Food and Nutrition Security Bulletin - Issue 2 (August –October 2009) West Kalimantan Province

Indonesia Food and Nutrition Security Monitoring System (FNSMS)

Highlights

- In total the proportion of food insecure household slightly decreased (1st MP: 14%, 2nd MP: 10%) (Figure 4). This was likely due to the increased expenditure and significantly improved food consumption.

- In summary, structural factors such as main source of income, education level, type of cooking fuel, and ownership of assets were found to be associated with food security. In addition, in external shocks such as increased commodity prices were likely to have impacted household food security. Therefore, the situation is likely to be associated with both chronic and transient factors.

- Food insecure households were found to be dependent on food purchase. In both areas, cereal production at household level was very limited likely due to small land size. As a result, both farmers and non-farmers are dependent on food purchase. They are considered as highly vulnerable to price increases as well as income falls.

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- However, existing formal supports were mainly to support short-term needs of the households such as RASKIN and BLT, and interventions for livelihood support such as and income generation had a low level of coverage.

Recommendations

- The future interventions aiming to improve household food security should focus on structural causes of chronic food insecurity such as: income generation/diversification, agricultural intensification, and increasing ownership of asset.

- More food secure households owned a refrigerator, motorbike and stove for cooking than food insecure households. These might be appropriate for targeting criteria for interventions.

- Since food insecure households are purchasing a high quantity of their foods, monitoring the prices of basic commodities as well as household expenditure patterns is important to provide early warning for the deterioration of household food security.

Methodology

- Sampling: 250 households (urban: 125; rural:125) were randomly selected and interviewed using a pre-tested questionnaire. In the 2nd round, all 250 households (urban: 125; rural: 125) were interviewed.

- Collected data: household composition, education, child labour, type of housing, water source, type of cooking fuel, food crops, ownership of land, livestock, assets , cash income sources, joblessness, migration, food access, food consumption (last 7 days), expenditures, difficulties, coping strategies and formal assistance.

- Food security indicators: Food access groups were determined by matching the monthly per capita expenditure (MPCE) groups (poor, near-poor, non-poor) with monthly food expenditure groups (poor, average, good), Data on food eaten by household members in the last 7 days were used to define a food consumption score (FCS), a proxy of current household food security. The calculation and the rationale for the thresholds are presented in Annex 1. A composite food security groups were determined by matching the food consumption groups with and food access groups. This resulted in three final categories namely food insecure, vulnerable and food secure.

- Data entry and analyses: ANOVA and Chi-square tests were used to assess differences in household food security. For all analyses, a probability value of 0.05 was accepted as significant. SPSS 16.0 was used.

All details of the methodology are presented in Annex 1.

How many are food insecure and where are they?

Food Access: Overall, the proportion of the household who spent less than provincial poverty line was slightly reduced in both areas (Figure 1). The decrease might be due to the significantly increased expenditure for meat, egg, fish, oil and sugar during the monitored period.

Figure 1: Monthly per capita expenditure (MPCE)
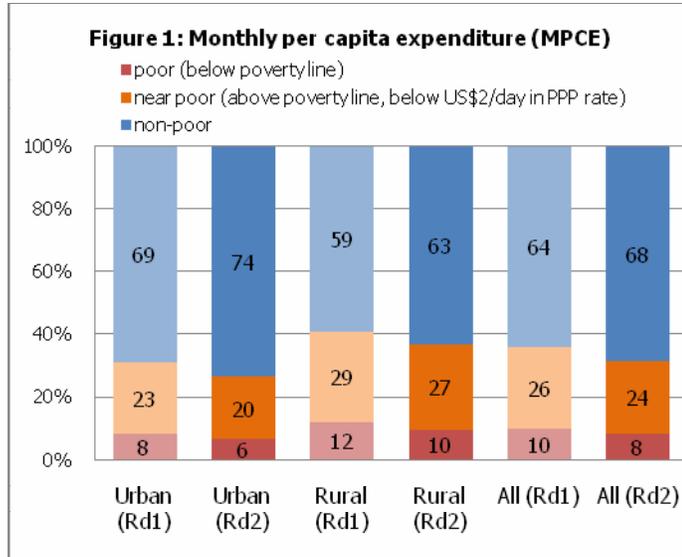
In both areas, more households were classified as poor share of expenditure on food (>65% of total expenditure, Figure 2). Detailed analysis on expenditure showed that households decreased the expenditure on cereals but increased the expenditure on meat, egg, fish, oil and sugar. This is likely related to harvesting, expenditure for celebrating national holidays and increased food price.

Figure 2: The share of food expenditure
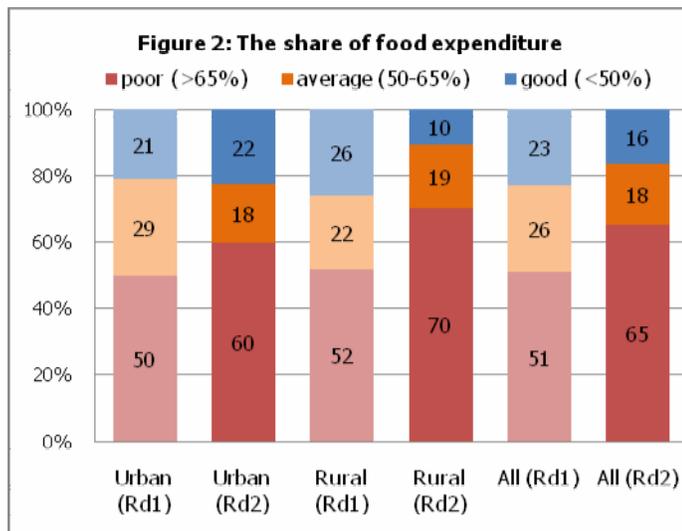
Food Consumption: The results of the food consumption score (FCS) shows that the proportion of the household had poor FCS significantly decreased in the 2nd round in rural area (Figure 3). This may be due to theincreased expenditure on meat, fish and egg during the holiday season.

The proportion of the households with a poor FCS was highest in Landak district (6%) while none was found in Sanggau and Sintang districts.

Overall, no significant change was observed in the frequency of meal. However, in Sambas district, 43% of the young children and 40% of women of reproductive age received only 2 meals a day. Similarly, in Landak district, 40% women of reproductive age and 44% of other household members ate only 2 meals per day.

