economic Affairs, Trade and Industry, mainly focus on the collection and analysis of macro-level data. This includes food prices and labor wages, crop plantation and production, harvest forecasts, exports and imports, fuel prices, exchange rates, malnutrition rates, rather than data on the household food access and utilization at the mezo (village) and micro (households, individual) levels.

To fill this information gap, it is important to develop and pilot a monitoring system to periodically collect data and analyze the impact of high food prices at the household level. The findings of the pilot will provide the Government and other partners with recommendations for possible replication of the tested system, better planning response options, especially pro-poor policies, and interventions.

1.2 OBJECTIVES

This 4-month pilot (August – November 2008) **primarily aimed** to develop and test a model for periodic monitoring changes in household food security in relation to high food prices, and is expected to be replicated by the government and other partners in future.

This overall objective was expected to be achieved through the following **specific objectives:**

- 17. Collect data and monitor changes in household food access and utilization through interviews of sampled households;
- 18. Collect data and monitor changes in prices of major staple food items and changes in buying behaviors at the village markets through interviewing local retail traders;
- 19. Collect secondary data on malnutrition (underweight) and malnutrition related deaths among children under five and monitor changes in these parameters;
- 20. Analyze data and report on the findings of each data collection round; and
- 21. Document the process, methodology, lessons learned and recommendations for possible future replication.

1.3 METHODOLOGY

The basis for the Pilot Monitoring was primary data collection at household level and at village/sub-village markets, complemented by available secondary data on malnutrition and related deaths among under-5 children from Village Health Posts (*Puskesmas*).

1.3.1 Data and Data Collections Tools

The following three types of data were collected and monitored:

- 1. Primary data on household food access and utilization: household composition and school attendance, housing/water/electricity/fuel access, agriculture and livestock, sources of food including government and external food assistance, sources of income, kinship support and assets, expenditure and debts, food frequency and diversity, food and non-food expenditure, coping strategies and assistance. WFP's structured Generic Household Questionnaire for high food price assessment was customized and used (Annex 2);
- 2. Local retail prices of basic food commodities, stocks, changes in buying behaviors, difficulties in coping, and response capacity. WFP's structured Generic Trader Questionnaire for high food price assessment was customized and used (Annex 3); and
- 3. Secondary data on malnutrition (total underweight, severe underweight) and malnutrition related deaths identified through monthly growth monitoring at the village health post (*Posyandu*). The Vulnerability Analysis and Mapping (VAM) Unit of WFP Indonesia created a simple sheet for collecting this data (Annex 4).

1.3.2 Sampling and Sample Size

The pilot was expected to include household residents in both rural and urban areas. Although ideally the monitoring villages should be spread across all livelihood zones, it turned out to be unrealistic because the livelihood zones have not been defined in Indonesia. Given a large and diverse country like Indonesia, it was also found unrealistic to conduct a nation-wide truly probability pilot.

Considering the limited resources (human, timing), it was planned to pilot the monitoring system in **rural vulnerable and food insecure districts of 4 regions** based on the *Food Insecurity Atlas (2005)* which is also currently supported by WFP Protracted Relief and Recovery Operation (PRRO 10069.2). To have data in urban settings, in each region, the City(ies), provincial and district Towns, though not currently supported by WFP, were also included.

In total, 5 big Cities, 11 Provincial/district Towns and 9 rural districts were included in the pilot, which are as follows:

- Greater Jakarta (Jabotabek region): Jakarta city, Bogor, Tangerang, Bekasi Cities;
- East Java region: Surabaya city, Sampang and Probolingo districts;
- Nusa Tenggara Barat region (NTB): Mataram city, West Lombok, Central Lombok and East Lombok districts
- Nusa Tenggara Timur region: Kupang city and Kupang district, TTS, TTU, Belu districts.

The multistage **cluster sampling** method was applied in the pilot. In Indonesia, the current administrative structure comprises region (or province), district, sub-district and village. The cluster of this pilot refers to the lowest level, i.e. a rural or urban village. In each region, a total of 20 clusters (villages) were selected amounting to **80 villages in 4 regions.**

The following 4 sampling steps were undertaken to select sub-districts, villages and households.

Step 1: Calculation of number of pilot villages for district within each region

In each region, 20 clusters were broken down for cities, towns and rural areas mentioned above proportionally to their population size, using the proportional-to-population size (PPS) technique.

<u>Step 2: Selection of urban and rural sub-districts in a chosen city/district using the</u> <u>Nutritional Map of Indonesia (2006)</u>

It was considered that a purposive sampling method would have been more suitable and practical for selecting urban and rural sub-districts for the pilot. Reasons behind are: (i) it is commonly presumed and qualitatively proved through WFP CO's field checks that high food prices are more likely to affect the household food access and utilisation of

the urban, peri-urban poor and rural poor farmers than other better-off groups; (ii) this method helps avoid the possibility of selecting villages that are very disperse or atypical (i.e. unique villages) – a risk inherent in the random or PPS selection method; and (iii) this method helps to avoid being dominated overwhelmingly by an urban population in a big city or by rural population in a large rural area.

As a result, in every rural district, one vulnerable urban/peri-urban sub-district located close to the district town and one vulnerable rural sub-district located elsewhere were randomly chosen by using a simple random sampling technique based on a comprehensive list of respective sub-districts ranked as of higher vulnerability to food and nutrition insecurity (i.e. having higher Malnutrition Rate (underweight), Infant Mortality Rate and higher proportion of population having less than 1,700 Kcal/person/day) according to the **Nutrition Map** of Indonesia (jointly launched in 2006 by WFP and BPS).

For Jabotabek and Surabaya cities as well as provincial and district towns, since there are no rural sub-districts, all selected sub-districts were urban.

Step 3: Selection of villages in a chosen sub-district

In a chosen rural district, the number of villages to be selected was broken down for the two identified urban and rural sub-districts proportionally to the population of these sub-districts using the PPS method. Within each selected sub-district, villages representing a high, medium and low population size were chosen randomly using the random sampling technique.

In a chosen city or town, 2-4 urban sub-districts ranked as having a higher vulnerability to food and nutrition insecurity according to the Nutrition Map 2006, were selected. Then in each selected urban sub-district, villages representing a high, medium and low population size were chosen randomly using the simple random technique.

As a result, a total of **52 urban villages (31 in big Cities** including Jakarta, Bogor, Tangerang, Bekasi, and Surabaya Cities; **and 21 in provincial/district Towns), and 28 Rural villages of 4 regions** were selected for the pilot.

WFP Sub-offices (SOs) were provided with a list of the selected villages for each region along with a letter requesting permission from the local government authorities. The SO checked the location, name and physical/political access to the selected villages through consultation with the local government authorities and then confirmed with the VAM Unit. In case a village was inaccesible, the SO informed the VAM Unit immediately and that village was replaced by a village ranked in the next order in the respective list.

Step 4: Selection of one poorest sub-village and households

In order to ensure adequate supervision of data collection and quality as well balance with actual capacity and timing, it was decided to focus the pilot on the poorest segment (a sub-village) through discussion and consultation with the key informants using a set of criteria such as higher poverty, access to agricultural land, proportion of households assisted by the current government's Rice-subsidised programme (RASKIN) and/or by Cash Transfer programme (BLT), access to main road and markets, access to water and sanitation.

In each selected sub-village, 11 households were defined as a minimal requirement for an Emergency Food Security Assessment (EFSA) and with an estimated 10% nonresponse or drop-out rate, a total of 12 households. These 12 households were chosen randomly, based on a comprehensive list of all households. In each selected subvillage, a purposive sampling method was used to select 4 petty traders/retailers who sell fresh or dry food.

A total of **960 households and 320 traders/retailers** were monitored in 80 villages in 4 regions. The sample size is presented in **Table 1.** A map of selected regions and a list of selected villages are in **Annex 1**.

The households and traders were repeatedly monitored in August, October and November 2008, but not in the fasting month (Ramadan, September 2008). The reason for this break of data collection during the Ramadan was that despite the fact that food frequency and diversity may not be strongly affected by the fasting period, the movement of people due to visits to their friends and relatives was likely to have interrupted the data collection.

Region	Number of piloted villages			Number of HHs per	Number traders per region	Number of villages health	
	Urban	Rural	Total	region	- og on	posts per region	
Greater Jakarta (Jakarta, Bogor, Tangerang, Bekasi)	20	0	20	240	80	20	
East Java (Surabaya city; Sampang district)	14	6	20	240	80	20	
NTB (Mataram city; West, East and Central Lombok districts	9	11	20	240	80	20	
NTT (Kupang city; Kupang, TTS, TTU and Belu districts)	9	11	20	240	80	20	
TOTAL	52*	28	80	960	320	80	

Table 1.Summary of the sampled regions and sample size

* Of the 52 urban villages, 31 are located in Cities, and 21 in provincial/district Towns

The sample was stably maintained and response rates (**Table 2**) were very high throughout the three data collection rounds. A decreased rate of village health posts in September 2008 (76%) was due to the long national Idul Fitri holidays.

Respondents	Total required sample size	Response rate of 1 st Round (Aug 2008)	Response rate of 2 nd Round (Oct 2008)	Response rate of 3 rd Round (Nov 2008)	Remarks
Households	960	100%	99%	99%	Very high
Traders	320	99%	94%	94%	Very high
Village health posts	80	94%	76%	90%	Very high

Table 2.Response rates

1.3.3 Data Collection, Field Supervision, Data Entry and Analysis

Four regional teams of a total of 20 enumerators and team leaders (4 enumerators and a leader per team) were set up. After two days of training or re-training comprising of field work and testing of the questionnaires, these teams simultaneously collected data on 11 -22 August (1st Round), 13 – 24 October (2nd Round) and 10 -21 November (3rd Round). The first training was conducted by the VAM Unit for each regional team, while subsequent re-trainings were facilitated by team leaders before the 2nd and 3rd Rounds.

On average, each regional team collected data in 2 villages per day (24 households, 8 traders, 2 Puskesmas) during the 10-12 working days per round. The enumerators collected data at households, while team leaders collected data from traders and village health posts. The team leaders also performed thorough daily quality checks of the completed household questionnaires, and weekly pouched checked questionnaires to the VAM Unit in Jakarta. Due to limited human resources, WFP staff at CO and SOs directly collected data at 9 villages. The rest (71 villages) were collected by external enumerators contracted from Mercy Corps, SEAMEO and Airlangga University.

Data entry was simultaneously performed by a data clerk contracted for 3 months. The household, market, and nutrition data was entered into a database in SPSS 16.0. Data was also analyzed by WFP's VAM Unit for each Round and the entire Pilot using SPSS 16.0 in line with WFP's food security analysis framework and methods.

The Pilot was implemented in vulnerable villages of more vulnerable regions, selected based on the Food Insecurity Atlas (2005) and Nutrition Map (2006) of Indonesia. As it was based on the initial hypothesis that net food buyers in urban/peri-urban area may have been more affected by high food prices, the analysis was focused on possible differences between households **living in Cities, Town and Rural areas,** rather than by region/province.

1.4 LIMITATIONS

The Pilot had some limitations, identified below, which will be considered as lessons learnt for future improvements if the Pilot is replicated.

- 1. The analysis and finalization was delayed due to: (i) prolonged process of obtaining permission from local Health Offices in some areas for the 1st Round; (ii) data on food and non-food expenditures required a longer verification and re-collection in some villages; and (iii) during the Pilot, a large range of indicators were tested making the data collection more time-consuming.
- 2. Varied food expenditure pattern (daily, weekly, fortnight, monthly) by households presented challenges for interviews and the quality/consistency of absolute figures when daily food expenditure data was converted to monthly food expenditure data.
- 3. Lack of primary anthropometric nutrition data did not allow for analysis of the relationship between food security indicators (consumption, coping, expenditure, income) and nutritional status.
- 4. Quality and reliability of Puskesmas's secondary data on underweight may be questionable. Since the Ministry of Health is shifting from using the previous USA National Center for Health Statistics reference (NCHS) to the WHO's standards, from measuring underweight (weight-for-age) to measuring wasting (weight-for-height), it is likely that data provided by Puskesmas was a mixture of underweight and wasting during the transitional period, rather than only underweight as originally envisaged.

2.0 **RESULTS**

2.1 DEMOGRAPHICS OF THE SAMPLE

Among 960 households included in the Pilot, 373 live in big Cities, 253 in provincial/ districts Towns and 334 in Rural areas (**Table 3**).

On average, households had 4.75 members. Eighty seven percent of households were headed by males and 13% by females. In August 2008, 43% of households had children under-5, the majority with one or two children under-five. There was no significant difference between the three groups and no significant changes during the Pilot.

Table 3.Demographic characteristics of households, August 2008

Demographic characteristics	Urban	Town	Rural	Total	
Households	373	253	334	960	
Household size	4.68	4.99	4.66	4.75	
Female-headed households (%)	12%	15%	12%	13%	
Households having under-fives	37%	43%	49%	43%	

2.2 HOUSING, WATER AND COOKING FUEL

<u>Housing</u>

All households had houses. Eighty eight percent of households in Town and 93% in Rural lived in individual houses. In Cities, 71% lived in individual houses, 21% in room(s) in shared houses or shared flats, and 8% in collective centers. As for the construction materials, 63% of all households lived in houses made of durable materials (brick, cement). A significantly higher number of households in Cities lived in this type of housing (79% as compared with 66% in Town and 42% in Rural). It should be noted that 36% of rural households lived in houses made of non-durable materials (soil floor and upper part made of wood, leaves, mud).

Only about 9% of all households had to pay a rent for their houses or leased land for houses (19% in Cities, 4% in Town and nil in Rural). Among those who had to pay for rent, around 25% were in debt for rent. No dramatic change in the rent was reported during the period of the Pilot.