Figure 3: Food consumption score
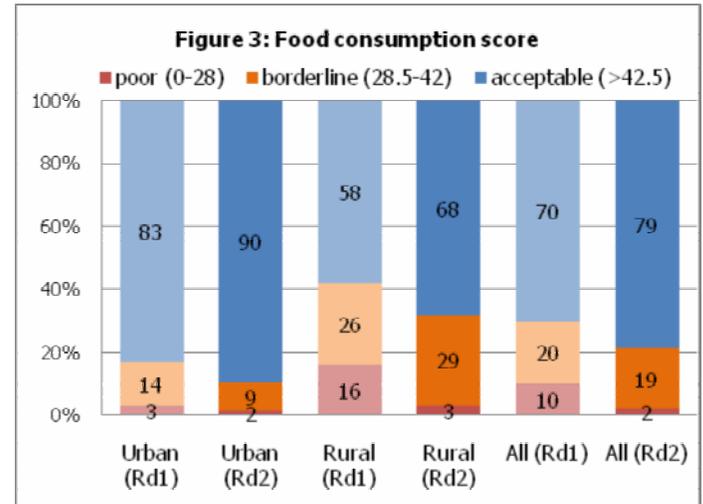
Food security is a multi-faceted concept as it is articulated in the definitions (Box 1 and 2). Therefore, a single indicator cannot measure it. Results from multiple indicators should be triangulated to identify the food insecure and vulnerable. In the FNSMS, the level of household food security was also estimated through the cross-tabulations of the monthly per capita expenditure, the share of food expenditure and food consumption score.

> **Box 1: Definition of food security (World Food Summit, 1996)**
>
> Food security exists when "All people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life."

> **Box 2: Definition of food security (Government of Indonesia, 1996)**
>
> Food Security is the fulfilment of food for every household, reflected from the availability of food in sufficient quantity and quality, safe, evenly distributed and accessible by people.

Composite food security group: The results of the composite food security group indicate that the proportion of food insecure household slightly decreased (1st round: 14%, 2nd round: 10%). This was likely due to the increased expenditure and significantly improved food consumption.

Landak district had the highest proportion (24%) which increased from the 1st round, while other districts reduced the proportion of the food insecure household.

Figure 4: Food security group
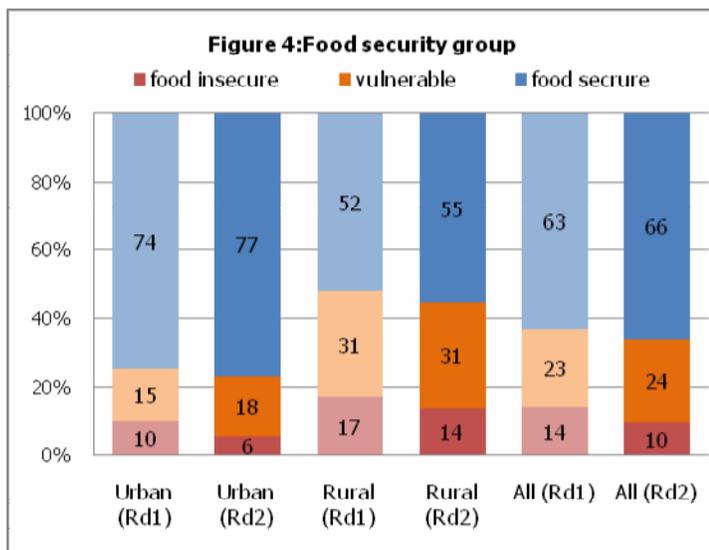
Who are the food insecure?

To identify food insecure households, household food security was investigated according to different characteristics.

Education: Overall, 39% (urban: 38%, rural: 40%) of household heads had never attended school or did not complete primary school. In both areas, the proportion of food insecure household was clearly higher among those households (Figure 5).

Figure 5. Food security and education level
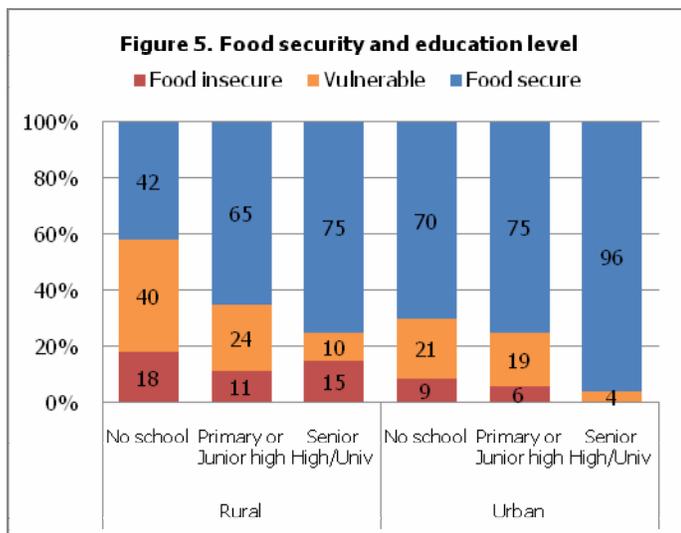
Note: The data was not collected in the 1st round

Income source: Results showed a higher proportion of food insecure and vulnerable households among those engaged in agriculture related activities such as agricultural wage labour, sale of cash crops production and sale of food crops (Figure 6). Meanwhile, much less food insecure households found among those having regular and reliable income source such as government employee.

Figure 6: Food security and main income source
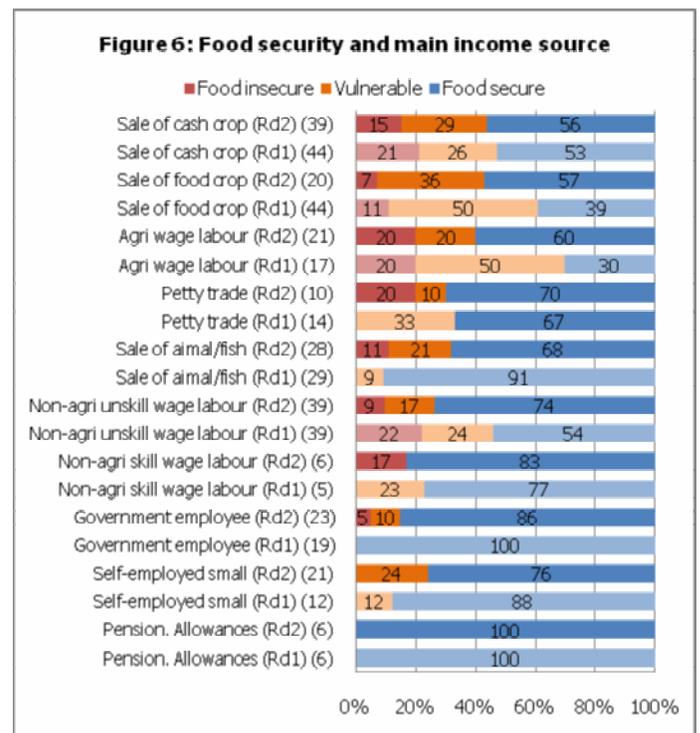
The proportion of the household engaged in agriculture related activities was clearly higher in rural area. More than 60% of rural households were dependent on agriculture for their main income (Figure 7).

Figure 7: Main income source by area
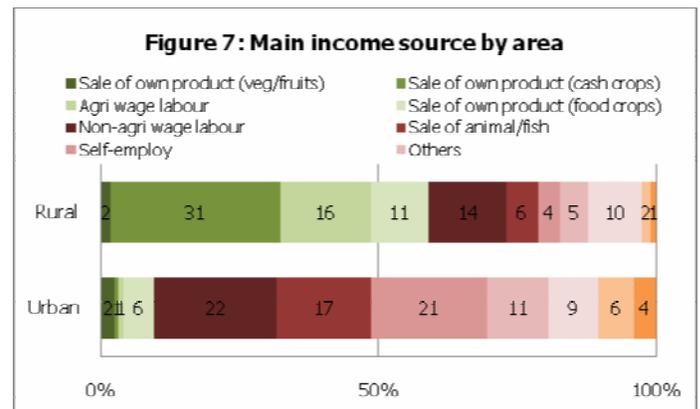
The production level of rural farming households seems to be sufficient. More than 50% of rural farming households produced cereals for more than 7 months of the household requirement (Annex 2).

However, more food insecure and vulnerable households were found among those who achieved higher level of production (Figure 8). This indicates that subsistent or quasi-subsistent farmers have limited access to quality food due to the lack of reliable income sources.

Figure 8: Food security and cereal production in 2009
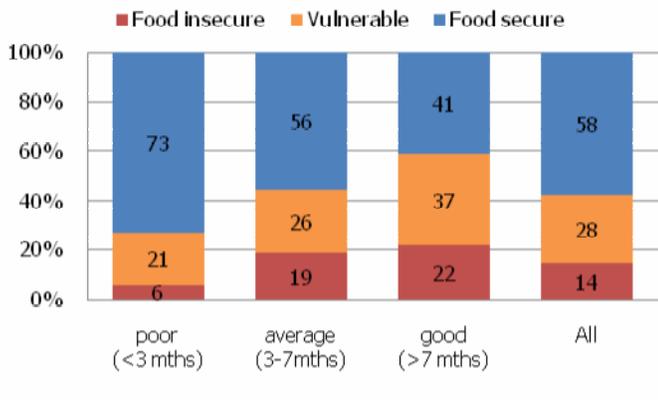
Some differences in expenditure pattern were found between food insecure and secure households. Food insecure households spend larger share of their expenditure on cereals (14%) than food secure (7%). Food insecure spent significantly less on meat (3%) than food secure (11%). Both food secure and insecure households spend significant portion of their expenditure on cigarette (food insecure: 5%, food insecure: 4%). Food secure households spent a larger portion on social events (7%) compared to food insecure (2%). This may indicate the existence of informal safety-net system at community level.

Use of latrine: In urban area, a higher proportion of food insecure households were found among those using no latrine (Figure 7). The association was not found in rural area, because most of households were not using latrine regardless of food security status (70%). The highest proportion was observed in Sanggau and Bengkayang districts (38%), while the least was in Sambas district (16%).
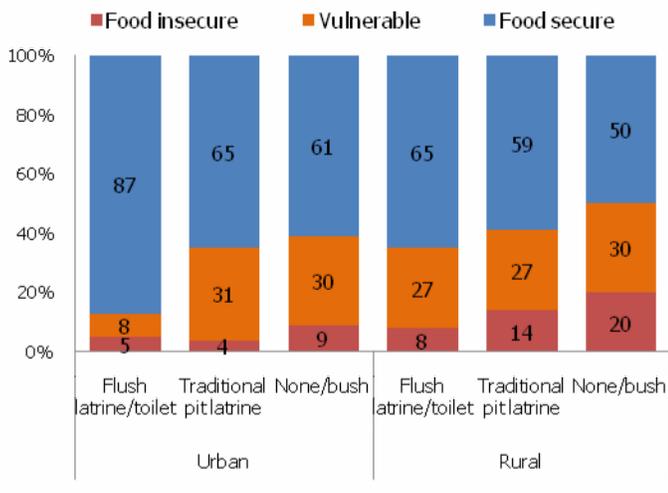

Figure 9 : Food security and use of latrine

Note: The data was not collected in the 1st round

Figure 10: Food security and number of assets
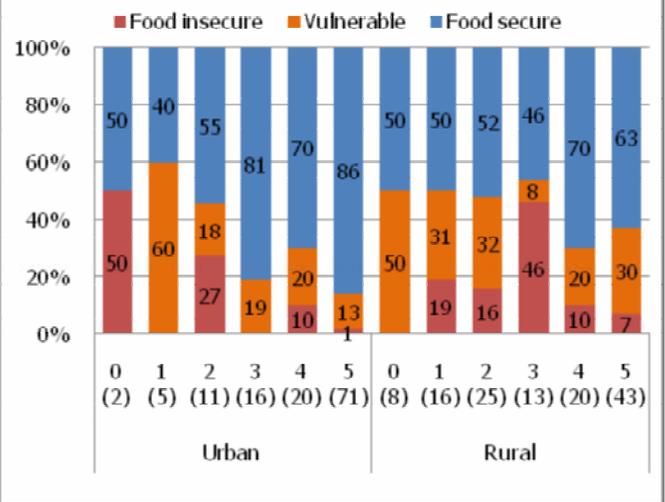
Most common assets owned by food insecure households were farming machinery (57%), TV (32%), and cooking stove (25%). Refrigerator and motorbike were predominantly owned by food secure households. No significant change was observed between the 1st and 2nd rounds.