Water

All households had access to at least one source of drinking water. In addition, nearly one fourth of the households in Cities had a second source. Almost all the households in Cities and 94% in Town had access to improved water sources according to UNICEF and WHO definitions (pipe water, public tap, tube well, borehole, protected dug well, protected spring water, rain water) while only 61% in Rural had such access.

Cooking Fuel

Wood, gas and kerosene were main sources of cooking fuel used by 55%, 25% and 19% of all surveyed households, respectively. In Cities, 63% used gas, 25% used kerosene, and 12% used wood. In Town, the majority use wood (69%) and kerosene (29%). Wood was dominantly used in Rural (93% of households), followed by kerosene (6%).

No significant change was observed during the pilot in terms of housing, water and cooking fuel among the three groups.

2.3 LAND AND ASSETS

<u>Agricultural land</u>

Although the initial assumption was that the majority of rural households would have been engaged in agriculture, the Pilot showed that 41% of rural households were not engaged in agriculture. In Towns, this rate was 74% as these households were engaged in cash income jobs to buy food, and therefore depended strongly on market purchases. Among 59% of rural households engaged in agriculture, only 49% owned land, 10% worked as laborers or rented land for farming.

The size of owned land was limited. Eighty percent of rural land owners owned less than 0.5 ha (among them, 53% less than 0.25 ha). Renting land was not a common practice and the size of rented land was also small. In total, 11% of households rented land, with a size less than 0.1 ha.

<u>Livestock</u>



Figure 1. Livestock ownership

As usual, more households in Rural raised livestock than in Town and Cities. **Figure 1** showed 6% of households in Cities, 44% in Town and 64% in Rural raised either some type of livestock or fish. Poultry was more seen than goats, sheep or pigs. Only 28% of rural households had cattle and 6% had fish. The size of livestock raised was very small, usually 1-2 cattle, 1-3 sheep or goats or pigs, 1-5 poultry 1-4 kg of fish.

Main reasons for selling animals (sheep, poultry, pigs) were to get cash for basic needs, buy cattle for festival/celebrations. Overall, the number of households reporting selling livestock, significantly and steadily reduced from August through November 2008 as compared to January-July 2008.

<u>Assets</u>

Households were asked about and confirmed through observation, their ownership of assets such as fridge, stove, television, radio, cell phones, bicycle, motorbike, car, taxi, sewing machine, farm and non-farm machinery, fishing tools, savings, small kiosk/shop. Rural households had a significantly lower number of assets than those in Town and Cities. The mean of assets in Rural was 1.2 while it was 2.8 in Town and 4.1 in Cities.

In August 2008, 42% of households in Rural did not have any asset and 41% had only 1-2 assets. Whereas, the proportion of households in Town had 0-2 assets was only 47% and in Cities was 18%, significantly lower than in Rural.

No significant change in the number of assets was observed within each group throughout the Pilot.

2.4 FOOD AVAILABILITY IN THE LOCAL MARKETS

2.4.1 Local Market Performance and Access to Market

Food shops were available and regularly functional in all villages or sub-villages. Almost all shops operated 6-7 days a week. The mostly sold food items in Cities were local cereals (grains, flour), eggs and cooking oil. In Town and Rural, processed cereals (noodles, biscuits, fried potatoes), sugar, cooking oil were three main items. Eggs were the fourth main item in Town and Rural markets. In all areas, fish was sold at only 8% of shops while meat, dairy products, peas/beans were almost absent. Tempe, tofu, vegetables were less sold in Rural than in Cities and Town.

Around 80% of shops in Cities, 60% in Town and 50% in Rural had stocks of cereals during the monitoring days in August-November 2008. However, the stocks were usually small for selling in 1-2 weeks.

The average quantities of four main food items sold in one week during August-November 2008 were reduced as compared with that at the same time in 2007, by 8% for local grains and flour, 18% for processed cereals, 22% for sugar, 26% for cooking oil. No significant difference in the level of changes was found between Cities, Town and Rural for cereals and sugar, but the reduction of oil sales was more remarkable in Rural.

2.4.2 Price of Food and Non-Food Items

Food prices

Rice price (Figure 2) steadily decreased in Cities. It was relatively stable in Town and Rural during August – November with only a slight increase in October. However, rice price was still higher than in January 2008 by 4% in Cities, 7% in Town and Rural.

Figure 2.Rice Price Trend during August – November 2008



Due to insufficient data on prices of tempe, tofu, sugar and cooking oil and essential non-food items (gas, kerosene, fuel, wood) collected during the 1st Round (August 2008), it is only possible to analyze these prices only for October and November 2008.

The price of tempe, tofu, sugar and cooking oil (Figure 3) was relatively stable in all areas, except cooking oil which increased in Rural (by 13%) while reduced in Cities (by 17%) in November.

Figure 3. Price Trend of Tempe, Tofu, Sugar and Cooking Oil during October-November 2008







Eighty percent of all traders responded that the main reason for increase in the prices of the food they sold was due to price increase of the food at source, i.e. at wholesalers, other traders, producers. This rate was higher in Town (89%). The second main reason was the increased fuel/transport cost, as claimed by 60% of all traders, with a higher rate in Cities (73%).

Non-food prices

Overall, price of the essential non-food items (Figure 4) changed very slightly during September-November 2008, except for wood, where the price increased by 35% in Town in November, while gas price reduced by 5% and kerosene reduced by 10% in Cities in November.









2.4.3 Changes in Buying Behaviors of Customers and Traders' Experienced Difficulties

Change in buying behaviors of customers

The traders were asked about changes in buying behaviors of their customers during January-July, August-September and October-November 2008. Three main behavioral changes were reported. Overall, throughout January-November 2008, 80% cited that their customers had reduced quantity. Nearly half mentioned that more people bought in credit, while around 40% of traders said their customers tended to buy cheaper foods.

Only a slight improvement was seen during August-September 2008 in terms of reduced quantity and buying on credit among customers in Cities, but overall, these three behavioral changes remained unimproved in all areas during January-November 2008.

Traders' experienced difficulties and coping strategies

Three main difficulties faced by local traders during August-November 2008 were high food prices (cited by 40% of traders), decreased buyers' demand (30% of traders) and difficult recovery of debts from people (20% of traders). Decreased demand was more reported in November 2008 in Rural.

To cope with increased food prices, 60-70% of the traders increased prices, 30-35% of traders reduced purchases, 20% of traders in Rural and 40% in Town and Cities lowered their profit margins, 15% of traders in Rural and Town and 32% in Cities increased credit to buyers. These coping mechanisms were relatively similar throughout the Pilot.

2.4.4 Response Capacity of Traders

The traders were asked how long it would take them to increase their food supplies (rice, maize, noodles, cooking oil, mung bean, sugar) if demand by households increase and they have enough money. Nearly all traders responded that they would be able to meet the increased demand for any of these foods within 2 weeks, thus indicating a very high response capacity of the markets.

Ten percent of traders in Cities, 30% in Town and 23% in Rural got credit to purchase commodities, usually from bank, credit unit, or cooperative.

2.5 FOOD ACCESS

2.5.1 Income Sources/Livelihoods

Households were asked about the number of members earning cash income, number of cash income sources and listed two main (important) sources.

Number of cash income earners and income sources per household

The average number of cash income earners per households was similar between the three groups; calculated at 1.7 earners per household in Cities, 1.6 in Town and 1.5 in Rural during January-November 2008. In Cities, it tended to increase during August - November as compared with the January-July period. But it remained stable in Town and Rural.

The average number of income sources per household was also found to be similar between the three groups; calculated at 1.6 income sources per household. It reduced in September-October, mainly due to the long holiday period.

Main income sources

Figure 5 shows that at the baseline period (August 2008), in total, the main cash income sources were: non-agricultural wage labor, which accounted for 29% of all surveyed households; followed by self-employment (taxi drivers, carpenters, etc.) at 14%; sale of agricultural produce (food and cash crops, vegetable and fruits) at 12%, and agricultural wage labor at 11%.

In Rural, sales of agricultural produce (food or cash crops, vegetables, fruits, livestock), agriculture wage labor and non-agriculture wage labor were the main sources of cash income, accounting for 26%, 23% and 17% of all households, respectively.

In Town, the main sources of cash income were as follows: 22% engaged in non-agriculture wage labor, 16% were self-employed, 12% were involved in petty trade.

In Cities, similarly to the situation in Town, non-agriculture wage labor and selfemployment were the main livelihood activities representing 45% and 20% of total households, respectively. The third main source in Cities was salaries from private company employment (12%).

As for the secondary income sources, 47% of households in Cities had a second source, while nearly 60% in town and rural had a second source. The pattern of the second income sources in each area (Cities, Town, Rural) was similar to that of their first source.



Figure 5. Main cash income sources in August 2008

The main cash income sources have been categorized into **three groups: poor**, **average and good** based on their regularity in providing an income to the household and the expected remuneration. The basis for classification was drawn from previous food security assessments in the country or these regions. The three classified income groups were later validated and confirmed through cross-tabulating with other food security indicators used in the Pilot (i.e. Food Consumption Score, Coping Strategy Index, Food Expenditure).

As a result, the sample of 960 households fall into three classifications:

1. **Poor income sources** *(unstable/irregular, low remuneration):* Sale of food, cash crops, vegetables or fruits, agricultural wage labor, sale of handicrafts, sale of animal/ animal products, garbage collection, unskilled casual labor (motorcycle or metromini driver, maid, daily labor, construction labor, vehicle service, carpenter), self-employment of small scale (rickshaw, horse cart rider, street musician, traditional healer, middleman of goods, seller horse shoes).

- 2. Average (steady, but low remuneration): petty trade, pension, allowances, remittances, skilled and fixed labor (fixed driver, factory labor, cleaning service, waitress, baby sitter, sales, chef).
- 3. **Good** (stable and sufficient remuneration to cover basic needs): Selfemployment of medium scale (owner of boarding house, entrepreneur, play station/sound system, computer, photocopy, food stall, driver of personal trucks, middlemen, tailor), government employment salary, salary employment of private company, security, honorer, courier).

In total, 57% of all households were classified as of poor group, 26% of average group and 18% of good group. Immensely high, 82% of rural households were engaged in poor cash income activities. This rate was significantly higher than in Town (53%) and Cities (34%) (Figure 6).



Figure 6. Income groups in Cities, Town and Rural

During January – July 2008, 47% of all households said that their cash income had been decreased. A significantly higher percentage was found in Rural (58%) as compared with Cities (37%) and Town (48%)). A remarkable improvement was observed during August – September and it stayed stable through November with a significantly higher number of households in all areas claiming for unchanged or increased cash income. However, the improvement was only statistically significant in Rural.

Change in main income source

In **Table 4**, results of the main cash income sources are marked in Bold/Red. Increases are filled in Green and decreases filled in Pink.

There was no dramatic change, as the three main sources of cash income within each group remained the most important. In Cities, non-agriculture labor and self-employment reduced during October - November. In Town and Rural, self-employment also decreased in October-November, but non-agriculture and agriculture wage labor increased, likely due to increased earning opportunities during the planting season. Sale of agricultural production (food /cash crops, animals, vegetables, fruits) tended to reduce in Rural in October-November, due to reduced cereal stock as mentioned earlier. It should be noted that more households became engaged in garbage collection in Cities during October-November, which indeed indicated a worsened situation.

	Cities			Town			Rural		
	Aug- 08	Oct- 08	Nov- 08	Aug- 08	Oct- 08	Nov- 08	Aug- 08	Oct- 08	Nov- 08
Sale of food crops production	0.8%	0.0%	0.3%	8.7%	6.8%	5.2%	16.6%	9.9%	5.9%
Sale of cash crops production	0.3%	0.0%	0.0%	0.8%	0.4%	0.6%	7.6%	13.8%	10.0%
Sale of vegetables or fruits	0.0%	0.8%	0.9%	0.8%	1.2%	1.0%	0.6%	4.5%	3.0%
Agricultural wage labor	1.6%	1.4.%	2.0%	9.1%	11.2%	17.0%	23.0%	24.3%	30.0%
Non-agricultural wage labor	44.6%	42.0%	38.0%	21.7%	30.3%	28.0%	16.9%	20.4%	23.0%
Self-employment	20.4%	11.2%	8.0%	16.2%	10.4%	8.0%	5.4%	4.5%	3.0%
Government employee salary, midwife	2.2%	1.9%	2.3%	10.3%	8.0%	7.5%	0.9%	0.9%	1.3%
NGO, private company salary	11.6%	14.9%	13.1%	7.1%	7.6%	8.1%	1.8%	3.0%	3.4%
Sale of handicrafts	0.3%	0.3%	0.3%	0.4%	0.8%	0.9%	3.6%	2.7%	3.4%
Sale of animal/animal products	0.8%	0.8%	0.8%	2.4%	2.0%	2.3%	6.3%	4.2%	3.0%
Petty trade	11.0%	12.4%	11.3%	11.5%	10.3%	10.8%	7.9%	5.4%	6.1%
Pension, allowances	3.0%	3.0%	3.4%	5.9%	7.2%	6.9%	1.2%	0.6%	1.5%
Remittances	1.9%	3.0%	5.0%	4.0%	2.7%	2.0%	5.1%	5.1%	5.5%
Garbage collection	1.3%	3.6%	6.5%	1.2%	1.1%	1.0%	0.0%	0.0%	0.0%
Other	0.3%	0.8%	2.8%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%
No answer	0.0%	5.3%	5.3%	0.0%	0.0%	0.7%	0.0%	0.7%	0.9%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 4.Change in main income sources

2.5.2 Food and Non-food Expenditures

<u>Methodology</u>

During each data collection round, households were asked about their average daily cash and credit expenditure spent for food during the last week prior to the survey day. Then it was converted to a monthly basis and combined with monthly non-food expenditure to constitute total household cash and credit expenditure. As for other non-food expenditures, households were asked about the cash and credit they spent during the last month prior to each data collection round, i.e. in July, September and October 2008. The share of food expenditure among total household expenditure was calculated.