The number of owned assets remained almost unchanged from 1st round. As it was observed in the 1st roumd, more food insecure households were found among those with less asset ownership (Figure 9).

Fuel and stove for cooking: In urban area, more food insecure households were found among those who were using wood as a main cooking fuel and not using stove for cooking (Figure 8). In rural area, the majority of households (89%) were using wood as cooking fuel, therefore the association with food security status was not found. Meanwhile household using a stove for cooking had better food security status (Figure 9)

Figure 11: Food security and use of cooking fuel and stove
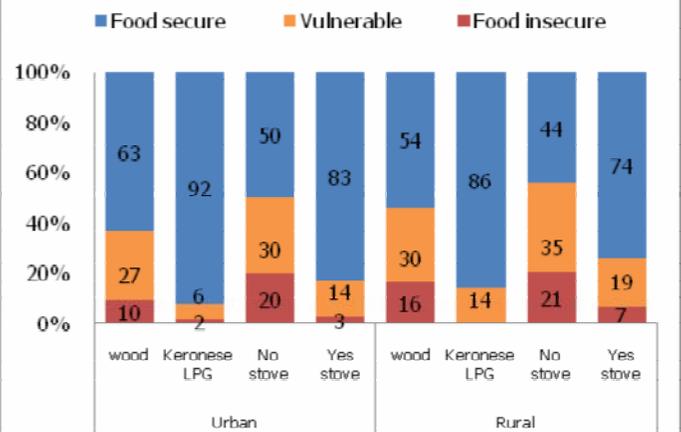
Transient or chronic: In both areas, more than 70% of household experienced difficulty to buy foods or to cover other essential expenditures during the past 30 days. It significantly increased in urban area (66% in 1st round, 77% in 2nd round). The association with food security was

found only in urban area, because most food secure households also experienced shocks in rural area. This indicates that the food insecurity in West Kalimantan remained to be a combination of both chronic and transient factors.

In summary, structural factors such as main source of income, education level, type of cooking fuel, and ownership of assets were found to be associated with food security. In addition, in external shocks such as increased commodity prices were likely to have impacted household food security.

Based on the above results, the situation is likely to be associated with both chronic and transient factors.

Food insecure households were found to be dependent on food purchase. In both areas, cereal production at household level was very limited likely due to small land size. As a result, both farmers and non-farmers are dependent on food purchase. They are considered as highly vulnerable to price increases as well as income falls.

How are they coping?

Experienced difficulties: The 3 most frequently answered difficulties faced between July-October were related to cash availability and price increase (Annex 2). A few percentage of households mentioned production constraints such as natural disasters and crop pest as difficulties. No significant change from 1st monitoring period was observed.

High commodity prices: No significant differences were found between urban and rural area in all items, except tofu (higher in rural). It is known that the provincial prices are closely linked with national prices which marked significant increase since early 2007. This explains frequently mentioned high commodity prices as a main difficulty. Moreover, the increased commodity prices deteriorate food accessibility not only in urban areas, but also in rural areas where food insecure households are dependent on market for their foods.

Coping strategies: Coping strategies are used by people to make use of their own capacities to offset the threads to their food security. The households mostly adopted long-term livelihood strategies which were at non-depleted level to acquire food rather than short-term strategies such as alternation of consumption patterns.

Commonly adopted strategies were seeking alternative or additional jobs (39%), extending working hours (17%), and reduced snack (16%). No significant difference was observed between urban and rural households. More households seek additional jobs and extended working hours compared to the 1st monitoring period. Again, main coping strategies of the households were to increase the access to cash.

Who is struggling the most? : To identify the households who were struggling the most, the Reduced Coping Strategy Index (RCSI) was calculated. The average RSCI

in the 2nd round was decreased to 7 (urban: 6, rural: 8) from 9 (urban: 7, rural: 11) in the 1st round. However, the index clearly increased among agricultural wage labourers. Although the index significantly decreased from the 1st round, households engaged in sales of vegetables/fruits and agricultural wage labour were likely struggling the most in 2nd round (Figure 9).

Figure : Reduced coping strategy index
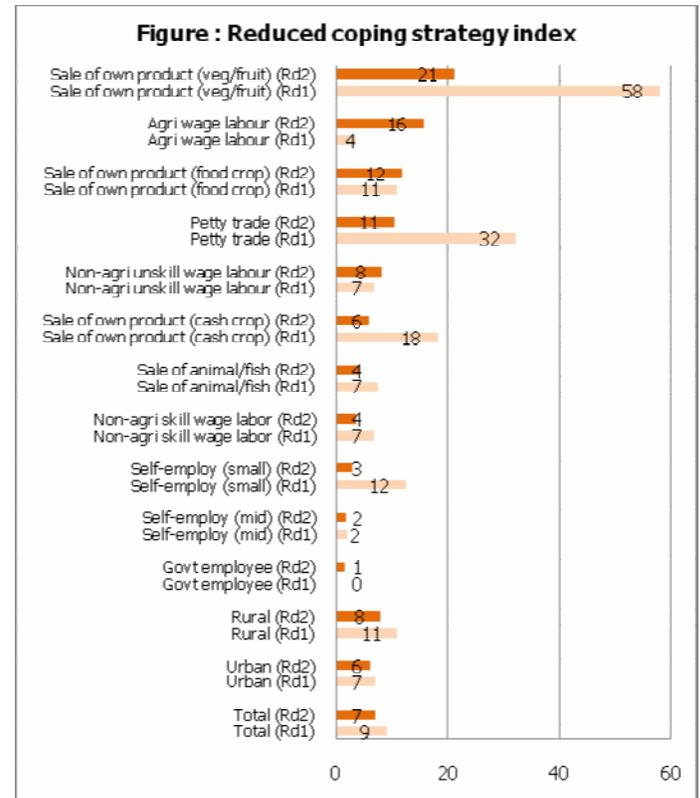
Formal assistance: During May – July 2009, the subsidized rise for the poor program (RASKIN) and unconditional cash transfer program (BLT) were two major assistance programs. There were no or negligible livelihood support programs and nutrition programs in all areas.