The share of food expenditure is a proxy indicator of household food security. The higher the share of total expenditure on food, the greater the likelihood that a household has poor food access. This is especially true if the household mainly depends on purchases for its food. Thus, for households that have low levels of income and cannot produce enough food for themselves, buying food becomes, *de facto*, the main priority. As such, household resources will go towards ensuring that minimum level of food is required in order to meet household needs. This, when compared to outlays of non-food priorities, will naturally result in a higher proportion of resources allocated to meet these food needs.

The commonly set cut-off points for the percentage of food expenditure were used in the Pilot to classify households into poor, average and good food expenditure groups:

- Poor: >65% of total household expenditure
- Average: 50-65% of total household expenditure
- Good: <50% of total household expenditure

Since it was impossible to collect quantitative data on expenditures prior to the Pilot (i.e. during January-June period), households were asked to recall whether their total and food expenditure had increased, decreased or unchanged. Three quarters of all households cited that their total expenditure increased. This rate was higher in Cities (78%). Increased food expenditure was reported by 68% of all households and again higher in Cities (77%). The second increase was the expenditure on education mentioned by 45% of all households because the school year started in July. One third of households noted their increased expenditure on cooking and lighting fuel.

Shares of food and non-food expenditures

Food expenditure always represented the biggest share in total household expenditures. It was found that in July 2008, on average, the surveyed households in Cities and Rural spent 50% of their cash income on food, while households in Town spent slightly lower, 46% on food in July 2008 (Figure 7). The share of food expenditure remained relatively similar throughout the Pilot.

As schools started in July, expenditure spent on education (school fee, textbook, stationery, uniform) was the second big expense; calculated at 19% of total expenditure in Cities, 17% in Town and 16% in Rural. Debt payment was the third big expenditure item among all groups (9% of total expenditure in Cities, 13% in Town and 14% in Rural).

In September and October, education expenditure significantly reduced while debt payment had the second largest share of expenses, after food. Expenditures for clothes, shoes and social events remarkably increased in all areas, especially in Cities in September, the usual common practices during the holiday month (Idul Fitri), and then reduced in October.



Figure 7. Shares of monthly food and non-food expenditure, July 2008





Poor food expenditure (i.e. more than 65% of total expenditure)

A further analysis was made to identify changes in the proportion of households that spent more than 65% of their total household expenditure on food (Figure 8). During August-October 2008, there was a significant increase from 25% to 35% of rural households who spent more than 65% of total expenditure on food. There was also an increase from 19% to 24% in Town. In contrary, the number of households in Cities who spent more than 65% of total expenditure reduced from 14% in August to 11% in October. However, the change in Town and Cities was not statistically significant.



Figure 8. Percentage of households with poor food expenditure

Who spent more than 65% of their total cash expenditure on food?

It was constantly found throughout the Pilot that sellers of cash crops, agriculture wage laborers, sellers of handicrafts or livestock, dependent on remittances who were earlier classified as of the poor income group, were likely to spend more than 65% of their total expenditure on food (Figure 9).



Figure 9. Food expenditure by income source

Shares of specific food items in daily food expenditure

Expenditure for different food items such as cereals, fresh food (meat, fish, vegetables, fruits, milk, eggs, tempe, tofu), cooking oil, cooked foods and snack, as well as their share among total food expenditure was calculated. It was found, in **Figure 10**, that expenditure on fresh protein and micronutrient-rich foods was the biggest share among households in Cities and Town, followed by expenses on cereals and snacks.

In Rural, although 59% of households were engaged in cereals and tuber production, expenditure on cereals was the biggest share in their food expenditure. While data on crop production showed that cereal produced in Rural was mainly used for food consumption, and average household size in Rural, Town and Cities was not different, this higher cereal expenditure in Rural likely suggests that the rural households did not produce enough for food consumption, or preferred to buy other cereals which they do not produce (e.g. sell maize to buy rice), or both reasons. Hence, the rural households were also strongly dependent on cereal purchases from the market.

It should be emphasized that snacks were found to be very common in all three areas. Daily cost for snacks accounted for 20% of total daily food cost in Cities, 14% in Town and Rural.

Only two changes in the shares of food items were observed during the Pilot. First change was an increase by 7% in the share of fresh foods in Cities while it was unchanged in Town and slightly decreased in Rural in November 2008. The second was a slight increase in cereal expense in Rural and Town, by 5%, in October. Shares of the remaining food items remained relatively stable.



Figure 10. Shares of food items of daily food expenditure





2.5.3 Food Stocks

Among 70% of households producing cereals and tubers in Rural, the production of cereal and tubers was low which could, altogether, cover the food need (estimated at 10 kg per month per person, or 50 kg/family of an average family of five members) for around 5-6 months a year. In Town, this rate was lower (46%).

Due to the fact that households in Town and Rural consumed food partly from their own production, they were asked about their food stock (cereals and tubers) on the day of data collection, and how long these stocks would last (Figure 11). It was found that in August 2008, 27% of households in Town and 12% in Rural cited they had no stock, while another 40% of each group said they had stocks for up to 2 months. Two months later, in October 2008, the number of households claiming no stocks increased to 62% in both groups. Accordingly, only 23% of households had stocks for the next two months.

The closer the lean season (usually during December – February), the lower the stocks were. While the situation in Rural slightly improved in November, it worsened in Town with a further increased number of households having no stocks (84%). In November, only 5% of households in Town and 13% in Rural had sufficient stocks to meet their food needs for the next three months, i.e. until the next harvest expected in March 2009.



Figure 11. Cereal and tuber stock on the day of survey during August-November 2008 in Town and Rural

2.5.4 Food Sources

In the rural surveyed villages, main cereal crops are maize and tubers (cassava, potatoes). Thus, rice which is a commonly eaten was mainly purchased from the market. During August – November 2008, three quarters of all surveyed households bought rice from the market. In Cities, it was the highest (more than 90%). Even in Rural where cereals and tubers are produced, nearly two thirds bought rice. The second source of rice was the Government's rice subsidized programme (RASKIN) mentioned by 10% of all households (1% in Cities, 12% in Town and 19% in Rural). Own production as the third source of rice was reported by 8% of all households (17% in Rural and 8% in Town).

As for maize, most households in Town and Cities bought from the market, while in Rural it was mainly from own production.

Except vegetable and pulses mainly coming from own production in Rural, the majority of food items (pulses, dairy, sugar, oil, meat, poultry) was mostly purchased from the market. This indicates that the households in all areas, including Rural, were strongly dependent on the market for food, and hence, prone to food price fluctuation. Their own production was mostly at the subsistent level.

No significant changes in the share of various sources of different food items were noted in the three areas during the Pilot.
2.6 HOUSEHOLD FOOD CONSUMPTION

2.6.1 Methodology

Household food consumption was calculated using **a proxy indicator** - the Food Consumption Score (FCS). FCS is a composite score based on **dietary frequency, food frequency and relative nutrition importance** of different food groups.

The FCS is considered as an adequate proxy indicator of **current** food security because the FCS captures several elements of food access and food utilization (consumption).

Dietary diversity is the number of individual foods or food groups consumed over a reference period. Food frequency is the number of days (in the past 7 days) that a specific food item has been consumed by a household. Household food consumption is the consumption pattern (*frequency* * *diversity*) of households over the past seven days. In the Pilot, household food consumption was calculated applying this method.

Food consumption module

Data was collected based on food items consumed that were specific for the Pilot regions. Food items were grouped into the standard food groups. The difference between foods and condiments (i.e. food items consumed in a negligible amount, mainly used for flavoring) were also captured during the data collection. The following food consumption module was used in the Pilot.

	Durin was t in	ng how many days he food item eaten n past 7 days?	Wha <u>main</u> the fo the p	t were <u>two</u> <u>sources</u> of ood eaten in ast 7 days?	What are two main sources do you USUAL obtain most of these for during October 2008 Ask for each food iter <u>even if not consumed</u> the past 7 days	
			1= Own crop/garden production 3= Work for food 5= Gifts from neighbors/relatives 7= RASKIN 99= No 2 nd source			 2= Market/shop purchase 4= Borrowing/debts 6= Free food aid (govt, UN, NGOs, company) 8= Gathering from forest/wild
Bread, biscuits (including WFP biscuit)	5.5		5.6		5.7	
Rice	5.8		5.9		5.10	
Maize	5.11		5.12		5.13	
Cassava	5.14		5.15		5.16	
Sweet potatoes	5.17		5.18		5.19	
Noodles	5.20		5.21		5.22	

Table 5.Sample of food consumption module (Pilot High Food Price
Monitoring, Indonesia, 2008)

Beans, lentils, peas, nuts (including tempe/tofu)	5.23	5.24	5.25	
Vegetables	5.26	5.27	5.28	
Fruits	5.29	5.30	5.31	
Meat, offals	5.32	5.33	5.34	
Eggs	5.35	5.36	5.37	
Fish (fresh, dried)	5.38	5.39	5.40	
Milk, cheese, yogurt	5.41	5.42	5.43	
Sugar, honey, jam	5.44	5.45	5.46	
Oil, fats	5.47	5.48	5.49	
Condiments	5.50	5.51	5.52	

Calculation of FCS and household food consumption groups

- 1. Using standard 7-day food frequency data, group all the food items into specific food groups.
- 2. Sum all the consumption frequencies of food items of the same group, and recode the value of each group above 7 as 7.
- 3. Multiply the value obtained for each food group by its weight and create new weighted food group scores.
- 4. Sum the weighed food group scores, thus, creating the food consumption score (FCS).
- 5. Using the appropriate thresholds, recode the variable food consumption score, from a continuous variable to a categorical variable, to calculate the percentage of households of poor, borderline and acceptable food consumption.

Food Items, Food Group and Weight (Pilot High Food Price Monitoring, Indonesia, 2008)

No	FOOD ITEMS	Food groups	Weight
1	Maize, maize porridge, rice, sorghum, millet pasta, bread and other cereals	Cereals and tuber	2
2	Cassava, potatoes and sweet potatoes		
3	Beans. Peas, groundnuts and cashew nuts	Pulses	3
4	Vegetables and leaves	Vegetables	1
5	Fruits	Fruit	1
6	Beef, goat, poultry, pork, eggs and fish	Meat and fish	4
7	Milk yogurt and other diary	Milk	4
8	Sugar and sugar products	Sugar	0.5
9	Oils, fats and butter	Oil	0.5
10	Condiments	Condiments	0

Weight justification

Food groups	Weight	Justification			
Main staples	2	Energy dense, protein content lower and poorer quality (PER less) than legumes, micro-nutrients (bound by phytates).			
Pulses	3	Energy dense, high amounts of protein but of lower quality (PER less than meats, micro-nutrients (inhibited by phytates, low fat.			
Vegetables	1	Low energy, low protein, no fat, micro-nutrients.			
Fruit	1	Low energy, low protein, no fat, micro-nutrients.			
Meat and fish	4	Highest quality protein, easily absorbable micro-nutrients (no phytates), energy dense, fat. Even when consumed in small quantities, improvements to the quality of diet are large.			
Milk	4	Highest quality protein, micro-nutrients, vitamin A, energy. However, milk could be consumed only in very small amounts and should then be treated as condiment and therefore re-classification in such cases in needed.			
Sugar	0.5	Energy dense but no other nutrients. Usually consumed in small quantities.			
Oil	0.5	Energy dense but usually no other micro-nutrients. Usually consumed in small quantities.			

Food Consumption Score thresholds

Once the FCS is calculated, thresholds for FCSs should be determined based on the frequency of the scores and the knowledge of the consumption behavior in that country/region. The typical thresholds are:

Thresholds	Profiles	Thresholds with oil and sugar eaten on a daily basis (~7 days per week)
0-21	Poor food consumption	0-28
21.5 - 35	Borderline food consumption	28.5 - 42
>35.0	Acceptable food consumption	>42.0

Why 21 and 35? Or why 28 or 42?

A score of 21 was set as barely minimum, scoring below 21, a household which expected NOT to eat at least staple and vegetables on a daily basis, was therefore considered to have poor food consumption. Between 21 and 35, households are assessed as having borderline food consumption.

• The value 21 comes from an expected daily consumption of staple and vegetables.

(staple* weight + vegetable * weight = 7 * 2 + 7 * 1 = 21).

 The value 35 comes from an expected daily consumption of staple and vegetables complemented by a frequent (4 day/week) consumption of oil and pulses.

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(staple*weight + vegetables*weight + oil*weight + pulses*weight = 7*2+7*1+4*0.5+4*3=35).
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• Where oil and sugar are consumed on a daily basis, 7 scores for oil and sugar are added to the above amounting to 28 and 42, respectively.

(oil*weight + sugar*weight = 7*0.5 + 7*0.5 = 7)

In this Pilot, because oil and sugar are commonly used on a daily basis by the majority of households, the **thresholds 28 and 42 were applied** for determining poor, borderline and acceptable food consumption groups.

2.6.2 Food Consumption Groups and Changing Trends

Data showed that 6% of all surveyed households had poor, 15% had borderline and 79% had acceptable food consumption during August - November 2008. In November 2008, as compared with August-October, there was a slight decrease of households in poor consumption group (by 2%) as they merged into the borderline group. Overall, no improvement in food consumption was reported during August –November 2008.