Overall, Raskin program assisted 46% of the households (urban: 39%, rural: 53%), although only 12% (10% in urban, 14% in rural) of households appeared to be food insecure. As it was observed in the 1st round, the level of food insecurity among recipients and non-recipients was relatively similar particularly in rural area. This may suggest that broader targeting of recipients and/or a more equal distribution of assistance, which may lead to a smaller portion of assistance received by the most food insecure quintile households.

Figure 10: Food security among Raskin recipients and non-recipients
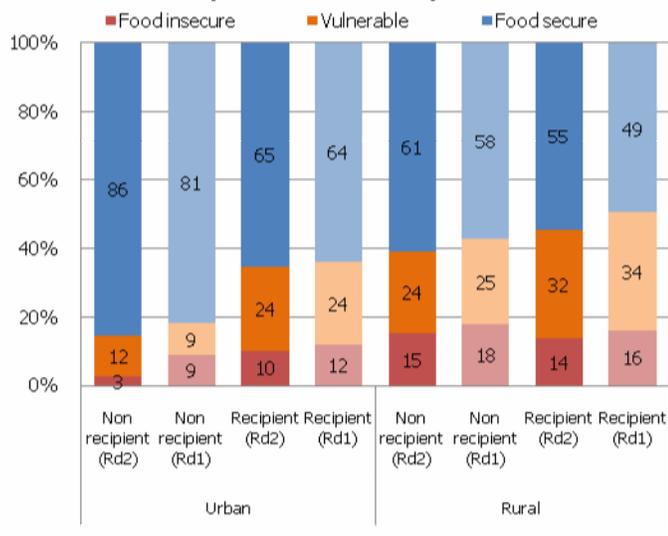
Only 18% (14% in urban, 22% in rural) of households received BLT program in the 2nd round and the proportion was significantly reduced from 1st round (overall: 43%, urban: 41%, rural: 46%).

Is the situation likely to change in the coming months?

Since the main causes of food insecurity in West Kalimantan are more related to underlying livelihood factors rather than natural shocks, the problem will persist for an extended period of time. Therefore, significant improvement is not expected in short-term. However, human-induced shocks such as commodity price increase and financial crisis will considerably affect the vulnerable and food insecure who are dependent on cash for their food access. Therefore, in addition to the sudden-onset disasters (such as earthquake) the following three factors are considered as risk factors in the coming months.

Price increase: Commodity prices, particularly sugar and kerosene, are still upward trend at national level. The price of rice is also volatile from early 2010 due to the delayed planting in main production areas. Since food insecure households spend a large portion of their expenditure for sugar, sudden and significant increase of sugar price may deteriorate their food access.

Crop failure: Crop failure due to the natural disasters such as flood, drought and pest will be a risk factor for subsistent farmers in rural area whose own production is already constrained and economic access to food is limited.

BLT: The unconditional cash transfer program which provided poor households with Rp 700,000 per year will be discontinued. This may affect the food access of the recipients particularly of those who have limited cash income.

Recommendations

The food insecurity in West Kalimantan is likely to be associated with both chronic and transient factors. However, existing formal supports were mainly to support short-term needs of the households such as RASKIN and BLT, and interventions for livelihood support such as and income generation had a low level of coverage.

The future interventions aiming to improve household food security should focus on structural causes of chronic food insecurity such as income generation, agricultural intensification and asset creation.

Income generation/diversification: Efforts should be made to provide or improve household income, whilst at the same time to encourage diversification into activities with higher and more stable incomes, through introduction of rural financial schemes and training in enterprise development.

Agricultural intensification: A mid and long-term support to improve the productivity of subsistent farmers in rural area will be one of the key strategies to enhance their access to staple food and resilience to high food price.

Targeting the food insecure: More food secure households owned a refrigerator and motorbike than food insecure households. These might be appropriate for targeting criteria for interventions.

Monitoring commodity prices: Since food insecure households are dependent on market for their foods, monitoring the prices of basic commodities as well as household expenditure patterns are important to provide early warning for the deterioration of household food security.

Early warning for natural disasters: In order to improve the resilience of the rural farming households to natural disasters, it is important to provide them with early warning of frequent natural disaster floods and droughts based on climate prediction.

Next monitoring period

The 3rd monitoring period will be November 2009 – January 2010. The bulletin will be released in early March 2010.

ANNEX 1
Methodology of Household Food Security Analysis

Household food security in this FNSMS Bulletin is analyzed using methodology which is highlighted in the second edition of Emergency Food Security Assessment (EFSA) Handbook (WFP, January 2009). The analysis is based on the Food and Nutrition Security Conceptual Framework which considers food availability, food access and utilization as core determinants of food security and link these to households' livelihood strategies and assets.

Because the FNSMS aims to assess food security at household level, the analysis is focused on <u>food access</u> (Monthly Per Capita Expenditure, Share of Food Expenditure), <u>food utilization</u> (Food Consumption Score) and <u>coping strategies</u> (Reduced Coping Strategy Index). Other <u>shock-related indicators of transitory food insecurity</u> were also analyzed (experienced difficulties/problems, absenteeism of school age children, child labor, joblessness, in – and out-migration). From the above, the analysis can answer **five key questions** of food security and vulnerability: **How many** households are food insecure? **Where** are the food insecure? **Who** are the food insecure? **Why** are they food insecure? And **How** are they coping?

1. Monthly Per Capita Expenditure (MPCE)

The households are asked about their monthly expenditure (including cash, credit, own production) spent on food and non-food items during the last calendar month before the survey to approximate their income. The monthly per capita expenditure is calculated, and then households are categorized into three groups (poor, near poor, non-poor) based on the latest provincial poverty line (BPS 2008), and the World Bank's threshold for the near-poor at US$2 PPP (Purchasing Power Parity) which is converted into IDR using the 2008 national PPP exchange rate. The thresholds in IDR are as follows:

- **Poor:**   less than IDR 126,746 for rural NTT, 199,006 for urban NTT
                less than IDR 150,968 for rural, IDR 179,261 for urban of West Kalimantan
                less than IDR 155,432 for rural, IDR 183,408 for urban of East Java
                less than IDR 160,527 for rural, IDR 196,229 for urban Central Sulawesi
- **Near poor:** between the above regional poverty line and US2 PPP or IDR 331,846 for all provinces
- **Non-poor**: more than IDR 331,846 for all provinces

2. Share of Food Expenditure

The share of food expenditure of total expenditure is a proxy indicator of household food security. The higher the share of food expenditure, the greater the likelihood that a household has poor food access. The commonly used threshold for the share of food expenditure are used to classify households into poor, average and good food expenditure groups:

- **Poor:** food expenditure is **more than 65%** of total household expenditure
- **Average**: food expenditure is at **50-65%** of total household expenditure
- **Good:** food expenditure **is less than 50%** of total household expenditure

3. Food Consumption Score (FSC)

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).

Household food consumption is 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.

Dietary diversity is the number of individual foods or food groups consumed over the past seven days. *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.

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). The most diversified and best consumption with maximal FCS at 112 means that all food groups are eaten 7 days a week.

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 (FNSMS, 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

**Food Consumption Score thresholds**

The following thresholds of FSC are used to categorize households into three food consumption groups based on the knowledge of consumption behaviors of the majority of Indonesian at present, which are:

Food consumption groups	Food Consumption Score	Description
Poor	0-28	An expected consumption of staple 7 days, vegetables 5-6 days, sugar 3-4 days, oil/fat 1 day a week, while animal proteins are totally absent
Borderline	28.5 -42	An expected consumption of staple 7 days, vegetables 6-7 days, sugar 3-4 days, oil/fat 3 days, meat/fish/egg/pulses 1-2 days a week, while dairy products are totally absent
Acceptable	> 42	As defined for the borderline group with more number of days a week eating meat, fish, egg, oil, and complemented by other foods such as pulses, fruits, milk

4. Reduced Coping Strategy Index (RCSI)

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.

Coping Strategy Index (CSI) is often used as a proxy indicator of household food insecurity. 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: "full CSI" and "reduced CSI".

In this FSNMS, RCSI is used. RCSI 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, because it focuses on the same set of behaviors. The maximal RSCI is 240 during the past 30 days (i.e. all 5 strategies are applied every day)**.** There are no universal thresholds for RCSI.

Table below is an example of RCSI of this analysis, with RCSI at 27.

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 total for each individual strategy	27	

5. Estimation of proportion of food insecure households based on composite food security (How many?)

The level of household food security is calculated through two cross-tabulations of the above three indicators.

Firstly, monthly per capita expenditure groups (poor, near-poor, non-poor) are cross-tabulated with food expenditure groups (poor, average, good) to identify *three food access groups* (poor, average, good). Table below is an example of the first cross-tabulation. Poor food access households (51%, in red cells) are those having either poor or near-poor monthly per capita expenditure combined with either poor or average food expenditure.

Monthly per capita expenditure / Food expenditure	Poor	Near-poor	Non-poor
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*

Secondly, food consumption groups and food access groups derived from the first cross-tabulation are matched to identify ***three composite food security groups*** (food insecure, vulnerable and food secure). Table below is an example of the second cross-tabulation. Food insecure households (29%, in red cells) are those having either poor or average food access combined with either poor or borderline food consumption.

Food access / Food consumption	Poor	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*

6. Determination of characteristics of food insecure households
Identified food insecure households are matched with their livelihood characteristics such as location, sex, age and education of household head, household size, age dependency ratio, main cash income source, housing, water and sanitation, land and livestock ownership, assets, coping strategies, child education and labor, unemployment, migration, etc. to answer other four questions: Where, Who, Why they are

food insecure, and How they are coping.

These analyses allow for determining whether food insecurity is **chronic** (long-term, persistent) caused by underlying structural and contextual factors which do not change quickly (local climate, soil type, local governance system, public infrastructure – roads, irrigation, land tenure, etc.), or **transitory** (short term, transient) mostly caused by dynamic factors which can change quickly (natural disasters, displacement, diseases, migration, soaring food prices).

ANNEX 2. Main socio-economic characteristics of surveyed households

Area: All 4 provinces East Java Nusa Tenggara Timur **West Kalimantan** Central Sulawesi

Period: 1st MP (Jun-Jul 09) **2nd MP (Oct-Nov 09)** 3rd MP (Jan-Feb 10) 4th MP (Mar-Apr 10)

* = difference between urban and rural is significant (P<0.05)

Characteristics	Urban 1st MP (May - Jul)	Urban 2nd MP (Aug - Oct)	Rural 1st MP (May - Jul)	Rural 2nd MP (Aug - Oct)	All 1st MP (May - Jul)	All 2nd MP (Aug - Oct)
1. Gender of household head						
Male	90	89	90	89	90	89
Female	10	11	10	11	10	11
2. Age of household head (mean)	44	44	46	46	45	45
3. Education level of household head						
No school, incompleted primary school		38		40		39
Primary or junior high school completed		42		44		43
High school or university completed		21		16		18
4. Household size (mean)	5	5	5	5	5	5
5. Household having under 5 children	47	49	39	41	43	45
Average number (person)	1	1	1	1	1	1
6. Household having at least 1 school aged child	69	68	67	69	68	68
7. Percentage of dependants	42	42	43	43	42	42
8. Households having a child absent from school last month	41	32	52	33	47	33
Due to child labour	1	1	0	2	0	2
Working hours 0-4 hours/day	100	0	0	1	100	1
Working hours >4 hours/day	0	0	0	0	0	0
Engaged in household chore		0		0		40
Supporting familiy business		0	No data info	50		33
Working in informal sectors		100		50		67
9. Housing conditions *						
Non-durable (wood, herb)	21	17	42	32	32	24
Semi permanent (ground part: durable, upper part: non-durable)	41	44	34	44	38	44
Durable (brick, cement)	38	38	23	24	31	31
10. Type of dwelling						
Individual house (separated from neighbour)	98	98	99	99	98	99
Flat in multi-storey building	0	0	1	1	0	0
Room(s) in a shared house or shared flat	2	2	0	0	1	1
11. Access to water sources						
Improved (piped water, public tap, tube well/borehole, protected well, protected spring water, rain water)	73	71	58	65	66	68
Unimproved (river, unprotected well/spring water, canal, bottled/refilled water supplied by factory/individual)	27	29	42	35	34	32
12. Distance to the main source of drinking water *						
less than 30 minutes		98		64		81
30 to 60 minuted		0		34		17
more than 60 minutes		2		2		2
13. Cooking fuel *						
Wood	51	50	88	89	70	70
Others (kerosene, LPG, biogas, electricity)	49	50	12	11	30	30
14. Type of latrine *						
Flush latrine/toilet with water		61		30		45
Traditional pit latrine (no water)		21		35		28
None/bush (go to forest, river, lake, dam, beach etc)		18		35		27
15. Ownership of land *						
Households do not own land	48	46	10	9	29	28
Households own land	52	54	90	91	71	72
16. Avg own land size (ha, among those own land)	1	2	2	2	2	2
17. Owned land size (among those who own land)						
Households own the land sized less than 0.5 ha	28	24	13	14	19	18
Households own the land sized more than 0.5 ha	72	75	87	86	81	82
18. Rental of land						
Households do not rent land	90	87	77	78	84	82
Households rent land	10	13	23	22	16	18
19. Investment of land						
Households do not invest land	99	99	100	100	99	100
Households invest land	1	1	0	0	1	0