It is shown in **Figure 12** that many more households in Rural had poor or borderline food consumption than in Town and Cities. Around 31% of rural households were found in poor and borderline groups in August which increased to 39% in October and November 2008, significantly higher than in town (25%) and in big cities (5%).

Food consumption in Rural worsened from October 2008 and remained at that level in November. In Town, consumption reduced in October, but almost returned to August's level in November. In Cities, consumption was better and relatively stable throughout the Pilot. The worsened food consumption in Rural in October-November was likely associated with the coming lean season in December, reduced cereal and tuber stocks as highlighted earlier, and perhaps households had to compromise with increased agricultural inputs (seeds, fertilizers, irrigation, plough) required during the planting season.

Figure 12. Food consumption groups in August – November 2008



2.6.3 Who has Poor or Borderline Food Consumption?

Figure 13 presents the food consumption pattern in Cities, Town and Rural in November 2008. Households in Cities had a more diversified diet. These households, even those of the poor consumption group (FCS < 28), more frequently consumed protein and micronutrient-rich foods (pulses, meat, fish, eggs, dairy) than the poor group in Town and Rural. Households in Town had less diversified and less nutritious diet than in Cities, but better than in Rural. Food consumption in Rural was found to be the poorest.

Figure 13. Food consumption pattern





Cross-tabulating the food consumption score with the income source (Figure 14) showed that during August-November 2008, poor and borderline food consumption were consistently reported higher among sellers of agriculture produce, animals, handicrafts, agriculture wage laborers and dependents on remittances. These households also belonged to the poor food expenditure group (i.e. they spent more than 65% of their total expenditure on food), and the poor or average income groups.



Figure 14. Food consumption by income source (percent of households)

Forty six percent of households in Rural and 27% in Town relied on one cash income source and had poor or borderline food consumption. These rates were lower among those who had two or more income sources in both areas. The difference between income groups was more noticeable in Rural (Figure 15).



Figure 15. Food consumption by number of income source

2.6.4 Number of Meals

The assessment found that 87% of people aged above 5 years old in the surveyed households consumed three meals per day (87%) and this was not significantly different between Cities, Town and Rural. Less than 1% consumed less than two meals per day. There was no household reporting their children under 5 consumed less than three meals a day plus snack.

2.7 HOUSEHOLD COPING STRATEGIES

2.7.1 Major Experienced Difficulties and Shocks During Jan-Nov 2008

During January-November 2008, four major difficulties perceived by households in all surveyed areas were high food prices, high fuel/transport, debt payment and employment loss (Figure 16).

High food price, fuel/transport and debt payment were gradually reduced from August. But employment loss, on average, increased from 10% in August-September to 18% in October-November. By area, an increase by 7% was found in Cities and 6% in Rural.





Data showed that in August 2008, 45% of all surveyed households said that they had any debt or credit (cash or in-kind) to be reimbursed, with a slightly higher percentage in Rural and Cities (46%) than in Town (40%). In October, on average, 59% of the households claimed for their duly debt reimbursement. By area, an increase of 9% in Cities, 15% in Town and 18% in Rural were reported. Some improvement was seen in November in all areas with 52% of all households said they need to payback their debt.

2.7.2 Methodology for Analyzing Coping Strategies

When livelihoods are negatively affected by a shock /crisis, households may adopt various mechanisms (strategies) which are not adopted in a normal day-to-day life, to cope with reduced or declining access to food.

In the Pilot, the following coping strategy module was used (**Table 6**). This was customized from WFP's Generic High Food Price Assessment Module to reflect what the households in the surveyed areas typically do in case of food or money shortages. In the customized module, the coping with difficulties for covering essential non-food needs (health care, education, cooking fuel, school, etc.) were also included. The customization was made based on findings from a number of rapid and quantitative food security assessments carried out by the WFP VAM Unit during 2007-2008 in NTT and NTB provinces.

Table 6.Sample of coping strategy module (Pilot High Food Price
Monitoring, Indonesia, 2008)

7.4	During the PAST 30 DAYS , have there been times when your household did not have enough food or money to buy food or cover other essential expenditures (health care, medicines, cooking fuel, school, etc.)?						
	0 = No, 1 = Yes						
Has anyone in your household done any of these things?							
1 = dail	v	Du	uring the				
2= very	v often (3-6days/week)	PAS	Frequency (1-4)				
3= once	e in a while (1-2days/ week)	0= N	lo / 1 = Yes				
4 = neve							
Ask col Extend	working hours to gain income	75					
Soalt al	ternative or additional jobs	7.5					
Seek al		/.6					
Increase	e the number of members out-migrating for work and/or food	7.7					
Rely on less preferred and less expensive food		7.8		<u> </u>			
Borrow	food, or rely on help from friends or relatives	7.9					
Reduce snacks		7.10					
Delay p	ayment for community services (garbage, security)	7.11					
Delay d	eposit to an informal group saving	7.12					
Credity	valuable items	7.13					
Purchas	e food on credit, incur debts	7.14					
Limit p	ortion size at meals	7.15					
Restrict	consumption by adults in order for small children to eat	7.16					
Reduce number of meals eaten in a day		7.17					
Skip entire days without eating		7.18					
Purchase non-food on credit, incur debts		7.19					
Consume seed stocks held for the next season		7.20					
Decreas vet. car	se expenditures for fertilizer, pesticide, fodder, animal feed, e	7.21					

Sell domestic assets (radio, furniture, fridge, TV, carpet)	7.22	
Sell productive assets (farm implements, sewing machine, motorbike, land)	7.23	
Sell more animals than usual	7.24	
Decrease expenditures for health care	7.25	
Take children out of school	7.26	
Other (specify)	7.27	

Coping Strategy Index (CSI)

Coping Strategy Index (CSI) is often used **as a proxy indicator of household food insecurity.** It was originally developed as a proxy for more time-consuming consumption data. CSI is based on a list of behaviors (coping strategies). CSI combines: (i) the *frequency* of each strategy (how many times each strategy was adopted?); and (ii) their *(severity)* (how serious is each strategy?) for households reporting food consumption problems.

Higher CSI indicates a worse food security situation and vice versa. CSI is a particularly powerful tool for monitoring the same households or population over time.

There are two types of CSI:

- 1. Context-specific CSI
- 2. Reduced CSI

Context-specific:

Context-specific CSI captures various coping strategies identified in a local context. It is useful for <u>identifying the most vulnerable households in a given location</u>. **Table 7** presents a sample of Context-specific CSI, in which:

- 1. Raw score = Number of days a household relied on the various coping strategies, is collected (frequency for each strategy)
- 2. Weighted score for each strategy = frequency multiplied by the severity weight
- 3. Total household score = the weighted frequency scores are summed up into one final score (CSI)

In dic oft	the past 7 days, if there have been times when you I not have enough food or money to buy food, how en has your household had to:	Raw Score	Severity Weight	Weight Score = Frequency
(A	dd each behavior to the question)	•		A weight
a.	Rely on less preferred and less expensive foods?	5	1	5
b.	Borrow food, or rely on help from a friend or relative?	2	2	4
c.	Purchase food on credit?	1	2	2
d.	Gather wild food, hunt, or harvest immature crops?	0	4	0
e.	Consume seed stock held for next season?	0	3	0
f.	Send household members to eat elsewhere?	1	2	2
g.	Send household members to beg?	0	4	0
h.	Limit portion size at mealtimes?	7	1	7
i.	Restrict consumption by adults in order for non- working members?	2	2	4
j.	Feed working members at the expense of non-working members?	0	2	0
k.	Reduce number of meals eaten in a day?	5	2	10
1.	Skip entire days without eating?	0	4	0
TOTAL HOUSEHOLD SCORE		Sum down t each individ	he totals for ual strategy	34

Table 7.Sample of context-specific CSI

Reduced CSI:

The Context-specific CSI was criticized for being relatively unhelpful in comparative analysis. However, it has been reported that several of the individual behaviors that the SI measures recur across different contexts. So, a Reduced CSI was developed to compare food security across different contexts.

Reduced CSI is based on the same short list of 5 coping strategies, and the same severity weights. It is very **useful for comparing across regions and countries, or across income/livelihood groups, or food consumption groups** because it focuses on the same set of behaviors. Extensive research demonstrated that the "reduced" CSI reflects food insecurity nearly as well as the "full" or "context-specific CSI".

	Strategies	Severity weight
1.	Eating less-preferred/expensive foods	1
2.	Borrowing food or relying on help from friends and relatives	2
3.	Limiting portion size at mealtime	1
4.	Limiting adult intake in order for small children to eat	3
5.	Reducing the number of meals per day	1

Table 8 presents an example of calculating a Reduced CSI of this Pilot using the universal 5 coping strategies and their universal weights.

Table 8.Example-calculating a reduced CSI (Pilot High Food Price
Monitoring, Indonesia, 2008)

Coping Strategies	Raw score	Universal Severity Weight	Weighted Score = Frequency x Weight
1. Eating less preferred /expensive foods	5	1	5
2. Borrowing food or relying on help from friends and relatives	2	2	4
3. Limiting portion size at mealtime	7	1	7
4. Limiting adult intake in order for small children to eat	2	3	6
5. Reducing the number of meals per day	5	1	5
Total Household Score – Reduced CSI	Sum down the tota individual strategy	al for each	27

Results of household coping strategies identified in the Pilot are reported in two ways: (i) Proportion of households adopting specific coping strategy(ies) to identify which strategies are adopted; and (ii) Mean of Reduced CSI to identify who are struggling the most.

2.7.3 Proportion of Households Adopting Specific Coping Strategy(ies)

Figures 17 indicates that during August-November 2008, the most commonly reported coping strategy across the surveyed households was eating less quality and cheaper foods, which on average adopted by 62% of households in Cities and Town, and significantly higher in Rural (73%). This strategy was gradually less adopted in Cities, but it fluctuated in Town, and steadily increased in Rural from August through November.

In Cities, the second typical strategy was reducing snack applied by 34% of households, followed by relying on help from relatives/friends (33%) or purchasing food on credit (30%). Reducing snack and relying on help from others constantly reduced in October and November, but purchasing food on credit remained almost unimproved.

In Town, the second strategy was relying on help from relatives/friends (39%), followed by purchasing food on credit (34%). Households tended to gradually rely less on help from others in October and November, but similar to those in Cities; purchasing on credit remained at the same level.

In Rural, 53% of households relied on help from relatives/friends, 34% purchased food on credit which respectively were the second and third major coping strategies. There was no improvement in these two strategies during the Pilot.

Across the three groups, purchasing non-food items on credit gradually increased from August through November. This was likely associated with increased purchases of basic items (clothing, shoes, soap, etc.) during the Idul Fitri holidays in all areas in September - October, and with increased agricultural inputs during the planting season in Rural in October-November.

In all groups, overall improvement was found for the remaining coping strategies such as extending work, looking for additional jobs, giving meals first for children, reducing portion size and meal frequency, skipping meals, pawning, selling livestock, consuming seeds, migration.

Data also showed that two thirds of households in Cities, half in Town and 61% in Rural said that they had been receiving food and/or cash support during August-November 2008, mainly from relatives, neighbors and informal village groups. At the same time, a similar proportion of households in Cities were supporting their relatives while only one third in Town and Rural could do so.

In summary, during August – November 2008, the surveyed households mostly adopted temporary, short-term coping strategies which were at an acceptable and non-depleted level, to acquire food while seeking to protect their livelihoods. They mainly used community-based and other traditional, informal social safety nets to borrow food or cash.









2.7.4 Reduced Coping Strategy Index

The mean of Reduced CSI was calculated for comparing across the income/livelihoods groups in November 2008 to identify which group was struggling the most. Results are presented in **Figure 18.** Agricultural wage laborers, dependents on remittances, sellers of handicrafts, agricultural produce and animals, animal products had a higher reduced CSI indicating their poorer household food security. These households also belonged to the poor food expenditure groups (i.e. spent more than 65% of their total household expenditures on food) and had poor or borderline food consumption.

The mean of Reduced CSI was also calculated for comparing across food consumption groups (poor, borderline and acceptable) in November 2008. Figure 19 shows that across all areas, the poor food consumption group had the highest CSI and the acceptable food consumption group had the lowest CSI. This difference was more visible in Cities than in Town and Rural.

A significantly higher CSI was found in the poor food consumption group in Cities (20 scores) than of the same group in Town (13 scores) and Rural (12 scores). While the same universal weights were applied for all areas, the lower CSI in Rural and Town likely suggests that households of the poor food consumption group in Town and Rural did not apply these five reduced coping strategies as frequently. This is possibly attributed to a larger coverage of the Government social safety net programmes such as Rice subsidized (RASKIN), Cash Transfer (BLT), Free Health Care (JPS) programmes in Rural and Town which are detailed in Section 2.8 – Types of Assistance below.



Figure 18. Mean Reduced CSI by income/livelihood groups, November 2008

Figure 19. CSI by food consumption group



2.8 TYPES OF ASSISTANCE

2.8.1 Three Main Government Social Safety Net Programmes

Households were asked what assistance they had currently been receiving including health and nutrition related interventions, food/cash for work, free food aid, cash transfer, micro credit, agricultural inputs and services provided by the Government, UN agencies, NGOs, or villages. Among these, only three major social safety net programmes were found to be significant covering large proportions of the surveyed households. There were no or negligible long-term livelihood and agriculture-supported interventions in all surveyed areas (Figure 20).

Three major social safety net programmes reported by the surveyed households during August – November 2008 were the Rice-subsidized (RASKIN), Cash Transfer (BLT) and Free Health Care (JPS) programmes. All three programmes had the highest coverage in Rural and lowest coverage in Cities.