No.	Indicator					
20.	**Mortgage of land**					
	Households do not mortgage out land	99	99	99	100	99	99
	Households mortgage land	1	1	1	0	1	1
21.	**Staple food production in a normal year ***					
	Households do not produce staple food in a normal year	73	78	30	31	52	54
	Households produce staple food in a normal year	27	22	70	69	48	46
22.	**Avg production of staple in a normal yr (kg, among those produce staple in a normal yr)**	587	649	573	597	580	610
23.	**Level of the staple requirement met by own product in a normal yr (among those produce staple) ***					
	HH Production meets less than 3 months requirement	24	82	10	35	17	58
	HH Production meets from 3 to 7 months requirement	24	6	24	21	24	14
	HH Production meets more than 7 months requirement	53	12	66	44	59	28
24.	**Sale of cereals in a normal year ***					
	None	55	65	71	71	67	70
	Less than half	14	9	21	23	19	20
	About half	14	4	3	4	6	4
	More than half	7	9	3	1	4	3
	All	10	13	1	1	3	4
25.	**Sale of tubers in a normal year ***					
	None	50	20	86	84	73	71
	Less than half	0	0	14	11	9	8
	About half	25	40	0	5	9	13
	More than half	25	40	0	0	9	8
	All	0	0	0	0	0	0
26.	**Staple food production in 2009 ***					
	Households do not produce staple food in a normal year	74	78	34	33	54	56
	Households produce staple food in a normal year	26	22	66	67	46	44
27.	**Average production of staple food in 2009 (kg, among those who produce staple food in 2009)**	462	526	460	505	461	510
28.	**Average production of staple food in 2009 (met requirement, among those who produce staple food in 2009) ***					
	HH Production meets less than 3 months requirement	24	26	16	13	18	16
	HH Production meets from 3 to 7 months requirement	36	33	30	32	32	32
	HH Production meets more than 7 months requirement	39	41	54	55	50	51
29.	**Level of the 2009 staple requirement met by accumulated harvested crops (mean %, ± SD) ***	1	1	1	1	1	1
30.	**Staple (cereals and tubers) in stock**					
	Households without staple in stock	33	0	15	2	24	1
	Households with staple in stock	67	100	85	98	76	99
31.	**Average amount of staple in stock (kg, among those who had staple in stock) ***	142	140	205	177	174	158
32.	**Number of days which last current cereals in stock (among those who had staple in stock)**	81	69	158	113	139	105
33.	**Number of days which last current tubers in stock (among those who had staple in stock)**	4	7	80	605	57	442
34.	**Ownership of livestock ***					
	Household without livestock	48	53	24	28	36	40
	Households own livestock	52	47	76	72	64	60
35.	**Average number of livestock**	10	53	12	12	11	28
36.	**Number of owned assets ***					
	None (0)	6	2	12	6	10	4
	From 1 to 3	12	26	39	43	31	34
	More than 4	82	73	49	50	59	62
37.	**Number of household members regularly earning income**					
	None (0)	0	0	0	2	0	1
	1 person	12	43	25	31	22	37
	2 persons	52	39	52	50	52	45

#		Col1	Col2	Col3	Col4	Col5	Col6
	More than 3 persons	36	18	23	17	27	17
38.	**Number of income sources**						
	None (0)	0	0	0	1	0	0
	1 source	12	38	41	39	33	39
	2 sources	70	51	53	55	58	53
	More than 3 persons	18	10	6	5	9	8
39.	**Main income source (3 predominant) ***						
	1st	Sale of cash crops production	Non-agricultural unskilled wage labour	Sale of cash crops production	Sale of cash crops production	Sale of cash crops production	Sale of cash crops production
	2nd	Government employee salary	Sale of cash crops production	Sale of food crops production	Non-agricultural unskilled wage labour	Sale of food crops production	Non-agricultural unskilled wage labour
	3rd	Non-agricultural unskilled wage labour	Government employee salary	Agricultural wage labour	Agricultural wage labour	Agricultural wage labour	Government employee salary
40.	**Households having unemployed members**	7	5	2	2	4	3
41.	**Household having out-migrated members in Indonesia and abroad ***	1	2	3	2	2	2
42.	**Number of meals per day (12-59 months old children)**						
	None (0)	0	4	0	3	0	4
	1 meals per day	0	1	2	0	1	1
	2 meals per day	17	16	10	16	14	16
	More than 3 meals per day	83	78	88	81	85	79
43.	**Number of meals per day (15-49 years old) (%)**						
	None (0)	0	1	0	3	0	2
	1 meals per day	1	0	0	0	0	0
	2 meals per day	26	24	17	17	22	20
	More than 3 meals per day	73	75	83	80	78	77
44.	**Number of meals per day (other household members)**						
	None (0)	1	1	1	2	1	1
	1 meals per day	1	2	0	0	0	1
	2 meals per day	29	24	19	18	24	21
	More than 3 meals per day	70	73	80	80	75	76
45.	**Food consumption score (FCS) ***						
	poor (0-28)	3	2	16	3	10	2
	borderline (28.5-42)	14	9	26	29	20	19
	acceptable (>42.5)	83	90	58	68	70	79
46.	**Monthly food expenditure ***						
	poor (>65%)	50	60	52	70	51	65
	average (50-65%)	29	18	22	19	26	18
	good (<50%)	21	22	26	10	23	16
47.	**Monthly per capita expenditure (MPCE) ***						
	poor (below poverty line)	8	6	12	10	10	8
	near poor (above poverty line, below US$2/day in PPP rate)	23	20	29	27	26	24
	non-poor	69	74	59	63	64	68
48.	**Food security group ***						
	food insecure	10	6	17	14	14	10
	vulnerable	15	18	31	31	23	24
	food secrure	74	77	52	55	63	66
49.	**Most frequently experienced difficulties in the past 3 months ***						
	1st	Limited cash	Limited cash	Limited cash	Limited cash	Limited cash	Limited cash
	2nd	Sickness/health expenditures	High food prices	High food prices	High food prices	Debt payment	High food prices
	3rd	No difficulty	Sickness/health expenditures	Sickness/health expenditures	Debt payment	Cost for education	No difficulty