On average, the Rice-subsidized programme (RASKIN) assisted 52% of all surveyed households during August-November. It was increased in Rural during October-November, in Town in November, and remained unchanged in Cities.

The Cash Transfer Programme (BLT) on average, assisted 31% of all surveyed households during August-November 08. It was increased in October and reduced in all areas in November, in line with the official Government fixed delivery schedules.

The Free Health Care Programme (JPS) on average assisted 34% of households during August-October. In October, it was remarkably increased in Town and Rural but reduced in Cities, as compared with August. This type of assistance was not reported in November in all areas.



Figure 20. Three main Government social safety net programmes





2.8.2 Food Consumption and Indebtedness of Beneficiaries and Nonbeneficiaries of the RASKIN and BLT programmes

Rural households who were not covered under **RASKIN programme** had significantly poorer food consumption as compared with rural RASKIN beneficiaries (Figure 21). Poor food consumption was reported among 18% of non-beneficiaries and at a much

lower level, 9% among beneficiaries. Borderline food consumption was found among 44% of non-beneficiaries, while 21% among beneficiaries. This may suggest a positive effect of RASKIN. It may also indicate that many rural households are still in need due to their persisting chronic food insecurity. No difference in food consumption is found between beneficiaries and non-beneficiaries in Town and Cities.





As for the BLT programme, data demonstrated no dramatic difference in the food consumption between beneficiaries and non-beneficiaries in Town and Rural. In Cities, it was found that the beneficiaries had poorer food consumption than non-beneficiaries. It is likely due to the fact that BLT beneficiaries were more food insecure and vulnerable, thus they were targeted, and still have poorer food consumption presently.

With regard to indebtedness, data showed that a significantly higher number of RASKIN or BLT beneficiaries had to reimburse their debts, continued debts from previous period and/or contracted new debts during August - November 2008 as compared with non-beneficiaries of respective programme. Thus it is likely that the RASKIN and BLT beneficiaries were more vulnerable and food insecure, and therefore, they were targeted for the assistance. This may mean that the targeting criteria for RASKIN and BLT are likely to be appropriate and the targeting compliance was also satisfactory in the proper selection of the poor and food insecure. Nevertheless, it can be noted that while RASKIN might have had positive effect on meeting the critical food needs of the rural poor, both RASKIN and BLT, for the long-run do not seem to effectively address widespread chronic food insecurity in all three areas.

2.9 GROWTH MONITORING AND NUTRITIONAL STATUS OF UNDER-5 CHILDREN

2.9.1 Growth Monitoring

On average, 61% of total children were weighed during July-October 08, lower than the Ministry of Health's target set at 70% for the coming years (Figure 22). More children in Town were weighed than in Cities and Rural in August-October. The coverage continuously reduced in Town and Rural from August to October. In Cities, it reduced in September but increased in October.



Figure 22. Growth monitoring of under-5 children at sub-village health posts (Posyandu)

2.9.2 Underweight rate (weight-for-age)

As shown in **Figure 23**, total underweight rate gradually reduced from August through October 2008 in Cities and Rural. In Town, it was unstable, reduced in August and October, but increased in September. In October, 11% of all weighed children were reported to be underweight. The rate was slightly higher in town and rural (14%). However, malnutrition was likely to be underreported due to the fact that only around half of all under-fives were weighed during September-October, much lower than the Ministry of Health's target at 70%.

The severe rate reduced from 4.5% in August and remained stable at 3% through October. It was higher in Cities than in Town and Rural during August-October, especially in August.

Since the nutrition data was not a primary data, it is impossible to analyze possible relationships between nutritional status and food security in this Pilot.

Only 4 deaths related to malnutrition were reported in 80 surveyed villages during August 2008.



Figure 23. Underweight among under-5 children, July-October 2008



2.10 SCHOOL ABSENTEEISM

During August - November 2008, on average, 13% of the students were absent at least 2 days during the week preceding the survey (Figure 24).

Average school absenteeism was similar between areas in August and November. In October, it increased in Town and Rural due to the long Ramadan and Idult Fitri holidays, rather than for economic reasons.



Figure 24. School absenteeism, August-November 2008

2.11 COMPOSITE HOUSEHOLD FOOD SECURITY

The correlation between Food Consumption Score with different proxies of food security (number of cash income sources, land size, proportion of cash and credit expenditure on food, total monthly food expenditure, total monthly fresh food expenditure, expenditure on essential non-food items, Coping Strategy Index) was analyzed to decide on a possible compositing the household food security. **Table 9** presents the identified correlations.

No	Livelihood and food security related proxies	Statistical test	Correlation
1	Number of cash income sources	Pearson Correlation	0.151
		Sig. (2-tailed)	<0.01
2	Land size	Pearson Correlation	0.232
		Sig. (2-tailed)	<0.01
3	Monthly food expenditure	Pearson Correlation	0.525
		Sig. (2-tailed)	<0.01
4	Monthly expenditure on fresh	Pearson Correlation	0.482
	foods	Sig. (2-tailed)	<0.01
5	Proportion of food expenditure	Pearson Correlation	- 0.200
		Sig. (2-tailed)	<0.01
6	Coping Strategy Index	Pearson Correlation	- 0.324
		Sig. (2-tailed)	<0.01
7	Monthly expenditure on non- food items:		
	• Kerosene	Pearson Correlation	0.281
		Sig. (2-tailed)	<0.01
	• Transportation		0.207
			<0.01
	• Telephone		0.281
			<0.01
	• Security and garbage		0.300
	collection		<0.01
	• Education		0.129
			<0.01
	• Health care		0.097
			<0.01
8	Monthly savings	Pearson Correlation	0.103
		Sig. (2-tailed)	<0.01

Table 9.Correlation of Food Consumption Score with other livelihood and
food security related proxies

The results on three food related proxies (income sources, proportion of expenditure spent on food and food consumption scores) presented separately in the previous

sections and the above proven correlations between them allow for compositing them to determine the level of household food security. The composite result will answer the following four food security related questions: How many are food insecure? Who are the food insecure? Where are the food insecure? and Why are they food insecure?

In accordance to WFP's standardized methodology, the level of composite household food security was calculated by two cross tabulations:

The first cross tabulation was made to determine the level of **food access** (poor, average and good access). The indicators used for this purpose were main income source groups (poor, average, good income, as presented in the section on income) and the proportion of their expenditure spent on food (good = < 50% of total expenditure, average = 50-65% of total expenditure, poor = >65% of total expenditure, as presented in the section on food expenditure). The calculated food access for Rural in October 2008 is presented as an example in **Table 10**.

Poor food access (cells marked in red in Table 10) include households engaged in poor income activities and who, at the same time, have either poor or average food expenditure, as well as those engaged in average income activities and have poor food expenditure. Similar interpretations by compositing these two indicators are applied for the average (cells marked in yellow) and good food access group (cells marked in green).

Table 10.Estimation of food access (in percentage) among rural households in
October 2008

Main income source	Poor Average		Good	
Food expenditure	1 001	Average	Guu	
Poor (>65% of total expenditure)	32%	3%	1%	
Average (50-65% total expenditure)	16%	4%	1%	
Good (<50% of total expenditure)	34%	6%	4%	

Note: Red = Poor food access, Yellow = Average food access, Green = Good food access

The second cross tabulation was done to provide the final result on food security and estimate the number of food insecure, vulnerable and food secure households. The indicators used for this purpose were the food access results above and the food consumption scores (poor, borderline and acceptable). The calculated composite food security for Rural in October 2008 is presented in **Table 11** as an example.

Table 11.Estimation of household food security among rural households in
October 2008

Food access	Poor	Avorago	Good	
Food consumption	1 001	Average	Good	
Poor (0-28 scores)	9%	6%	0%	
Borderline (28.5 – 42 scores)	14%	8%	1%	
Acceptable (> 42 scores)	27%	26%	9%	

Note: Red = Food insecure, Yellow = Vulnerable, Green = Food secure

Results of the three areas were summed up and presented in Table 12.

Table 12.Percentage of food insecure, vulnerable and secure households in
Rural in October 2008

Area	Food insecure	Vulnerable	Food secure
Cities	1%	18%	82%
Town	18%	26%	56%
Rural	29%	35%	36%

In the Pilot, similar calculations for Cities and Town were made for each data collection round to identify changes in the proportion of food insecure households during August - November 2008 (Figure 25).

Figure 25. Proportion of food insecure households during August – November 2008



How many are Food Insecure?

In August 2008, 22% of households in Rural, 19% in Town and 3% in Cities in the Piloted provinces were identified as food insecure. The proportion of the food insecure in Rural and Town was always significantly higher in Cities (P<0.05). While food insecurity tended to reduce in Town and Cities during October-November, it remarkably increased in Rural with 29% of households being reported as food insecure.

Data also showed that on average, 47% of households were vulnerable to food insecurity (highest in Cities at 52%) in August 2008. It dramatically reduced and remained stable at 26% in October-November. Reductions of this category were seen in all areas.

Food insecurity and vulnerability by region

Figure 26 presents results by region. In October 2008 (2nd data collection Round), among the total sample of 923 households, 15% were food insecure, 26% vulnerable and 59% food secure. The highest percentage of the food insecure was found in NTT (34%). At the same time, higher proportions of vulnerable households were found in East Java and NTB. These differences were statistically different (P<0.05).

It should be emphasized that the comparison between four regions should be regarded as indicative because the assessment was not designed to focus on this purpose, and hence, the composition of the sample of each region was not similar. In Jabotabek and East Java, urban households dominated in the sample while rural ones were more in NTB and NTT).



Figure 26. Food insecurity and vulnerability by region, October 2008

However, comparisons could be made between NTB and NTT regions because the samples had a quite similar composition, each included 9 villages in Town and 11 villages in Rural. **Figure 27** indicates that 48% of rural households in NTT were food

insecure, significantly higher than in Rural of NTB (P<0.05). This difference was not found between Towns of NTB and NTT, nor between Rural and Town in NTB.

The proportion of vulnerable households was not significant different between Town and Rural in each region. But more vulnerable households were reported in Rural and Town of NTB than in respective areas of NTT (P < 0.05).

Figure 27. Food insecurity and vulnerability in Town and Rural of NTB and NTT region, October 2008



Who and Where are the Food Insecure?

As mentioned above, more households in Rural were consistently found to be food insecure than in Town and Cities.

Cross-tabulating the composite food security with the number of cash income sources, land size, number of assets. Data indicated that, across areas, food insecure households were found more among sellers of agriculture products (food or cash crops, vegetables, fruits, livestock), unskilled and skilled agricultural wage laborers, unskilled non-agricultural wage laborers, farmers having less than 0.5 ha land, households relying only on 0-2 cash income sources, households without fridge, stove or radio.

In Town and Rural, food insecure households were also significantly found more among households without access to improved drinking water, who had 0 - 0.5 ha land, and did not have a television or farming machines.

There was no significance relationship between food security and gender, age of the household head nor of the household size in all areas.

In relation to the RASKIN programme, a higher food insecurity was found among nonbeneficiaries in Rural (P<0.05). No difference in Town and Cities was reported. As for the BLT programme, many more beneficiary households in Rural and Town were food insecure than non-beneficiaries. This may confirm that they are more vulnerable and properly targeted for the assistance. The assistance may meet their immediate needs but did not have any effect on chronic causes of food insecurity (poor income, poor expenditure on food).

Why Are They Food Insecure?

In Rural, 41% of households are not engaged in agriculture. In Town, it was 74%. These households were strongly dependent on market purchases, hence, highly prone to price fluctuations. Limited access to land, small size of owned or rented land, very low productivity of cereals and tubers, relying on only one income source, usually poor income activities (unstable, irregular, low remuneration), and inadequate access to improved water sources were the main underlying causes of higher food insecurity in Rural. Relying on poor income activities and usually only one or two cash income sources, strong dependence on market made the casual wage laborers more food insecure in Town and Cities.

3.0 CONCLUSIONS

<u>Shocks.</u> High food prices, high fuel/transport, debt payment and employment loss were the four major difficulties experienced by the households in the selected vulnerable areas during January-November 2008. It is challenge to differentiate the impact of high food prices with other factors because chronic food insecurity was already widely prevalent and existent at the same time. Thus, high food prices was regarded as an additional shock to the poor and vulnerable.

Having said that, the correlations defined between various food security proxy indicators (cash income sources, proportion of food expenditure, food consumption score, Coping Strategy Index) allowed for calculating the composite household food security to answer four key food security related questions: How many are food insecure, Who are the food insecure, Where are the food insecure, and Why are they food insecure?.

How many are food insecure? In the piloted vulnerable areas, a significantly higher proportion of food insecure households were found in Rural than in provincial/district Towns and Cities, with a statistical difference between Rural and Cities. In August 2008, 22% of households in Rural, 19% in Town and 3% in Cities were estimated to be food insecure. In October-November, it was 29%, 18% and 1%, respectively. The increase was likely due to households running out of stocks as the lean season was approaching and/or competing with the need for increased agricultural inputs for the planting season.

In October 2008, the highest proportion of food insecure households was found in NTT (34%), followed by NTB (24%), both significantly higher than in Jabotabek and East Java (1%) (P<0.05).

More rural households in NTT were found to be food insecure than in Rural of NTB (48% vs. 25%, P<0.05), but no difference was found between Towns in two regions. In the meantime, more vulnerable households were reported in Rural and Town of NTB than in the respective areas of NTT (P<0.05)

<u>Who and Where are the food insecure?</u> Across areas, food insecure households were found more among sellers of agriculture products (food or cash crops, vegetables, fruits, livestock), unskilled and skilled agricultural wage laborers, unskilled non-agricultural wage laborers, farmers having less than 0.5 ha land, households relying only on 0-2 cash income sources, households without fridge, stove or radio. In Town and Rural, food insecure households were also significantly found more among households without access to improved drinking water, have 0- 0.5 ha land, did not have a television or farming machines.

There was no significant relationship between food security and gender, age of the household head nor of the household size in all areas.

<u>Why are they food insecure?</u> Higher food insecurity in Rural was likely due to their chronically limited food access as a result of: (i) lack of or limited agricultural land, with very low staple production; (ii) largely engaged in casual wage labor, hence,

strongly dependent on food purchase from markets; (iii) mainly engaged in irregular, unstable, low remuneration cash income jobs; and (iv) reliance on one or two cash income sources.

Nutrition. Secondary data on malnutrition (underweight) rates showed a reduction from 14% in August to 11% in October, (14% in Rural and Town). The severe rate reduced from 4.5% in July to 3% in August and has stabilized since then. The low underweight rate should be interpreted with caution since only around half of all underfives were weighed during September-October. Only 4 deaths related to malnutrition were reported during the Pilot. School attendance remained high, above 85%. Reduced attendance in October in Town and Rural was mainly due to the official long holiday period, rather than for economic reasons.

<u>**Coping and assistance.</u>** Adjusting the diet and relying on informal community support were the main coping strategies adopted. Overall, the adopted coping strategies were ranked at an acceptable, non-depleted level.</u>

The Government's safety net programmes including Rice-subsidized (RASKIN), Cash Transfer (BLT) and Free Health Care (JPS) were a major assistance to the households. These programmes assisted 52%, 31% and 34% of all households, respectively, with higher priority given to poor households in Rural and Town. Targeting criteria of these programmes are likely to have been appropriate and the compliance seems satisfactory. While these safety net interventions might have partly met people's immediate food needs, the long-term effect on chronic underlying causes of poverty and food insecurity seems to be minimal in all areas.

There were no or negligible nutrition interventions for the more vulnerable groups (young children, especially malnourished children, pregnant and lactating women), nor for long-term livelihood and agriculture-supported interventions in all surveyed areas.

4.0 **RECOMMENDATIONS**

4.1 **RECOMMENDATIONS ON RESPONSE OPTIONS**

- 1. Continue Government safety net programmes until food and fuel prices return to and are stabilized at the 2007 level, with the same focus on the poor and vulnerable in Rural and Town;
- 2. Stronger focus on promoting longer-term and sustainable interventions to address problems of chronic food insecurity through improving households' resilience to shock. Interventions may include homestead and village food production, gardening at schools and village health posts, agricultural extension and intensification services, food/cash-for-work, skill training, income generating, micro-credits through village associations, targeted food assistance for more vulnerable groups or during the lean season, etc.;
- 3. Due to reduced quality and diversity of the diet as a coping strategy to a shock, deterioration of micronutrient status usually occurs earlier than changes in weight and height. Thus, nutrition interventions should address micronutrient and protein deficiencies, especially for vulnerable groups (under-five children, school students, reproductive age women). Practical interventions can be awareness promotions for diet diversification through intensive health and education. support of exclusive breastfeeding. nutrition targeted supplementary feeding, multi-micronutrient supplementation, fortified foods including blended food, vitamin A and iron supplementation, salt iodization, de-worming; and
- 4. Strengthen village health posts (*Posyandu*), especially in Rural, to increase the coverage of growth monitoring of children under-5, for more accurate reporting on malnutrition rates and timely interventions.

4.2 **RECOMMENDATIONS ON FUTURE REPLICATION**

- 1. Crisis impact on household food security should be monitored because it is sensitive to changes, and it is one of the underlying causes of malnutrition. It needs to be periodically monitored and can provide early warnings on the impact of the crisis on food security and nutrition in more vulnerable and highly food insecure provinces;
- 2. Food Insecurity Atlas (2005), Nutritional Map (2006), Poverty Map are good tools for selecting vulnerable districts, sub-districts and villages, if expanded to other regions. Sample of households and traders should be fixed for comparing changes over time;
- 3. Revise questionnaires to capture the most sensitive indicators and continue monitoring on quarterly or bi-annual basis;

- 4. Based on the past experience, a real-time monitoring system titled "Food Security and Nutrition Monitoring System FSNMS" should be developed and implemented first in these vulnerable regions;
- 5. Continue monitoring the proven key food security indicators including food consumption score, proportion of food expenditure and the coping strategy index. Income source, school absenteeism, job loss, child labor, crop production, assistance should also be considered in order to have a broader understanding of the changes and causes;

Respondents	Food Security Indicators	Frequency of data collection and reporting
Households	1. Food Consumption Score	Quarterly
	2. Coping Strategy Index	Quarterly
	3. Food Expenditure	Quarterly
	4. Income source	Quarterly
	5. School absenteeism	Quarterly
	6. Job loss	Quarterly
	7. Child labor	Quarterly
	8. Crop production	Twice a year
	9. Assistance	Quarterly
Retailers at local markets	1. Food and key non-food prices	Quarterly

6. Monitor the nutrition situation using indicators drawn from several examples of national nutritional surveillance systems including wasting (weigh-for-height) of under-fives, Body Mass Index of their non-pregnant mothers, and morbidity. If resources permit, anemia prevalence rate is strongly recommended;

	Nutrition Indicators	Frequency
Under-5 children	 Wasting (weight-for-height) Anemia (if resources permit) 	Bi-annually Bi-annual
Mothers of under-5 children	1. Body Mass Index (BMI) of non- pregnant mothers	Bi-annually

7. In the future FSNMS, enhance partnership with Government (Planning and Economic Development Ministry, Coordinating Ministry for Economic Affair, Food Security Offices), government research institutions, international organizations (UNICEF, ILO, UNDP, FAO, IFAD, World Bank), NGOs to enhance ownership, complimentarity and sustainability of the monitoring system.

LIST OF ANNEX

ANNEX 1

Map of selected regions and list of selected villages

Annex 1 Map of selected regions and list of selected villages

No	District/City	Sub district	Village
1	Jakarta Selatan	Kebayoran Baru	Gandaria Utara
2	Jakarta Selatan	Kebayoran Baru	Kramat Pela
3	Jakarta Selatan	Kebayoran Baru	Selong
4	Jakarta Timur	Kramat jati	Batu Ampar
5	Jakarta Timur	Kramat jati	Dukuh
6	Jakarta Timur	Kramat jati	Cililitan
7	Jakarta Pusat	Senen	Paseban
8	Jakarta Pusat	Senen	Bungur
9	Jakarta Barat	Tambora	Kalianyar
10	Jakarta Barat	Tambora	Tanah Seral
11	Jakarta Utara	Koja	Lagoa
12	Tangerang	Benda	Pajang
13	Tangerang	Benda	Jurumudi Baru
14	Tangerang	Jati Uwung	Alam Jaya
15	Tangerang	Jati Uwung	Gandasari
16	Kota Bogor	Kota Bogor Selatan	Empang
17	Kota Bogor	Kota Bogor Selatan	Mulyaharja
18	Kota Bogor	Kota Bogor Selatan	Kertamaya
19	Kota Bekasi	Bantargebang	Sumurbatu
20	Kota Bekasi	Bantargebang	Bantargebang

Greater Jakarta region:

East Java region:

No	District/City	Sub district	Village
1	Sampang	Robatal	Lepelle
2	Sampang	Robatal	Sawah Tengah
3	Sampang	Robatal	Robatal
4	Sampang	Sampang	Gunung Sekar
5	Kota Surabaya	Tenggilis mejoyo	Kutisari
6	Kota Surabaya	Tenggilis mejoyo	Prapen
7	Kota Surabaya	Tenggilis mejoyo	PanjangJiwo
8	Kota Surabaya	Semampir	Ampel
9	Kota Surabaya	Semampir	Sidotopo
10	Kota Surabaya	Semampir	Wonokusumo
11	Kota Surabaya	Kenjeran	Tanah Kali Kedinding
12	Kota Surabaya	Kenjeran	Sidotopo Wetan
13	Kota Surabaya	Kenjeran	Tambak Wedi
14	Kota Surabaya	Gunung Anyar	Rungkut Tengah
15	Kota Surabaya	Gunung Anyar	Gunung Anyar Tambak
16	Probolinggo	Banyu Anyar	Gunung Geni
17	Probolinggo	Banyu Anyar	Gading Kulon
18	Probolinggo	Banyu Anyar	Alassapi
19	Kota Probolinggo	Wonoasih	Pakistaji
20	Kota Probolinggo	Wonoasih	Jebreng Lor

No	District/City	Sub district	Village
1	Kota Kupang	Alak	Mantasi
2	Kota Kupang	Alak	Nunbaun Delha
3	Kota Kupang	Oebobo	Oebufu
4	Kota Kupang	Oebobo	Naikoten I
5	Kota Kupang	Kelapa Lima	Oesapa
6	Kupang	Takari	Takari
7	Kupang	Takari	Benu
8	Kupang	Takari	Tanini
9	Belu	Atambua	Fatubenao
10	Belu	Lamaknen	Henes
11	Belu	Lamaknen	Dirun
12	Belu	Lamaknen	Makir
13	TTS	Kota So'e	So'e
14	TTS	Kota So'e	Kota Baru
15	TTS	Amanuban Selatan	Pollo
16	TTS	Amanuban Selatan	Bena
17	TTS	Amanuban Selatan	Naip
18	TTU	Insana	Ainiut
19	TTU	Insana	Lanaus
20	TTU	Kota Kefamenanu	Kefamenanu Selatan

Nusa Tenggara Timur region:

Nusa Tenggara Barat region:

No	District/City	Sub district	Village
1	Mataram	Mataram	Pagesangan
2	Mataram	Mataram	Karang baru
3	Lombok Barat	Sekotong Tengah	Sekotong Tengah
4	Lombok Barat	Sekotong Tengah	Kedaro
5	Lombok Barat	Sekotong Tengah	Batu Putih
6	Lombok Barat	Gerung	Gerung Utara
7	Lombok Barat	Gerung	Gapuk
8	Lombok Tengah	Pringgarata	Bilebante
9	Lombok Tengah	Pringgarata	Pringgabaya
10	Lombok Tengah	Pringgarata	Murbaya
11	Lombok Tengah	Pringgarata	Pemepek
12	Lombok Tengah	Praya	Panjisari
13	Lombok Tengah	Praya	Prapen
14	Lombok Timur	Selong	Jorong
15	Lombok Timur	Selong	Majidi
16	Lombok Timur	Selong	Pancor
17	Lombok Timur	Pringgabaya	Bagik Papan
18	Lombok Timur	Pringgabaya	Apitaik
19	Lombok Timur	Pringgabaya	Kerumut
20	Lombok Timur	Pringgabaya	Labuhan Lombok


Annex 1 Map of selected regions and list of selected villages



ANNEX 2

Household Questionnaire (Sample, for 3rd Round, November 2008)



PILOT HIGH FOOD PRICE MONITORING IN SELECTED AREAS OF INDONESIA

Questionnaire number:	_		_		_		_	.		_	
-----------------------	---	--	---	--	---	--	---	---	--	---	--

Household questionnaire for 3rd Round (November 2008) (Finalised, 05 November 2008)

Province name :	Province code :	_ _
City/district name :	City /district code:	_ _
Sub-district name:	Sub-district code:	_ _ _
Village name:	Village code:	_ _ _
Village Type 1=Urban / 2=Rural	_	
Sub-village name (RT/RW):		
Name of the head of household:		
Date : _ _ / _ _ / _ _ _ _		
<i>day month year</i> Enumerator name :		

Introduction to the household:

First of all, thank you very much for your valuable information provided during the 1^{st} round in August and 2^{nd} round in October.

As informed you earlier, we are from WFP, we are collecting data on the food security situation of families. We are not planning for food aid. We would like to ask you again some questions about your family. The questionnaire usually takes about 40 minutes to complete.

Any information that you provide will be kept strictly confidential and will not be shown to other people. This is voluntary and you can choose not to answer any or all of the questions if you want. However, we hope that you continue participating since your views are important.

This time will be the last interview and we hope that data collected from you will benefit the village by helping us understand the food security situation.

Do you have any questions? May we begin now?