50.	Households experienced any shocks in the past 30days						
	Yes, experienced	66	77	74	74	70	75
	No, not experienced	34	23	26	26	30	25
51.	Most frequently applied coing strategies						
	1st	Seek alternative/additional jobs	Extended working hours to gain income	Seek alternative/additional jobs	Seek alternative or additional jobs	Seek alternative/additional jobs	Seek alternative or additional jobs
	2nd	Purchase food on credit	Seek alternative or additional jobs	Borrow food, or rely on help from friends/relatives	Extend working hours to gain income	Purchase food on credit	Extend working hours to gain income
	3rd	Reduce snacks	Reduce snacks	Purchase food on credit	Purchase food on credit, incur debts	Borrow food, or rely on help from friends/relatives Rely on less preferred/expendive food	Reduce snacks
52.	Coping Strategy Index (mean)	46	7	64	11	55	9
53.	Household assisted by RASKIN program	40	39	68	53	54	46
54.	Household assisted by BLT program	41	14	46	22	43	18

4 Provinces (All)

Commodity	Current price (IDR/kg, ltr, piece)	Change in price (%)			Average monthly change over		
		1 m	3 m	1 yr	1 m	3 m	1 yr
Rice (RASKIN)	2,090	↓	→	↑	↓	→	↑
Rice (High quality)	6,379						
Rice (Medium quality)	5,411						
Rice (Low quality)	3,559						
Maize	5,516						
Noodle (Fortified)	1,490						
Noodle (Unfortified medium quality)	1,357						
Tempe	1,502						
Tofu	1,186						
Egg	17,882						
Cooking oil (Bimoli)	11,747						
Cooking oil (Local)	7,195						
Sugar (Regular)	10,264						
Sugar (Brown)	9,682						
Kerosene	3,730						

East Java (All)

Commodity	Current price (IDR/kg, ltr, piece)	Change in price (%)			Average monthly change over		
		1 m	3 m	1 yr	1 m	3 m	1 yr
Rice (RASKIN)	1,725	↓	→	↑	↓	→	↑
Rice (High quality)	5,702						
Rice (Medium quality)	4,857						
Rice (Low quality)	3,559						
Maize	3,240						
Noodle (Fortified)	1,254						
Noodle (Unfortified medium quality)	1,128						
Tempe	1,207						
Tofu	n.a.						
Egg	14,409						
Cooking oil (Bimoli)	12,630						
Cooking oil (Local)	11,000						
Sugar (Regular)	10,449						
Sugar (Brown)	9,180						
Kerosene	3,163						

4 Provinces (Urban)

Commodity	Current price (IDR/kg, lir, piece)	Change in price (%)			Average monthly change over		
		1 m	3m	1 yr	1 m	3 m	1 yr
Rice (RASKIN)	1,863	↓	→	↑	↓	→	↑
Rice (High quality)	6,491						
Rice (Medium quality)	5,373						
Rice (Low quality)	4,588						
Maize	5,654						
Noodle (Fortified)	1,489						
Noodle (Unfortified medium quality)	1,313						
Tempe	1,379						
Tofu	836						
Egg	17,935						
Cooking oil (Bimoli)	11,698						
Cooking oil (Local)	7,592						
Sugar (Regular)	10,231						
Sugar (Brown)	9,852						
Kerosene	3,670						

East Java (Urban)

Commodity	Current price (IDR/kg, lir, piece)	Change in price (%)			Average monthly change over		
		1 m	3 m	1 yr	1 m	3 m	1 yr
Rice (RASKIN)	n.a.	↓	→	↑	↓	→	↑
Rice (High quality)	5,702						
Rice (Medium quality)	4,852						
Rice (Low quality)	4,588						
Maize	3,055						
Noodle (Fortified)	1,231						
Noodle (Unfortified medium quality)	1,128						
Tempe	1,027						
Tofu							
Egg	13,904						
Cooking oil (Bimoli)	13,009						
Cooking oil (Local)	n.a.						
Sugar (Regular)	10,084						
Sugar (Brown)	9,471						
Kerosene	2,899						

4 Provinces (Rural)

Commodity	Current price (IDR/kg, lir, piece)	Change in price (%)			Average monthly change over		
		1 m	3 m	1 yr	1 m	3 m	1 yr
Rice (RASKIN)	2,160	↓	→	↑	↓	→	↑
Rice (High quality)	6,244						
Rice (Medium quality)	5,543						
Rice (Low quality)	3,148						
Maize	5,360						
Noodle (Fortified)	1,490						
Noodle (Unfortified medium quality)	1,400						
Tempe	1,676						
Tofu	1,642						
Egg	17,823						
Cooking oil (Bimoli)	11,810						
Cooking oil (Local)	6,922						
Sugar (Regular)	10,297						
Sugar (Brown)	9,510						
Kerosene	3,790						

East Java (Rural)

Commodity	Current price (IDR/kg, lir, piece)	Change in price (%)			Average monthly change over		
		1 m	3 m	1 yr	1 m	3 m	1 yr
Rice (RASKIN)	1,725	↓	→	↑	↓	→	↑
Rice (High quality)	n.a.						
Rice (Medium quality)	5,000						
Rice (Low quality)	3,148						
Maize	3,510						
Noodle (Fortified)	1,281						
Noodle (Unfortified medium quality)	n.a.						
Tempe	1,712						
Tofu	n.a						
Egg	14,898						
Cooking oil (Bimoli)	11,819						
Cooking oil (Local)	11,000						
Sugar (Regular)	10,684						
Sugar (Brown)	8,442						
Kerosene	3,428						

↑ Price increase amove normal price fluctuation

→ Normal price fluctuation

↓ Price decrease below normal fluctuation

Price fluctuation is considered normal if the change is within 5% for 1 month, or within 10% for 3 months or within 15% for one year.