I - HOUSEHOLD COMPOSITION AND ENROLMENT AT SCHOOL

1.1	Who is the head of household ?	1= Male / 2 = Female		
1.2	How old is the head of household?		y	ears
1.3	How many persons at total are currently living in the the same roof, food, income and other assets)?	household (i.e. who share		persons
How	v many children and adults are currently living in the h	ousehold?		
1.4	Children less 5 years (0-59 months)			
1.5	Children 6-11 years			
1.6	Adolescents 12 – 17 years			
1.7	Adults 18-59 years			
1.8	Elderly (+60 years)			

1.9	Are there scho secondary gra more than 2 d	ool-aged children of primary and des who are NOT attending school days LAST WEEK?	0 = No 1 = Yes 99 = No sch aged childre	nool- _ →	lf No, go to 1.11
1.10	If YES, What is the main reason for not attending school LAST WEEK?	 1= Taking care of sibling 2= Sickness/handicap 3= Cannot pay school fees, uniforms, 4= Cannot offer transportation/ far aw 5= Absent teacher/ poor quality teach 6= Poor school facilities (building, toil 7= Household chores/ Child work (pa 8= Pregnant/Married 9= Not interested 10= Official holidays 11= Other reasons (specify) 99= Not applicable due to skipping th 	textbooks, e /ay ets, etc.) id/unpaid), he	tc. elping parent in the field	ı II
1.11	Were they atte school year (ending school at the beginning of th July 2008)?	e current	0 = No/ 1 = Yes 99 = No school-aged children	_

II - HOUSING, WATER AND ELECTRICITY/FUEL ACCESS

2.1	Observe and note the type of major construction1= Mostly in durable material (brick, cement) 2= Semi permanent (ground part: cement/brick, upper part: bamboo/wood) 3= Mostly in non-durable material (wood, herb) 4= Plastic sheeting 5= other (specify)					_
2.2	Observe and note 1= Individual house the type of 2= Flat in multi-storey building dwelling 3= room(s) in a shared house or shared flat 4= room(s) in a collective centre 5= other (specify)					_
2.3	Are you the owner?)		0= No 1= Own the house and land 2= Own only house but not land (rent, borrow)	lf Yo	 es, go to 2.9
2.4	Do you have to pay house or leased land	a rent for y I for your h	your iouse?	0= No/ 1= Yes	lf N	 No, go to 2.9
2.5	What is the freque	ency of p	payment	 1= Monthly 2= every 3 months 3= every 6 month 4=yearly 5=other, specify 99= Not applicable due to skipping 		
2.6	How much do you rent?	pay for f	the	IDR 99= Not applicable due to skipping		
2.7	Are you currently in payment?	debt for your rent 0= No/ 1= Yes 99= Not applicable due to skipping → If I				וf No, go to 2.8 ⊮
2.8	Has your debt for re during October – No	nt increas ovember 2	sed 2008?	0 = No/ 1 = Yes 99 = Not applicable due to skippin	ng	_
2.9	What are you using a <u>main sources</u> of drin water at present?	as two nking	1= <u>Safe so</u> well/boreh rain water,	<u>ource</u> (piped water, public ta ole, protected well, protected spri , bottle water)	ap, tube ng water,	_ _

	2= <u>Unsafe</u> unprotected sp 99 = No 2 nd so	<u>source</u> (river, pring water, canal) urce	unprotected	well,	
2.10	What are you using as <u>two main sources</u> of fuel for cooking at present ?	1= Wood 3= Electricity 5= Kerosene 6= Other (spec 99= No 2 nd sou	2= Animal du 4= Gas sify) urce	ung	_ _

III - FOOD CROPS AND LIVESTOCK

Ask column by column

	Cereals Tubers, roots			Vegetables, fruits		
What is your current stock today (in kg) ?	3.27	kg	3.28	kg	3.29	kg
How long will your today's stock last (<i>in day</i>)?	3.30 days		3.31	<u> </u> days	3.32	 Days

Do you raise a sheep/goats/pi	a nimals (catt gs. poultry) d	le, or fish?	3.33	0 = No / 1 = Yes	$ _ $ \rightarrow If No, go to 4.1					
Ask questions column by column		Ca	ttle (cow, ouffalo)	Sheep, goats, pigs, dogs		Poultry		Fish, shrimp (kg)		
How many animals or estimated number of fish do you currently own? Record 99 for each skipped question		3.34	_	3.35		3.36		3.37		
Have you sold any live animals or fish during 0= No October - November 1= Yes 2008		3.38	 If 0, go to 4.1	3.39	 If 0, go to 4.1	3.40	 If 0, go to 4.1	3.41	 If 0, go to 4.1	
Have you sold female animals during October – November 2008?		0 = No 1 = Yes 99 = Not applicable	3.42	_	3.43	_	3.44		3.45	
What was the main reason for selling live animals or fish?	1= Need for n needs 2= Old/sick ar 3= Infertility 4= Lack of wa 5= Lack of for feed/pasture 6= need for n festiva/celebr 7= Other reas 99= Not applied	noney for basic nimals Ider/animal noney for ration on (<i>specify</i>) cable	3.46		3.47	_	3.48		3.49	

IV - CASH INCOME SOURCES, KINSHIP SUPPORT AND ASSETS

		Currently (November 2008)
How many household members earn cash income?	4.1	
How many sources of cash income do you have to sustain your family?	4.3	

		1**	source	2	source
What are your two main sources of income currently?	1= Sale of food crops production 2= Sale of cash crops production 3= Sale of vegetables or fruits 4= Agricultural wage labour 5= Non-agricultural wage labour (Specify:) 6= Self-employed (taxi, carpenter) (Specify:) 7= Government employee salary 8= NGO, private company salary 9= Sale of handicrafts 10= sale of animal/ animal products 11= Petty trade 12= Pension, allowances 13= Remittances 14 = Other: 15= "Pemulung" 99 = No 2 nd source of income	4.5	1_1	4.6	_

What is the share of total two main sources of your current cash income ? (Use proportional piling if needed) - Total may not =100% if more than 2 sources of income	4.7	%	4.8	%

4.9	Has your total cash income (in general trend) changed during October - November 2008?	1= No change / 2= Decreased / 3= Increased	
4.10	During October - November 2008, when you needed food or cash, whom did you ask to support <u>(can be</u> <u>multiple answers</u>)?	 1= Relatives without interest rate 2= Relatives at an agreed interest rate 3= Neighbour/colleagues without interest rate 4= Neighbour/colleagues at an agreed interest rate 5= Community associations without interest rate 6= Community associations at an agreed interest rate 7= Informal saving group (e.g. religious) 8= Gifts, remittances 9= Credit from bank, pawn 10 = "Rentenir" 11=Credit from shops/trader 12=Other (specify) 99 = No need for support 	
4.11	Have you received such food or cash support during October - November 2008?	0 = No, 1 = Yes If yes, specify	_
4.12	Yourself, did you support relatives with food or casil specific events, festivals, etc.), 0 = No, 1=Yes, <i>If yes, s</i>	h during October - November (not related to pecify	_

Ask row by row				Do you have currently? 0= No / 1= Yes					
4.13	Fridge		4.21	Sewing machine					
4.14	Stove (kerosene, electric, gas)	_	4.22	Farm machinery (tractor, other such equipment), fishing tools	_				
4.15	Television, sound system	_	4.23	Non-farm machinery (constructing, concrete blender, magic jar, fan, laptop/printer)	_				
4.16	Satellite dish		4.24	Motorbike					
4.17	Radio, audio/play station	_	4.25	Car, taxi	_				
4.18	Cell phone		4.26	Cash, other savings (e.g. jewellery)					
4.19	Bicycle, becak		4.27	Bank saving					
4.20	Others:		4.28	Small shop, kiosk, basket					

V-FOOD CONSUMPTION

					dren aged 59 months	Othe	r family members
Yesterday, how many meals were eaten by:						5.2	
During October 2008, how many meals were usually eaten per day:						5.4	_
Focus on food eaten INSIDE the house	During ho days was item eater 7 day	ow many the food n in past ys?	What were main source the food eate the past 7 da	What are <u>t</u> USUALLY duri <i>Ask for each</i> <u>consumed ii</u>	What are <u>two main sources</u> do you USUALLY obtain most of this food during October 2008? Ask for each food listed, even <u>if not</u> consumed in the past 7 days		
	0 = Not eaten 2= 2 days 4= 4 days 6= 6 days	1= 1 day 3= 3 days 5= 5 days 7= 7 days	1= Own crop/ga 3= Work for food 5= Gifts from ne 7= RASKIN	Dwn crop/garden production Vork for food Bifts from neighbours/relatives		 2= Market/shop purchase 4= Borrowing/debts 6= Free food aid (govt, UN, NGOs, company) 99= No 2nd source 	

		8= Gathering from forest/wild					
Bread, biscuits (including WFP biscuit)	5.5	5.6	5.7				
Rice	5.8	5.9	5.10				
Maize	5.11	5.12	5.13				
Cassava	5.14	5.15	5.16				
Sweet potatoes	5.17	5.18	5.19				
Noodles	5.20	5.21	5.22				
Beans, lentils, peas, nuts (including tempe/tofu)	5.23	5.24	5.25				
Vegetables	5.26	5.27	5.28				
Fruits	5.29	5.30	5.31				
Meat, offals	5.32	5.33	5.34				
Eggs	5.35	5.36	5.37				
Fish (fresh, dried)	5.38	5.39	5.40				
Milk, cheese, yogurt	5.41	5.42	5.43				
Sugar, honey, jam	5.44	5.45	5.46				
Oil, fats	5.47	5.48	5.49				
Condiments	5.50	5.51	5.52				

VI – EXPENDITURES AND DEBTS

	How much, on average, did you spend a day during the LAST WEEK (<i>in IDR</i>)? (If pay weekly, divide by 7 days. If pay every 2 weeks, divide by 15 days)	How much did you spend in LAST MONTH (October 2008) for other expenditures (<i>in IDR</i>)?				
6.1	Cereals (rice, maize)	6.13	Housing (rent, repairs, tax)			
6.2	Cooking oil	6.14	Water (washing, bathing, cleansing)			
6.3a	Meat	6.15				
6.3b	Fish (fresh, dried)					
6.3c	Eggs					
6.3d	Beans, lentils, peas, nuts (including tempe/tofu)		Health (checkups, drugs, hospitals)			
6.3e	Milk products (milk, cheese, yogurt)					
6.3f	Vegetables					
6.3g	Fruits					
6.4	Prepared food	6.16	Education (fee, books, uniform, shoes)			
6.5	Snacks	6.17	Celebrations, funerals, wedding, entertainment			
6.6	Kerosene	6.18	Debt reimbursement			
6.7	Drinking water	6.19	Electricity			
6.8	Cigarette	6.20	Telephone (landline, prepaid card)			
6.9	Transport	6.21	Any other non-food expenditures (clothing, shoes, hygienic items)			
6.10	Cell phone voucher	6.22	Community services (garbage, security)			

	How much, on average, did you spend a day during LAST WEEK (<i>in IDR</i>)? (If pay weekly, divide by 7 days. If pay every 2 weeks, divide by 15 days)	the	How much did you spend in LAST MONTH (October 2008) for other expenditures (<i>in IDR</i>)?				
6.11	For Business (e.g:gas for foodstall, gasoline for ojek, etc)			B Sa	avings (informal/formal)		
6.12	Other (specify)		6.24	+ O	ther (specify)		
			6.25	5 Co	Cooking fuel(kerosene, gas, etc)		
			6.26	G Ci	garette		
				7 Ti	ansportation		
6.25	Has your total expenditure (in general trend) char during October – November 2008?	nged	1 = No change / 2 = Decreased 3= Increased				_
Which types of expenditures have changed during October - November 08?			1= No change / 2= Decreased / 3= Increased				ased
6.26	Food	_	_	6.30	Health		
6.27	Snacks	_	_	6.31	Education		_
6.28	Energy (cooking, lighting)		_	6.32	Transportation		
6.29	Housing (new construction, renovation, tax)		_	6.33	Other (specify)		

6.34	Do you have any debt or credit (in cash or in kind) to reimburse at the moment?			0= No 1= Yes 99=			
6.35	Have you continued debts or credits from previous years, and/or contracted new debts or credits during October - November 2008 ?			want to answer	_	→ If No, g	o to 7.1
6.36	What were the two main reasons for continued and/or contracted new debts/ credits?	 1= To buy food 3= To pay school, education costs tools) 5= To buy animal feed, fodder, veterinary 7= To buy or rent land 9= To pay for ceremonies 10= Other reason (specify) 	2= 4= 6= 8=	To cover h To buy agr To buy ani To buy clo	ealth e icultura imals thes, s	expenses al inputs (seed, hoes	 []
6.37	In which amount of tim debts or credits?	e do you think you will be able to reimburse a	all yo	our curren	t	Months 99 = Uncertain	

VII - COPING STRATEGIES AND ASSISTANCE

7.4 During the **PAST 30 DAYS**, have there been times when your household experience difficulty to buy food or cover other essential expenditures (health care, medicines, cooking fuel, school, etc.)?

0 = No, 1 = Yes						
Has anyone in your household done any of these things? If yes, how often did s/he do them? 1= daily 2= very often (3-6days/week) 3= once in a while (1-2days/ week) 4= never	Du PAST 0= N	ring the 7 30 DAYS lo / 1= Yes	Frequency (1-4)			
Extend working hours to gain income	7.5					
Seek alternative or additional jobs	7.6					
Increase the number of members out-migrating for work and/or food	7.7					
Rely on less preferred and less expensive food	7.8					
Borrow food, or rely on help from friends or relatives	7.9					
Reduce snacks	7.10					
Delay payment for community services (garbage, security)	7.11		<u> </u>			
Delay deposit to an informal group saving	7.12					
Credit valuable items	7.13					
Purchase food on credit, incur debts	7.14					
Limit portion size at meals	7.15					
Restrict consumption by adults in order for small children to eat	7.16					
Reduce number of meals eaten in a day	7.17					
Skip entire days without eating	7.18					
Purchase non-food on credit, incur debts	7.19	<u> _ </u>				
Consume seed stocks held for the next season	7.20					
Decrease expenditures for fertilizer, pesticide, fodder, animal feed, vet. care	7.21					
Sell domestic assets (radio, furniture, fridge, TV, carpet)	7.22					
Sell productive assets (farm implements, sewing machine, motorbike, land)	7.23					
Sell more animals than usual	7.24					
Decrease expenditures for health care	7.25					
Take children out of school	7.26					
Other (specify)	7.27					

<u>Speci</u>	fically ask for each assistance below	Are you currently receiving this assistance? 0= No 1= Yes 99 = Not Relevant/not an assistance area
7.28	Food for school children (eaten at school or take-home) from UN, government (PMTAS) or NGOs	
7.29	Food for young/malnourished children or for pregnant/lactating women from UN or NGOs	
7.30	Free food ration for the households from UN or NGOs, church, private sectors	
7.31	Food-for-work from UN or NGOs	
7.32	Cash-for-work from UN or NGOs	
7.33	Cash transfers from social assistance programme (private, NGO)	
7.34	Free health care/drugs, from UN or NGOs, Government social safety net (<i>JPS</i>)	
7.35	Micro-credit (from UN or NGO)	
7.36	Free seeds, fertilizer (government, private, NGO)	
7.37	Free agricultural tools (government, private, NGO)	
7.38	Free fodder, animal feed (government, private, NGO)	
7.39	Free veterinary services (government, private, NGO)	

<u>Specifically ask</u> for each assistance below		Are you currently receiving this assistance? 0= No 1= Yes 99 = Not Relevant/not an assistance area
7.40	Government rice subsidised programme (RASKIN)	
7.41	Government complementary feeding programmes for under two children (<i>MPI-ASI</i>)	
7.42	Village complementary food for malnourished children provided at Posyandu	
7.43	Government BLT program (cash transfer)	
7.44	Other assistance (specify)	

Enumerator's additional comments or clarifications:

Verified and cleared by Team Leader:

Signature:

Date:

ANNEX 3

Trader Questionnaire (Sample, for 3rd Round, November 2008)



PILOT HIGH FOOD PRICE MONITORING IN SELECTED AREAS OF INDONESIA

Questionnaire number : |_||_||_||_|

Questionnaire for local market traders & shopkeepers for 3rd Round in November 2008

(Finalised, 05 November 2008)

Province name :	Province code : _ _
City/district name :	City /district code: _ _
Sub-district name:	Sub-district code: _ _ _
Village name:	Village code :
Type of Village 1=Urban / 2=Rural	_
Sub-village name (RT/RW):	
Trader's name:	
Date : _ _ / _ _ / _ _ _ _ day month year	
Enumerator name :	

Instructions to the enumerators

1. Introduction to traders to be interviewed as follows

First of all, thank you very much for your valuable information during the 1st round in August and 2nd round in October .

As informed you earlier, we are collecting data on the food security situation in the village. We would like to ask you some questions about your work. The questionnaire usually takes 30 min to complete.

Any information that you provide will be kept strictly confidential and will not be shown to other people. This is voluntary and you can choose not to answer any or all of the questions if you want. However, we hope that you will continue participating since your views are important.

This time will be the last interview and we hope that data collected from you will benefit the village by helping us understand the food security situation.

Do you have any questions? May we begin now?

I. General Background Information							
1. Coverage (tick the highest level):	Sub-village		Village				
	Sub-district		Mobile retailer				
2. Shop function : How many days per week is your shop usually open? (Indicate the number of days a week the shop open and sells food commodities)							

(Indicate the number of days a week the shop open and sells food commodities)

II. Commodities currently sold

	Commodity	What type of food items are you selling currently ? 0= No / 1= Yes
2.1	Local cereals (grain, flour)	
2.2	Imported cereals (grain, flour)	
2.3	Bread	
2.4	Processed food (noodles, biscuits, fried potatoes)	
2.5	Potatoes	
2.6	Beans, lentils, peas	
2.7	Meat poultry (duck, chicken, including live poultry)	
2.8	Meat animal (beef, pork, goat, sheep)	
2.9	Eggs	
2.10	Fish and aqua products	
2.11	Milk, cheese, yogurt	
2.12	Vegetables, fruits	
2.13	Oil	
2.14	Sugar	
2.15	Tempe/Tofu	

What are the three (03) most sold food items? (select three from below items)	2.16	_	2.17	_	2.18	_	
2.17 What are the average quantities you are selling <u>in</u> <u>one week at the moment/</u> <u>currently</u> ? (999 = does not sell)	2.19	[] Unit	2.20	[] Unit	2.21	[] Unit	
2.18 What are the average quantities you are selling <u>in</u> <u>one week</u> during the same period of the year, USUALLY (999 = does not sell)	2.22	[] Unit	2.23	[] Unit	2.24	[] Unit	
1 = Local cereals (grain, flour)		6 = Beans, lentils, peas			11 = Mi	lk, cheese, yogurt	
2 = Imported cereals (grain, flour)		7 = Meat poul live poultry	7 = Meat poultry (duck, chicken, including live poultry)			12 = Vegetables, fruits	
3 = Bread	8 = Meat anim	al (beef,	13 = Oil				
4 = Processed food (noodles, bis potatoes)	ied 9 = Eggs	9 = Eggs 14 =			ıgar		
5 = Potatoes		10 = Fish and	aqua pro	15 = Tempe/Tofu			

III. Sources of currently sold commodities

Annex 3:	Trader	questionnaire

Commodity	Where do you usually obtain the commodities you are selling <i>(multiple answers)?</i> 1= Own production 2= Other farmers 3= Other traders of market 4= Private company or cooperative 5= Imported her/himself 6= Other (specify) 99 = Does not sell				
		November 2008			
Local cereals (grain, flour)	3.31				
Imported cereals (grain, flour)	3.32				
Bread	3.33				
Processed food (noodles, biscuits, fried potatoes)	3.34				
Potatoes	3.35				
Beans, lentils, peas	3.36				
Meat poultry (duck, chicken, including live poultry)	3.37				
Meat animal (beef, pork, goat, sheep)	3.38				
Eggs	3.39				
Fish and aqua products	3.40				
Milk, cheese, yogurt	3.41				
Vegetables, fruits	3.42				
Oil	3.43				
Sugar	3.44				
Tempe/Tofu	3.45				

IV. Food and Non-food prices

Food commodities	Unit	What is the c (in IDR) ? 99= does not	current price of the commodities you are selling sell
			November 2008
Local rice grain	1 kg	4.55	
Imported rice grain	1kg	4.56	
Local maize grain	1 kg	4.57	
Imported wheat flour	1 kg	4.58	
Cassava	1 kg	4.59	
Bread	Piece of 100-150 gr	4.60	
Irish potato	1 kg	4.61	
Sweet potatoes	1 kg	4.62	
Tempe	Piece of 50 gr	4.63	
Tahu	Piece of 50 gr	4.64	
Mungbeans	1 kg	4.65	
Chicken (live)	1 kg	4.66	
Chicken meat	1kg	4.67	
Beef meat	1 kg	4.68	
Eggs (chicken)	Piece	4.69	
Fish (fresh)	1 kg	4.70	
Fish (dried)	1 kg	4.71	
Milk (powder)	Sachet of 200-250 gr	4.72	
Milk (condensed	Sachet/Tin	4 73	
sweetened)			
Fresh vegetables	Bunch 200-250 gr	4.74	
Banana	Piece	4.75	
Local mandarin	Piece	4.76	
Fresh coconut	Piece	4.77	
Oil (unbranded)	Plastic sachet of 250 gr	4.78	

		What is the current price of the commodities you are selling (<i>in IDR</i>) ? 99= does not sell				
Sugar	Sachet of 250 gr	4.79				
lodized salt	Sachet of 250 gr	4.80				
Instant Noodles	1 pack	4.81				

Non-food items and prices

Dried coconut	1 kg	4.125	
Kerosene	1 litre	4.126	
Gas	Balloon of 3 kg	4.127	
Fuel	1 litre	4.128	
Unskilled labour wage	Day	4.129	
Local cigarette	pack	4.130	
Tobacco	Pack	4.131	
Wood for cooking	pack	4.132	

What are the main causes	0= No / 1= Yes	4.141	Increased price at the source of the food (e.g. wholesaler, other trader, producer)	
of price		4.142	Increased price of transportation including fuel	
your		4.143	Higher taxes	
commodities?		4.144	Increased credit interest rate	
		4.145	Increased porters' cost for loading/unloading	
		4.146	Other reason (specify)	

V. Buying behaviours

5.1 Has there been during October previous visit 2	n a change i r – Novembe ?	n buyi r 2008,	ing behaviour 0= No / 1= Yes i.e. since our	If No,	go to 6.1
What type of	0 = No	5.2	People buy cheaper foods		
changes in buying	1=Yes	5.3	People buy smaller quantities		
behaviour do you see?	99 = Not applicable	5.4	More people buy in credit		_
		5.5	Other reason (specify)	· · · · · · · · ·	_

VI. Stock

6.1	Do you currently hold stocks of cereals (rice, maize)?	0= No / 1= Yes	If No, go to 7.1
6.2	How many DAYs do your cereal stocks last?		

VII. Difficulties for trading

	1 = Cost of fuel	1 st di	fficulty	2 nd dif	ficulty	3 rd di	fficulty
What are your main three difficulties with trade at the moment?	 2= Cost or commonities to purchase for sale 3= Decreased/lack of credit 4= Increased credit interest rates 5=Difficulties with recovering debts from customers 						
Do NOT list, leave the trader answer spontaneously.	 6= Decreased / low demand from people to buy commodities 7= Lack of storage facilities 	7.1		7.2		7.3	
Once done, ask the household to rank the 3 most important ones	 8= Lack of transportation 9= Taxes 10= Poor roads 11= Food aid distributions 12= Other: 						
	99 = No 2 nd or no 3 rd difficulty mentioned						

How do you cope or compensate for shocks that affect negatively your	01= Increase prices 02 = Lower profit margins 03 = Reduce purchases	7.4	1 st
business? (Indicate ranking in the box)	04 = Close business 05= Increase credit to customers 06= Increase indebtedness from suppliers	7.5	2 nd
	07= No change 08= Increase sales 09= Others, specify	7.6	3 rd

VIII. Response capacity

How long would it	1= Less than 2 weeks	Rice	8.1	
take for you to	2= Between 2 and 4 weeks	Maize	8.2	
increase your food	se your food3= Between 1 and 2 monthses if demand by4= More than 2 monthsbolds increases5 = Would not be able to increase supplies	Noodles	8.3	
supplies if demand by		Cooking oil	8.4	
and you have enough	6= Does not know	Mungbean	8.5	
money?		Sugar	8.6	

IX. Credit

9.1	Do you usually get credit to purchase the 0= No commodities you are selling? 1= Yes		_
9.2	If yes, who mainly provides you with advanced funding?	99 = don't know 1= Other traders providing the commodities 2= Money lenders 3= Bank, credit union, cooperative 4= NGO programme 5= Relatives 6= Other (specify)	_
9.3	Have there been changes in your access to credit this year compared to last year?	1= Same 2= Less than usual 3 = More than usual 4= Other reason:	
9.4	What is the current <u>monthly</u> interest rate for you to reimburse?	% per month	
9.5	Has the interest rate changed compared to last year?	1= Same 2= Lower this year 3 = Higher this year	

Enumerator's additional comments or clarifications:

ANNEX 4

Sheet for collecting data on underweight and related deaths among under-5 children at village health post (Sample, for 3rd Round, November 2008)

Annex 4: Sheet for collecting data on underweight and related deaths among under-5 children at village health post (Sample, for 3rd Round, November 2008)

PILOT HIGH FOOD PRICE MONITORING IN SELECTED AREAS OF INDONESIA Questionnaire number: ______

Data Collection Sheet for nutrition and mortality data of 0-59 months children for 3rd Round in November 2008

(Collected from the midwife responsible for this village) (Finalised, 05 November 2008)

Province name :	Province code : _ _				
City/district name :	City /district code: _ _				
Sub-district name:	Sub-district code: _ _ _				
Village name:	Village code : _ _ _				
Type of Village 1=Urban / 2=Rural	_				
Sub-village name (RT/RW):					
Name of the midwife of Puskesmas responsible for this village:					
Date : _ _ / _ _ / _ _ _ _ day					
Enumerator name :	/				

STEPS:

1) Introduction to the midwife at the village health post (Puskesmas) as follows:

First of all, thank you very much for your valuable information during the 1st round in August and 2nd round in October.

As informed you earlier, we are from WFP. We are collecting data on the current food security and nutrition situation in the village. We would like to collect data on weights of under-five children measured by all Posyandu in the village on a monthly basis. In addition, we also would like to ask you about deaths directly related to malnutrition among under-five children.

We already collected data during mid August and October. Today we will repeat the 3rd time. This time will be the last data collection and we hope that data collected from you will benefit the village by helping us understand the food security situation

It will take 30 min to complete this sheet. Information that you provide will be very important to us. It will be used for the assessment only. Do you have any questions? May we begin now?"

2) Ask for data on weights of under five children measured during the last month at **ALL** posyandu of the village. Verify and clarify to ensure they are correct. Ask them what reference (International WHO or Ministry of Health, Indonesia) was used to classify moderate and severe malnutrition and clearly note down in the sheet.

Annex 4: Sheet for collecting data on underweight and related deaths among under-5 children at village health post (Sample, for 3rd Round, November 2008)

3) Fill out **Table 1** with verified/confirmed nutrition data:

Table 1: Nutrition data of 0-59 months children based on the <u>LATEST</u> weighing (can be October or November 2008 depending on the last Posyandu day). Please record in a respective row)

				Nutritional status of weighed and reported children (according to Weight- for- Age in KMS chart)			
Date and month of the last weighing prior to the visit at Posyandu	Total number of Posyandu in the village	Total number of 0-59 months children in the village (from all Posyandu)	l otal Posyandu weighed children and submitted reports to Midwife	Number of weighed children	Number of normal children (in green part of KMS)	Number of moderately malnourished (in yellow part of KMS)	Number of severely malnourished (with or without clinical symptoms), (under the red line of KMS)
Date							, , , , , , , , , , , , , , , , , , ,
Oct 2008							
Date							
Nov 2008							

4) Fill out **Table 2** with verified/confirmed data on malnutrition-related deaths among under five children and their causes:

Table 2: Data on malnutrition-related deaths of 0-59 months children

Reporting period	Number of deaths	Age (when died)	Direct causes of death	Place of death
1 – 31 Oct 08				

Enumerator's additional comments or clarifications:

Midwife's signature:

Date: